Crafting a Model of Student Entrepreneurs through Business Incubators

Anna Purwaningsih*
Universitas Atma Jaya Yogyakarta, Indonesia

Anita Herawati
Universitas Atma Jaya Yogyakarta, Indonesia

Anna Pudianti
Universitas Atma Jaya Yogyakarta, Indonesia

Elisabet Dita Septiari
Universitas Atma Jaya Yogyakarta, Indonesia

ABSTRACT
Entrepreneurship is not born, but crafted. Incubator business is important in supporting new entrepreneurs in Indonesia. Many universities have carried out business incubator to facilitate their students to be new entrepreneurs. However, the best model for mentoring is still debatable. This research is written based on our experiences in mentoring our students’ business incubator. Through some observations, this study will explain the mentoring steps of business incubator. Then, this study will recommend a model of business incubator. This study employed a qualitative method by conducting case studies and in depth interview with the participants of business incubator. Triangulation and member checking were in use to test its validation. Practical implication of this study will give insight information especially for universities which run business incubator for their students. Then, through this research, universities can learn how to craft successful student entrepreneurs.

Keywords: entrepreneurship, model of student entrepreneur, business incubator, qualitative method

1. INTRODUCTION
The open unemployment rate (TPT) in Indonesia based on data from the Central Statistics Agency (BPS) in August 2015 was as many as 7.56 million people (6.18 percent of total 122.4 million labor force). The open unemployment rate decreased in

The number of unemployment is allegedly due to lack of competence, lack of soft skills, as well as the mentality to look for jobs rather than creating their own jobs. In addition, many fresh graduates are idealistic in choosing jobs. They choose to be unemployed than to work in fields they do not want.

Reality above should be a concern of universities to evaluate their curriculum and learning process. College graduates should change their mind set. They are not as job seekers, but job creators. If this happens then the number of educated unemployment is going down; the number of entrepreneurs will increase; and, new jobs will increase.

Based on a survey of 5 million students in Indonesia, 83 percent want to be employees, 4 percent to be entrepreneurs, and 13 percent to be a politician and to work in NGOs (http://m.tempo.com, retrieved May 30th, 2016). The survey shows that very few Indonesian students are willing to be entrepreneurs.

Meanwhile, the President of Indonesia, Jokowi, said that Indonesia needs 5.8 million new young entrepreneurs to win the competition in the era of the ASEAN Economic Community. The number of entrepreneurs in Indonesia has reached 1.56 percent, while the World Bank standard is 4 percent (http://m.tempo.com, accessed May 30, 2016). Thus, to achieve 2 percent, Indonesia still needs 1.7 million new entrepreneurs. The amount is certainly much lower than the number of entrepreneurs in other countries. The number of entrepreneurs in Singapore is as much as 7 percent, Malaysia 5 percent, Thailand 4.5 percent, and Vietnam 3.6 percent (http://m.tempo.com, retrieved May 30th, 2016).

The amount of graduate unemployment and the low number of entrepreneurs can only be solved with the synergy between the government and universities. Universities should be able to change the curriculum of learning so they enable graduates to become entrepreneurs.

Government’s synergies with universities have begun from 2009 with the Student Entrepreneurial Program (PMW), Entrepreneurship Student Creativity Program (PKMK), and the Student Entrepreneurial Bina Desa Program (MAUBISA). Government provides venture capital support for students. However, the results are less than optimal. Sustainability is often a major obstacle. Therefore, the government (Ministry of Research, Technology, and Higher Education) in collaboration with
universities organize business incubator so that mentoring process can be conducted intensively and sustainably.

The increase of entrepreneur number is very important. Instead of creating jobs, entrepreneurs will make innovations continuously. Accordingly, their business will make a financial contribution to the state, such as income tax and value added tax (Daft, 2007 in Agustina, 2011).

Entrepreneurship is not born, but crafted. Entrepreneurship is characteristic embedded within the individual as a result of the process of life-long learning (Tuskeroh, 2013). Therefore, the entrepreneurial spirit can be trained through business incubators.

Incubator business is important in supporting new entrepreneurs in Indonesia. Many universities have carried out business incubator to facilitate their students to be new entrepreneurs. However, the best model for mentoring is still debatable. But we have a confidence that mentoring plays an important role in creating successful student entrepreneurship. Mentoring is a medium to improve the entrepreneurial competency because, after all, students must have entrepreneurial competencies to succeed in the competitive and rapidly changing business environments (Sajilan and Tehseen, 2016).

This paper is written based on our experiences in mentoring our students’ business incubator. Through some observations, this study will explain the mentoring steps of business incubator. Then, this study will recommend a model of incubator business.

2. ENTREPRENEURSHIP

Entrepreneurs are people who dare to start a new business because he sees an opportunity, expediency and running events with all the risks (Rasyid et al., 2005). Furthermore, Catillon states that entrepreneurs are people who specialize taking risks (Casson, 2012).

The characteristic is obtained by individuals who want to think creatively and innovatively. This entrepreneurial spirit appears in confident individuals who have initiative, have a spirit of leadership, and take a chance with the full calculation (Suryana, 2013)

Entrepreneurship is taught in the courses of Universitas Atma Jaya Yogyakarta (UAJY). This is consistent with the vision of the institution, as it is also stated in the nine basic direction of development of UAJY. The pattern of entrepreneurship education will affect the students’ willingness for entrepreneurship (Li, 2007). The students’ expectations after graduation have shifted because they no longer want to be
an employee, but like to become entrepreneurs by starting their own businesses (Hal, 1996 in Li, 2007). It is in line with the results of Sunarni and Purwaningsih’s (2011) which states that 77.3% of respondents will manage the family business or become entrepreneurs after graduation. It is driven by difficulty of finding a job. In addition, the students also expect to achieve financial freedom, time freedom, and awards to become an entrepreneur (Wilson et al., 2004).

3. BUSINESS INCUBATOR FOR STUDENTS

Business Incubator is currently on the rise in Indonesia. Business incubator is a company / institution which provides a program designed to foster and accelerate the successful development of the business through a series of capital programs followed by a partnership support / guidance from other business elements with the aim of making the business into a company that is profitable, has the proper organizational and financial management, and sustainability, so it has a positive impact on society (http://smeindonesia.org, retrieved May 5th, 2016).

A business incubator that will be discussed in this paper is a university business incubator. University business incubator can be divided into internal and external oriented business incubator. External business incubator became media for SMEs which are outside the university. Meanwhile, internal incubator is divided into two. First, a business incubator that aims to acquire income generating. This business incubator manages an enterprise to be a source of university income. Second, internal business incubator is assistance for students’ business until their business is ready to face real business competition. Incubator student-oriented business is what will be discussed in this paper.

Research Sunarni and Purwaningsih (2011), the entrepreneurial spirit is not all inborn. Entrepreneurship is not born, but crafted. Therefore, we believe that entrepreneurship can be learned and created. One of the processes of creating entrepreneurial spirit we have practiced is business incubator. We choose business incubator as a medium to generate new entrepreneurs because the results shows that 87% of business start-ups through the incubation program/mentoring survive and they are able to run their businesses in a sustainable manner (http://smeindonesia.org, retrieved May 5th, 2016).

Business incubator is important in supporting new entrepreneurs in Indonesia. Many universities have carried out business incubators to facilitate their students to be new entrepreneurs, including UAJY. UAJY has run its business incubator for two years.
4. RESEARCH METHOD

This study employed a qualitative method by conducting case studies and in-depth interview with the participants of business incubator. Triangulation and member checking were used to test its validation.

The case study was conducted at the business incubator of the Universitas Atma Jaya Yogyakarta. Data were obtained through in-depth interviews and direct observation.

Business incubator was planned for three stages and for three years. Last year, 2016, reached the second stage; thereby in-depth process of observation and interviews was conducted on two batches of the students’ business involving 36 students (including two students’ business with two years mentoring).

The results of the observation process and this in-depth interview were formulated in the model of business incubators facilitating students to be independent entrepreneurs and to outperform the competition. The businesses considered successful were the continuing students’ businesses.

5. BUSINESS INCUBATOR OF UAJY

This business incubator is under the authority of Entrepreneurial Studies Center (PUSWIRA) of UAJY. The business incubator has been running for two years. The number of students’ business (tenants) being monitored were 20 businesses in the first year and 16 businesses in the second year (Herawati et al., 2015, 2016a, b). In the first year, 9 tenants were declared independent and ready to compete with other entrepreneurs outside the campus. Meanwhile, 11 students still needed assistance. The target of independent business was 5 (25%). But factually, in the first year, the target reached 45%.

The second year, the number of students’ business was 16, two of which came from the first year. At the end of the second year, all business reached independent. Thus, the second year exceeded the target by 25%.

The fields of businesses were reseller, culinary, waste recycling, fashion, merchandise, and farms. The economic value of students’ products was likely to increase than similar goods in the market because of their innovation and creativity which were related to their disciplines (knowledge based). Students were more daring to try something new by modifying products that already existed to produce more unique goods. The economic value of the products was also getting up by choosing the right means of distribution or marketing, i.e., online marketing. Online marketing affected working capital savings. Then, the working capital savings encouraged more competitive pricing.
5.1. Approach Method Tenant

Tenant approach method was conducted with a variety of activities into three stages, namely the stage of pre-incubation, incubation and post-incubation. Pre-incubation stage was the stage to equip tenants with a range of knowledge. Pre-incubation stage was planned for 6 months. At this stage, the tenants obtained tutorials and training for entrepreneurship, such as the way of creative thinking, entrepreneurial insight, increased motivation for entrepreneurship, marketing management, operations management, business forecasting, financial management, communication and business negotiations, as well as business ethics.

The incubation stage was the stage to prepare the tenants before plunging into a real business. At this stage, the tenants would carry out work practices or internships at business partner relevant to their business incubator. Business incubator partners consisted of businesses outside the campus that were willing to work together as places for tenants to learn. Some business owners were alumni of UAJY. The incubation stage ran at least for 6 months.

Post-incubation stage was a stage to lead the tenants to be independent. The tenant would get equity participation from the university’s cooperative, Caritas UAJY, in the form of loans with low interest rate and negotiable term. In the future, "crowdfunding" can be considered as a funding source. Crowdfunding is also known as “crowdfinancing” or “crowdsourced capital”. It is a popular approach to financing business startups and SMEs. Crowdfunding can be defined as a practice of funding a startup or a small firm by raising small amounts of money from a large number of people by utilizing online social media such as Facebook, Twitter, LinkedIn and other specialized blogs (Adhikary and Kutsuna, 2015). It is a response to the formal procedure of traditional banking system. People collectively organize themselves to raise financial support for small businesses and startups which cannot access fund from traditional banking system. This phenomenon happens when internet enables people organize themselves, even in financial area.

At this stage business incubator provided business assistance in the form of site visits. In addition, the business incubator also initiated the community of alumni’s business incubator. Through this community, the independent tenants might share experiences on the real problems and solutions they experienced.

5.2. Partnership Program

Puswira collaborated with alumni of UAJY, who have been successfully running their business, such as Anugerah Abadi (furniture), Sigrak Advertising (Advertising),
and Q-ta Juice (fruit juice). Thus, the tenants could learn from the alumni. In addition, the business incubator had also been cooperating with other businesses, such as Mataram Furniture, Kopilimo, Bakso Bakar 'Kaconk', Kebon Ndelik Restaurant, Coffee COD, Dirty Ink Screen Printing, and Be One Copy Center. Nevertheless, tenants could choose businesses that would be the place of their internship, not only the ones provided by business incubator. Partners participated not only in the internship program but they also became the speakers in entrepreneurship training as well as being the providers for observation.

5.3. Recruitment Process

The process of recruiting prospective tenants consisted of three stages: (1) the selection and administration: students were selected based on the completeness of the file and the feasibility of the business plan that would be executed; (2) the presentation: students who passed the selection and administration had to present their business plans, including production planning and operations, human resources planning, marketing planning, and financial projections; (3) interview: the student would be interviewed to determine motivation, interest, and desire (passion) them to be entrepreneurs.

Students (tenants) who passed the selection would be grouped into two categories, namely tenants who already had a business and tenants who already had a business idea but do not start a business. Assistance to tenants who had already started business focuses on the improvement and acceleration of business, including assistance for the problems faced by each tenant. Meanwhile, assistance to tenants who had not started business focused on strengthening the business idea, the uniqueness of the idea, and an inventory of products to start the business and to win business competition.

5.4. Implementation Stage

The implementation stage was done from pre-incubation, incubation stage, and post-incubation stage. In pre-incubation stage, tenant would receive training related to three modules, namely (a) the soft skills module, which contained the way of creative thinking, entrepreneurial insight, and increased motivation of entrepreneurship. Debriefing soft skills is very important for the tenants so that they become individuals with strong passion and struggle with tenacity in any condition (Baum and Locke, 2004); (b) management module, which contained marketing management, operations management, financial management, and business forecasting; and (c) business skills module, which contained, among others, communication and business negotiation, business ethics, e-commerce, as well as the quality of services and products.
A new entrepreneur is faced with limited resources, such as capital, training, equipment, and facility. Therefore, poor resources and communication could be a potential stressor for entrepreneurs (Hizam and Khairuddin, 2015). Therefore, in this business incubator stage, coach must intervene to reduce the source of stress itself (stressors) through counseling/coaching. Counseling process can improve entrepreneurs' individual work performance.

At this stage of incubation, the tenants visited the business partners of Puswira and choose a business relevant to their type of business. The tenant was obliged to make a daily report on the internship and report on visiting business partners.

In this incubation period, each tenant would get a business coach who would accompany them. Business Coach came from expert staff of Entrepreneurial Studies Center (PUSWIRA). Coaches were selected based on their expertise and the type of business tenants. Thus, the coach was expected to be able to accompany and train them.

Mentoring process was carried out for 4 months (June-September). Tenants should meet the coach every two weeks to consult the progress and constraints experienced during the start. The coaching material included objectives to be achieved by tenants, products and pricing, marketing strategies, financial management, innovation, how to build relationships with customers and cope with angry customers, how to build and maintain networks, and evaluation / control in business processes. In addition, it was possible that there were other materials considered necessary for the tenants to develop their business. Indicators of success mentoring were that the tenant was able to start a business and manage its business, as well as address any problems encountered, and to gain profit from the business he had started.

Lastly, on the post-incubation stage tenants were obliged to become members of the university's cooperative, Caritas UAJY, to sign a contract and to get a loan as a capital investment with a low rate and loan schedule.

5.5. Evaluation Stage

The evaluation was done at each stage of pre-incubation, incubation, and post-incubation. Objective of pre-incubation evaluation was to see if the tenants had knowledge as the bases to run their business. Objective of the incubation evaluation was to see if the tenants already had skills and experience, and they were ready to run business independently, while the post-incubation evaluation was to see the constraints faced by tenants in business management and to solve their problems. At this stage, the business tenants would be judged if they passed from a business incubator process and they were able to conduct business independently. Assistance
would be done until the third year. It was expected that the tenants could continue to grow and have a big turnover.

### 5.6. Research Result

For two years the business incubator activities, the research team provides assistance and in-depth interview to all tenants. From the assistance process, researchers know the materials needed and learned by tenants during the internship, the control process of raw materials, production process (design), process service to consumers, the quality of raw materials to be products (services), risk management, and pricing. Material learned during the internship is in accordance with the needs of each tenant.

In addition, the results in-depth interviews to all of the tenants are presented in Table 1.

**Table 1. Results of In-depth Interview**

| Motivation for business choice | • to earn income  
|                               | • to see opportunities for modification of food in terms of taste  
|                               | • to provide value-added products (milk processed into yogurt)  
|                               | • to produce the merchandise of Universitas Atma Jaya Yogyakarta  
|                               | • to be a sponsor for a student activity unit  
|                               | • to develop products of previous efforts that have got a sponsor but less innovative products  
|                               | • to have big profit from reseller  
|                               | • to preach through business  
|                               | • to do hobbies (cooking, designing, and sewing)  
|                               | • to actualize (self-actualization)  
| Obstacles                    | • Wet food which does not stay long  
|                               | • No place for production and no store  
|                               | • All work is done alone, no employees  
|                               | • Difficulty to manage time between working and studying.  
|                               | • Difficulty to coordinate with team  
| Marketing strategy           | • Working with student activity unit  
|                               | • Selling products by order  
|                               | • Selling products directly (direct sales)  
|                               | • Selling on consignment  
|                               | • Selling online  

Stimulant fund  
- Stimulant fund is quite helpful for small businesses, but less for businesses with a big working capital

Training materials  
- Training materials meet the needs of students  
- Sharing business experiences by young people who owned a successful business should be added  
- Material motivation to start a business and risk measurement is essential

The impact of business on the business incubator tenants  
- Income increases by 25% -400%  
- Tenants are much better prepared to face the obstacles of business  
- Tenant increasingly are able to see new opportunities for business development into the future

Based on the interviews, the motivation that encourages tenants to conduct business is to earn a living, to achieve success, to channel hobby, to modify existing products, and to actualize (self-actualization). Meanwhile, the business obstacles are preservation techniques to sell products for consumers located far away, availability of stores/stalls and the employees so that tenants are sometimes difficult to manage time between studying and running business. However, in the process of mentoring, tenants begin to share with each other to explore opportunities for online sales. Online sales allow for flexibility of time and place.

In the process of business incubator, tenants are given stimulant fund of Rp 1,500,000, 00 for each business. For tenants, the value of money is relative. It can be big amount or small. The value depends on the kinds of business activities. Tenants with businesses such as bags and shoes, catfish hatcheries, as well as catering consider the value of the fund relatively small, but the souvenir and snack businesses consider the stimulant fund relatively big.

A fund provided in the business incubator is only stimulant fund. Meanwhile, if the tenants will increase business capital, they can apply for loans to the university’s cooperatives, Caritas UAJY, after they are declared to be independent or successful up to the post-incubation stage. In fact, after passing post-incubation, they also have access to capital from banks and other financial institutions.

The business impact on the tenants’ business incubator is quite good. Tenants’ business profit has increased between 25% -400%. In addition, tenants are also more eager to face the challenges of the business and they are looking for solutions to
business problems that they face. In fact, some of the tenants are able to see new opportunities for the development of their products. **DRana** initially produces handmade leather shoes. However, the sales turnover of shoes is quite slow. Then **DRana** see an opportunity to create a casual bag. The sales of casual bags are better than sales of leather shoes. The next stage, **DRana** sees an opportunity to produce wallets and pencil cases. Finally, tenants produce them. As a result, sales of handbags, wallets and pencil cases could bring almost 400% profits within four months.

From the assistance process, the tenants suggest that soft skills material associated with motivation and sharing of successful entrepreneurs should be increased, especially young entrepreneurs both from outside the institution as well as from previous tenants who have been successful. Thus, the tenant can increase motivation. In addition, share experiences of successful entrepreneurs will provide additional experience for the tenants about the failure and success of the business. This will have an impact on increasing the sensitivity in the measurement of their business risks.

![Figure 1. Model of Student Entrepreneurs through Business Incubator](image)

6. **MODEL OF BUSINESS INCUBATOR**

   Based on observation, in-depth interview, as well as assistance that has been
done, the researchers propose a model of business incubator which enables students to be successful entrepreneurs in figure 1.

7. CONCLUSION

Many students are interested to be an entrepreneur. Some of them have been running the business, but few succeed to be entrepreneurs. Therefore, the Center for Entrepreneurial Studies, UAJY holds a business incubator. Business incubator program, which includes training, internships and mentoring for students of business (tenants), is expected to further facilitate students in achieving business success.

Previously, the lack of capital is considered as a major factor in their business failure. But as time goes by, it turns out that a large capital does not guarantee business success. Business motivation is the main factor to overcome the lack of capital. Strong motivation in business formulates them so that they can see business opportunities, including opportunities to obtain capital sources. Thus, an entrepreneur should be able to see opportunities amid the difficulties encountered and to build social networks.

However, it is undeniable that the success of tenants is higher when they have started a business before entering business incubator rather than started with a business idea. This is due to shorter (limited) time assistance for each of the stages for tenants. To be fair, there should be differentiation between tenants who already run a business and tenants who start business just with ideas. There should be a longer process for the second type. Tenant still needs to be assisted in finding a passion business.

Partners of business incubator should be increased in numbers and variations, such as a banking partner. As a start, the capital derived from loans Cooperative Caritas UAJY is sufficient in terms of number and soft loan. However, in line with the growth of tenants’ businesses, the capital sources should be easily accessed, but within the professional norms.

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