

## Factors Related to Entrepreneurial Incubation Centers Model Verification Through Delphi Technique

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**Abstract:** The students of business graduate program in many universities in Indonesia are undergoing frequent training programs to become entrepreneurs. The facilities provided by the universities are termed as business incubation program. Though many dimensions of incubation program are available through literature and various models which are adaptable to the Indonesian business school context has been less research into. A qualitative research is conducted to fix the dimension of a business incubation program among business graduates in Indonesia. In order to collect the data, the study followed interview, observation, focus group discussion and Delphi technique in this study. The study observed that there are seven factors which are closely associated with incubation programs such as space, sharedness, service, support, skill, seed capital and synergy. This paper provides an insight into an influential factor of business incubation programs for business graduate students in Indonesia.

**Keywords:** *entrepreneurs, incubation program, training programs and business school*

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### 1. Introduction

It is a well known fact that the business incubation centers play an important role in grooming entrepreneurial intention among young wards. Aspiring entrepreneurs are well trained through this program in order to start up own business in their area of interest. Knowledge sharing, learning and development advisory, administrative support services and habit development are the major responsibilities expected from such programs. Many policies and regulations have been made by Indonesian Government to enhance the quality of graduates in higher education. Numerous programs have been launched to build the frame of mind and business awareness of university students such as National Science Fair (PIMNAS), Student Entrepreneur Program (PMW), Student Creativity Program (PKM), Business Incubator Program and many other programs that can improve not only student's creativeness, proactiveness, innovativeness, but also competitive aggressiveness, risk taking ability and autonomy to start up a new business. Yet the government is unlikely ready for those programs as the government support is considerably lacking and inconsistent in developing this programs, particularly in incubation program (Muafi, Wahyuningsih, Effendi, & Sriyono, 2012). Most programs cannot run properly because they are not well prepared. In the case of business incubator programme, for instance, most studies has agreed that this program can support the development of economic and reduce unemployment (Al-Mubarak & Busler, 2013; Davies, 2009), however, the incubator programme lacks coordinations such as both Non-Departmental Government Institutions and the related Ministry still run this program separately and it has not been integrated yet (Ambardi, 2012). On Wednesday, 25<sup>th</sup> January 2012, Investigation and Implementaion Bureau (BPPT) in Indonesia held a discussion forum of business incubator with the topic of "Government Role in Development Program of Business Incubator." They launch a forum in order to push new innovated entrepreneur to start up a business. During the discussion, it was revealed that the development of a business incubator in Indonesia is still far left behind when compared to neighboring countries such as Malaysia, China and even Vietnam. Considering this issue, this particular study is conducted among few Indonesian universities and business schools, through qualitative interventions that to ascertain the factors that are contributing to best incubation centers with the aim of to extendng better learning and development and administrative support to the entrepreneurial aspirants. The study has incorporated problem formulation, model incorporation and theory building with expert verification to identify the factors that best contribute to incubation centers.

**Issues Pertinent To Business Incubation Program in Indonesia:** In developing countries, particularly in Indonesia, incubation is a key factor in accelerating the development of technologies, industries and business skills that in turn will increase the economic growth. However the need of education, business training and public institutional support to enhance the above technology, industries and business skills is still extremely different and far below than the more mature corporate environment such as Europe and the United States (Davies, 2009). Most Incubators in Indonesia are under the management of the higher education institution, state research institutions, private institution and state-owned enterprises (BUMN). The weakness of the incubator in Indonesia lies on inadequate facilities and capacity as well as the competence of the managers that still need to be improved through a series of training. Both central and local government still do not pay much attention to the strategy and incubator policies that is consistent with the character and local resources in carrying out incubator training. It is due to the fact that there is no government program that specifically encouraged the establishment of incubator programme (Sanjaya, 2011). These days, the amount of university graduates in Indonesia is getting bigger statistically and most of them only rely on job vacancy instead of starting up a new business, meanwhile the absorption from industries is only 16% of the graduates. Furthermore, many higher education institutions are only able to produce a large number of graduates without embedding the necessary skills. This phenomenon has become an evidence that the college fail to create innovative graduates who are ultimately tend to be a job seeker instead of job creator (Loy, 2013). The competition today is getting fierce in the world of work, only a few numbers of graduates could successfully obtain a job and it is time for higher education institution to alter this old paradigm and find a better way to create qualified graduates who have good mindset to start up their business. In term of innovativeness, Indonesia can be classified as a low productive country and low flow capital for SME's. Indonesia could not step further to be a developed country like any other ASEAN countries. For instance, South Korea can directly step higher from a large number SME's country to a developed country because of creativeness and innovativeness. Therefore, in order for Indonesia to be able like South Korea, Indonesian should be creative and innovative (Puspitarini, 2013).

In 2011 the General Directorate of Higher Education announced there are 350 proposals of the student creativity programme (PKM) had successfully passed from selection process and they are eligible to go for competition at national science fair (PIMNAS). However, only

few of them who won the competition can get funding from the government, meaning the rest of the proposals are going to be a rubbish (Azzam, 2011). That is really tragic if those 300 wonderful ideas are going to be rubbish, those ideas could become guidance and platform for creating a new business that in turn it can absorb a lot of employees if the government could accommodate and follow up those ideas through a well organized incubation program. This situation also represents a government unreadiness to organize the student creativity program. Asean Free Trade Area 2014 (AFTA) will be coming shortly, AFTA is the manifestation of treaty of ASEAN countries to form a free trade area in order to enhance competitive advantage among ASEAN countries by making ASEAN a world production basis as well as making a regional market for its 500 million population. The impact of this treaty obviously makes the competition in the world of work becoming fierce because we do not only compete with local citizen, but also with foreign people over ASEAN countries. Moreover, the absorption of industry in Indonesia could not accommodate all the university graduates as the industries are only able to absorb up to 15% of the university graduates each year. As a result, the rate of educated unemployment increases every year (Yusuf, 2012). Based on this, what Indonesian people, particularly university students should prepare as an individual? They must develop their ability and attitude in any aspects including employability and entrepreneurial ability. In AFTA where the competition in the world of work is getting fierce, it is hoped that university students should be able to start up a business as an alternative choice so they do not need to rely on job vacancies. They can utilize their natural resources, instead of watching the foreign people exploit the natural resources in Indonesia. In order to face regional market of Southeast Asia, the business incubator of technology organized by higher education institution is very much needed. I Wayan Dipta, the Deputy of Review Departement of SME businesses noted that Indonesia should enhance the capacity of small business through business incubator in higher education institution or college because other Southeast Asean Countries have already prepared their small business to face regional market of ASEAN 2015 (Bisnis Indonesia, 2013). Therefore, Indonesian government should strive to make a good law and regulation to strengthen the position and competency of business incubator in every university. Project Coordinator of SME Business and Technology business Incubators of Asean, Hadi Karya Purwadaria also asserted that the decree of president is very much need to strengthen the position of Business Incubator of Technology to assist the SME businesses in the period of 1 to 3 years (Bisnis Indonesia, 2013).

Another issue that need to take in to account is that most of university graduates do not have a desire to be an entrepreneur as only around 17% of graduates having commitment to be entrepreneur (Amrullah, 2012; Fitriati, 2012; Rahmawati, Suwanto, & Endarwati, 2010). Moreover, the entrepreneurial activity in Indonesia today is very low. One of the indicators that making low entrepreneurial activity is that the graduates tend to be job seekers, instead of job creators (Yusuf, 2012). Despite the universities has embedded an entrepreneurship course in the curriculum, yet it has not been able to foster the entrepreneurial orientation for the students. Those students mostly prefer a safe way to obtain income rather than facing challenge to be an entrepreneur. In Indonesia, for instance, the assumption to be civil servant or employee is considered much better than being entrepreneur. This is due to the desire of their parents that expecting the students to get a job in government institution or in reputed company (Putra, 2012). In term of the competitive advantage of entrepreneurship. The Association of Indonesian Business Incubator (AIBI) stated that the amount of entrepreneurs in Indonesia only accounted for 0.24% this year (Arcom, 2013). This percentage still far below than standard if we compare to other ASEAN countries such as Malaysia and Singapore. In order for a country to be considered developed, the country must have at least 2% of entrepreneur from its population (Mc Celand, Cite in Rochmah, 2013). She also noted that the percentage of entrepreneur recently in Malaysia has constituted around 4% and Singapore comprised around 7,2%, America and China accounted for 11,5% and 10% respectively. Based on this data, Indonesia still have to foster the rate of entrepreneurs to achieve at least 2%. The low of entrepreneurial intention of the youth in Indonesia because they lack family support and there are still quiet a lot of parents who prefer their children to be employee because it has a low risk compared to be an entrepreneur (Amalia, 2012; Suharti, 2011).

This is due to the fact that teaching system that has been implemented in various university is more focused on how to prepare an employability graduates, instead of entrepreneurial ability graduates (Yusuf, 2012). There are two types of constraints that are often faced by the students to be an entrepreneur, the constraints is divided into internal and external. The internal constrains such as insufficient capital to do a business improvement, they have a fairly high reluctance to deal with banks in term of obtaining additional fund, a lack of knowledge in running and maintaining a business and lack of self confidence. The external constrains are a lack environmental support and lack of support from their parents to start up a business (Amalia, 2012). Further, she also mentioned that the support from both universities and government is very limited in term of organizing a continual special expo for university students as well as lack of support from banking sector regarding providing a low interest loan for the student who want to start up their business. The General Directorate Of Higher Education (DIKTI) develop an Entrepreneur Student Programme (PMW) to improve the student's entrepreneurial ability and activity so the graduates can be a job creator once they pass out from university. However, the rate of achievement is very low if we refer to its indicator of PMW success (Yusuf, 2012). He also stated that the failure of this program is not because of the implementation, yet there is a mismatch from the model of PMW itself to achieve a desired outcome, so there is a need to create a new model. This program also demonstrated a failure relating to the evaluation of effectiveness and efficiency of fund such as the ratio between the number of funds released and the effects obtained by this program itself. In 2009, the general directorate of higher education has distributed \$ 1 billion for student entrepreneurship program (PMW) and only 2 businesses are able to survive upto this day. In fact, the problem is not because only 2 businesses survive, but the fact that only around 16.6% out of 100% participants were still committed to be an entrepreneur, this is obviously an ineffectiveness (Yusuf, 2012).

**Theoretical Underpinnings: Business Incubation Centers:** There are many definitions of business incubator, there is no registered trademark to interpret the business incubator in general. It depends on the objective of the incubator program itself and the condition in which it is being applied (Zasiadly, 2012). In medical term, the meaning of incubation is the process of maturation of a phenomenon, either disease or the growth rate of the fetus (baby) in her mother's womb. We often notice in hospitals when a mother gives a birth a baby prematurely or a baby with low weight, she will have a special treatment from the doctor, such as, the baby is laid in a warm box in a certain period of time as the substitution of natural process like in the mother's womb. This process only for the premature baby, not for normal baby and it is often called as incubation. Base on this definition, business community adopt the meaning of business incubator terminologically as an institution of education and training for hatching new entrepreneurs, particularly in business approach (Novel, 2001). Therefore, incubation program could be defined as an economic and social program which provides support intensively

to an individual or a group of people who want to start up a business and coach them to accelerate their business development through business assistance program such as management training, financial assistance, networking access, providing facilities and consultation relating to business development (Al-Mubarak & Busler, 2013). In Indonesia, incubator has been established since 1992 by Government, cooperative departement as well as universities. Until now, most of the incubators are organized by the Government and private universities. In 2005, the incubator programs have been established around 32 institutions, 75% of them were initiated by the Government and private universities, while the rest (25%) were established by Job Training House Service, Technology Business Centre BPPT, BPPT incubator house and PT. Freeport Incubator Programme (Muafi et al., 2012). From Those 32 incubators, there are only around 69% are still active.

According to Cooperative Departement and Small Medium Enterprise in Jakarta, Indonesia, business incubator is an institution that develops aspiring entrepreneurs to be independent entrepreneurs through a series of integrated development includes the provision of workplace or office with its facilities, guidance and management consulting, research and development assistance, training, funding assistance, and the creation of business networks either locally or internationally. This definition is quiet similar to Hon Peter Reigh, he mentioned that business incubator generally provide 7s service (Reith, 2000). The 7s service is mentioned below:

- Space to start up a business.
- Shared that refer to sharing basic business services and equipment with other tenants such as receptionist, conference room, communication system, fax and computer as well as sharing security.
- Service that includes management consulting, market problem, financial aspect and law, information of commerce and technology.
- Support that can help access to research, professional networking, technology, and investment.
- Skill development that constitutes training in preparing business plans and other necessary skills.
- Seed capital such as providing an internal revolving fund or providing assistance in obtaining financing from banking institutions.
- Synergy that emphasizes on coordination among tenants to build a networking with higher education, research institution, entrepreneur, professional and international community.

This theory is also supported by Agustina (2011). She noted that in implementing the incubation progamme, there are at least 5 "S" that this institution needs to provide, such as Service, Support, Skill, Seed Capital, and Synergy. Service means providing a guidance and management consulting such as marketing, finance and technology production and other consultation which in line with management. Support refers to a development support of firm and having access to use technology. Skill development involve coaching the incubator tenants in arranging business plan and conducting management training. Seed capital means providing initial business funding as well as an effort to obtain financial access to the financial institutions. Synergy refers to creating business network either locally or internationally. Business incubator facility is basically a standard facility owned by a central office facility which is further supported by an increase in business resources. The facilities provided may vary. A business incubator that has been developed has facilities such as conference rooms, canteen, security, office supplies, telephone, internet, library, rental vehicles, cleanliness and maintenance and lodging accommodations. According to the types, business incubator is divided into 3 types (Campbell cited in Supangkat, 2005):

- Industrial incubator means the incubator that is supported by government and nonprofit institution which aims to create jobs and reducing unemployment rate.
- University-related incubator which aims to apply science commercialization, technology and a right from the research finding. University incubations offer to the new ventures to obtain service regarding laboratory, computer, library and consulting with experts. This incubation is totally supported by university and also cooperate with stakeholders.
- For Profit Property Development Incubator, meaning an incubation that provide physical space such as office, production space and service facility in one place. All the tenants share the office facilities and they have to pay for the facilities to the incubator provider.

The main goal of business incubator programme is to establish a successful start up business that will leave the incubator financially viable and free standing and the graduates of the business will be able to provide job creation, technology transfer, commercialize new technology and create welfare for economies. In addition, Panggabean (2006) noted that the objective of business incubator is (1) establishing a potential new and small venture to be independent venture in order to be successful in dealing with local or international competition, (2) developing entrepreneurship promotion by involving private companies that can contribute to market economy system, (3) a place for transferring technology and commercialization process of the outcomes of business development and technology from the experts and university college, (4) creating an opportunity through new business development, (5) technology application in industry commercially through study and review, but not time consuming and relatively low cost. On the other hand, the business incubator of higher education institutions in Indonesia emphasizes on 5 parameters to measure the quality of the SMEs. They are productivity improvement, competitiveness, value added and working quality as well as job absorbtion (Djmhari, 2013). Recently, around 20 business incubators established by Government and higher education institutions today are ready to develop the skill of new small medium enterprises (SMEs) as tenant through incubation activity that involving technology, administration and marketing. The institutions are even ready to provide the necessary equipments for this program. The tenant will be recruited through a test based on the 5 parameters mentioned above and the tenant who pass the test are qualified to follow the incubation program in a certain period of time, generally in 2 or 3 years. For the first time, the Governor of Jakarta Province, Joko Widodo announced the establishment of night market festival in the center of Jakarta city The festival called "Kaki Lima Night Market." The main purpose of this activity is giving opportunity to the SMEs in developing and marketing their products as well as improving entrepreneurial intention of the Jakarta society. Joko widodo provided the space for free of charge every Saturday and Sunday, resulting more than 400 seller in Jakarta contribute to this festival and a thousands of visitors came to this location and did the shopping. This activity would certainly improve the entrepreneurial intention, especially for the university student. According to Muljaningsih, et al (2012) they revealed that space variable has a positive correlation to entrepreneurial intention. Accordingly, this is an evidence that the bigger the space provided for doing a business, the higher the propensity of new entrepreneurs to run a business. This finding is in line with the study of Ellis (2002) cited in (Muljaningsih, Soemarno, Hadiwidjojo, & Mustadjab, 2012) the rural economic theory that the land factor will foster an effort to generate technology that can increase productivity. Alma (2010) cited in (Kadarsih, Susilaningsih, & Sumaryati, 2013) has also argued

that the provision of capital such as building which is on the strategic location will trigger someone's desire to start a business. The provision of physical space is not only could elevate entrepreneurial intention, but also has been a substantial feature for every business incubator in order to implement the program effectively and efficiently (Rochmah, 2013).

Regarding services in management consulting, a study showed that based on motivation to develop their business, as many as 78.8% of entrepreneurs in DIY, Indonesia are willing to develop their business but they lack information on how to manage their business properly (Muafi et al., 2012). Therefore, the entrepreneurs still need a service of management consulting in order to better understand how to run a business properly and in turn it would trigger their interest to be the real entrepreneurs. In recent years, online business has been spread throughout the world, especially in Indonesia. This business is run by the students or employee. The average growth of online transaction from 2010 to 2012 has achieved more than 80%, meanwhile the transaction value increase 4 fold from the last 2 years. It is forecasted in 2014, online transaction will achieve 28,6 millions with the value of US\$776 millions (Praditya, 2013). This data shows that the intention of university students for being a good entrepreneur increase significantly in line with the increase of information technology. Moreover, Astuti (2009) highlighted that there is a positive and significant relationship between family, education, social support, difficulties and individual value toward the entrepreneurial intention of university students. Therefore, by giving a technology support, family support, education support and social support as well as government support to the incubator tenant, it would foster student's intention to build and develop their business (Kadarsih, 2013). Skill development is also considered to be an essential factor to improve the entrepreneurial intention, Muafi et al (2012) mentioned that even though there are a large number of businesses that have been running for a long time, their business has not shown any significant development, thus, they will need a motivation and skill from the training programs and assistance in order to enhance their intention to be a real entrepreneur in the future. This study is supported by Muljaningsih et.al (2012), they said that the more skill an entrepreneur has, the higher the intention to run his business. In addition to that, the role of soft skill to emerge a spirit of being an entrepreneur is also significant. Thus, both hard skill and soft skill are very much needed to emerge entrepreneurial intention of the students.

As we know that formulating business teaching regarding knowledge and technology development as a culture is not so easy to be done. Hardworking is very much needed for not only changing the mindset of the students, but also changing a paradigm of college that is very essential. So, there should be a certain skill in developing technopreneurship activities. In turn, it will form not only the mindset of the students, but also it will improve the student's interest in running a business (Sudarsih, 2013). One study noted that even though a large amount of seed capital provided, it would not influence the entrepreneurial intention (Praditya, 2013). On the other hand, Kadarsih, et.al (2013) have a different view. They argued that the provision of capital will influence entrepreneurial intention of university student. Those opinions certainly have a rationale in analyzing seed capital factor from a different point of view. The synergy regarding a motivation to gain network, a study revealed that around 69% of SMEs in the province of DIY, Indonesia does not have a willingness to build network. The reason is that gaining network will make possible for competitors to copy their product. This means, building networking doesn't enhance the interest to run a business (Muafi et al., 2012). On the other hand, according to Soeprapto (2012) the synergy may influence entrepreneurial intention by using triple helix approach. The triple helix approach is a positive synergy between three different actors in implementing innovation development. This concept was initiated by Etzkowitz and Leydesdorff (2008) which emphasize the interaction between universities (Civitas academic), industry and Government. Therefore, this concept is fundamental for accelerating the development of innovation that in turn it will improve entrepreneurial intention and creates innovative entrepreneurs in running their business properly.

## **2. Methodology**

The methodology of research followed in this study was Delphi technique which provided exploratory insight into major factors of business incubation centers. The Delphi technique, mainly developed by Dalkey and Helmer (1963) at the Rand Corporation in the 1950s, is a widely used and accepted method for achieving convergence of opinion concerning real-world knowledge solicited from experts within certain topic areas. Predicated on the rationale that, "two heads are better than one, or...n heads are better than one" (Dalkey, 1972), the Delphi technique is designed as a group communication process that aims at conducting detailed examinations and discussions of a specific issue for the purpose of goal setting, policy investigation, or predicting the occurrence of future events (Ulschak, 1983; Turoff & Hiltz, 1996; Ludwig, 1997). The Delphi method is especially useful for long-range forecasting (20-30 years), as expert opinions are the only source of information available. This research engaged semi-structured interviews. Based on the suitable time for the resource person interviews were arranged, during 2012 July to 2012 December. Telephonic interview is conducted to gather information from the respondents. 40 experts from the industry and academia were identified and approached by email or telephone and were invited to take part in the study. All the clarifications related to the objective of the study were made by the researcher. However, 30 respondents were being interacted and communicated, only 20 respondents shown their willingness to participate in the discussion. Finally, 20 participants were interviewed by telephone and through email. The conversations taped recorded, and manually analyzed. The procedural steps in adopting the Delphi technique were as follows.

**Expert panel identification:**The group of professional was made from specialists having high knowledge and expertise in business incubation centers. They are closely associated with industries, as consultants, Owners of industries, Top level managers, Entrepreneurs, Professors, Researchers and Academicians. The specialized areas of these expert members include, 15 male members (75%) and 5 female members (25%). These dynamic groups of panel of experts are knowledgeable and familiar to give relevant opinions and an admissible understanding of the business incubation centers.

### **Rounds**

**Round 1:** In the first round, the Delphi process traditionally begins with an open-ended questionnaire. The open-ended questionnaire serves as the cornerstone of soliciting specific information about a content area from the Delphi subjects (Custer, Scarella, & Stewart, 1999).

**The questions:**

- How do you define business incubation centers?
- How do you relate the business incubation centers with entrepreneurial learning and development?
- Which are the major factors, in general closely related to business incubation centers?
- Contextualizing the topic to the Indonesian scenario, which are the major factors, closely related to business incubation centers in Indonesia?

**Round 2:** In the second round, each Delphi members receives a second questionnaire and is asked to review the items summarized by the investigators based on the information provided in the first round. Accordingly, Delphi panelists may be required to rate or rank-order items to establish preliminary priorities among items. Because of round two, areas of disagreement and agreement are identified (Ludwig, 1994). In this round, consensus begins forming and the actual outcomes can be presented among the participants' responses (Jacobs, 1996). Information regarding the influential factors of internationalization of business collected from the respondents. The process identifies 161 categories, which are having items with high and low proximity of business incubation centers identified. Rating process further identified in the categories and items identified.

**Round 3:** In the third round, each Delphi panelist receives a questionnaire that includes the categories and items ratings, summarized by the investigators in the previous round and are asked to revise his/her judgments or "to specify the reasons for remaining outside the consensus" (Pfeiffer, 1968). This round gives Delphi panelists an opportunity to make further clarifications of both the information and their judgments about the relative importance of the categories and items. Second level screening of the 161 categories which were having a high and low influence on business incubation centers identified with corresponding items. The process further identified 89 categories, which are having high and low proximity of the business incubation centers identified. Classification of the items in 89 categories of 7 factors was being made with appropriate loaded items. Thematic presentation and the categorization of the items were done.

**Round 4:** In the fourth and often final round, the list of remaining items, their ratings, minority opinions, and items achieving consensus are distributed to the panelists. This round provides a final opportunity for participants to revise their judgments. It should be remembered that the number of Delphi iterations depends largely on the degree of consensus sought by the investigators and can vary from three to five (Van de Ven, Gustafson, 1975; Ludwig, 1994). During fourth level, screening of the 83 categories which were having items with high and moderately high proximity of the business incubation centers identified. Sought the expert opinion on the appropriateness of the core factors selected for the study.

**3. Results**

**Table No 1: Delphi table on Business Incubatiuon Centre**

BIP S/N	Factors	Categories	No. Items	No of Experts (N=20)	% of Experts
1	Space	Secure	2	15	75%
		Well equipped	2	15	75%
		Affordable	2	14	70%
		Flexible	1	16	80%
		Laboratorium	2	16	80%
		Workspace	2	15	75%
		Variety of sizes	1	15	75%
		Right locality	1	14	70%
		Environmental permitting	1	15	75%
		2	Shared	Receptionist	1
Conference room	2			15	75%
Communication system	3			16	80%
Security	2			15	75%
Utilities	3			16	80%
Pooled equipment	2			16	80%
Laboratories	2			17	85%
Loading dock	2			15	75%
Internet	3			14	70%
Renting transportation	2			14	70%
3	Service	Accommodation	3	14	70%
		Maintenance	2	14	70%
		Market problem	2	16	80%
		Financial aspect	3	17	85%
		Receptionist area	2	15	75%
		Laboratorium and library	3	17	85%
		Research and development	2	16	80%
		Company legality	2	17	85%
		Opportunity analyze	2	16	80%
		Administrative assistance	3	16	80%
		Business issues	2	16	80%
		Technical assistance	3	15	75%
		Offering opportunities	2	15	75%

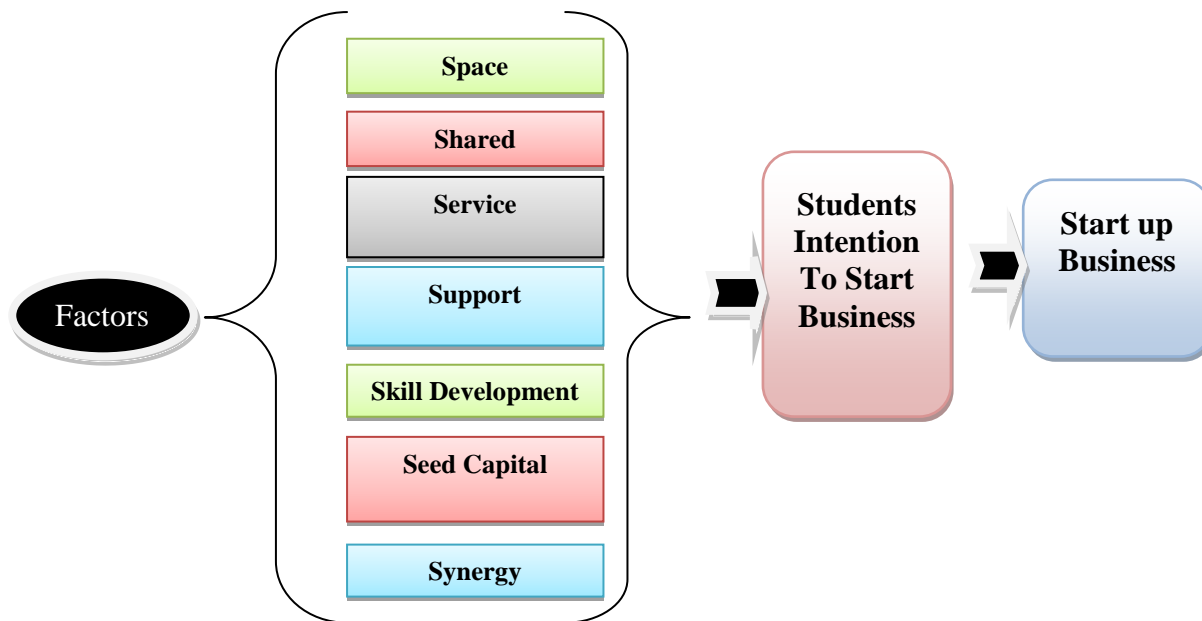
		Assistance in obtaining financing	2	16	80%
		Mentoring the new business	2	17	85%
<b>4</b>	<b>Support</b>	Business development	2	18	90%
		Technology access	2	16	80%
		Academic Support	2	17	85%
		Environmental support	1	15	75%
		Social support	2	16	80%
		Government support - policies	2	16	80%
		Financial sectors support	1	16	80%
		Emotional Support	2	15	75%
		Esteem support	2	15	75%
		Tangible/instrumental support	2	14	70%
		Informational support	1	16	80%
		Networking support	2	17	85%
		Access to research	2	15	75%
		Technology support	1	14	70%
<b>5</b>	<b>Skill development</b>	Business plan	2	17	85%
		Transforming character	2	16	80%
		Transforming beliefs	2	16	80%
		Change management	2	15	75%
		Stress management	2	16	80%
		Time management	2	16	80%
		Creative thinking process	3	18	90%
		Learning techniques	3	15	75%
		Communication skills	2	17	85%
		Networking skills	2	15	75%
		Motivation skills	2	16	80%
		Leadership skills	3	17	85%
		Self-marketing skills	2	15	75%
		Negotiation skills	2	15	75%
		Presentation skills	2	17	85%
<b>6</b>	<b>Seed capital</b>	Presentation to venture Capitalist	2	15	75%
		Applying for loan	2	16	80%
		Getting revolving loans	2	16	80%
		Initial funding	3	16	80%
		Capital access	3	16	80%
		Long term soft credit	3	17	85%
		Revenue for tenants	2	17	85%
		Relationship with capital providers	2	15	75%
		Business plan	2	17	85%
		Combining provision of capital (grants, loans and equity)	2	15	75%
			2	16	80%
<b>7</b>	<b>Synergy</b>	Business network	2	16	80%
		Cooperation between tenants and stake holder	2	17	85%
		Competition between tenants and stake holder	3	15	75%
		Sharing resources	3	15	75%
		Sharing experience	2	17	85%
		Learn from one another	2	16	80%
		Exchanging business contacts	3	16	80%
		Establish collaborative business	3	16	80%
		Synergy between University, Government and Industry	3	17	85%

The first factor considered for the study is the *Space* availability of business incubation centers that to provide entrepreneurial grooming through business incubation centers. The experts acknowledged 14 items. The major factor space availability consists of 9 categories. Laboratory (80%) and flexible (80%) space availability are the major categories business incubation centers, identified by the experts in relation to imparting appropriate entrepreneurial learning development program in universities and business schools. Further categories like secure space (75%), well equipped workspace (75%), variety of size (75%) and environmental permitting (75%) are considered as equally responsible factors that to be there for effective transference of entrepreneurial learning. In addition to all these factors experts also have given importance to affordable space (70%) and right locality (70%). The second factor considered for the study is the *Shared*. Within the second factor the experts identified 27 items that are closely related to entrepreneurial grooming through business incubation centers. The major factor of shared consists of 12 categories. The table showed that sharedness of laboratories (85%), as the prominent factor which closely knit with entrepreneurial grooming through business incubation centers. Further the

study pointed out the categories like communication system (80%), utility (80%) and pooled equipment (80%) as the next key subcategories that explain the properties of business incubation centers. Conference room (75%), security (75%), and, loading dock (75%), categories also get moderately high opinion from experts. The observation also pointed out the importance of receptionist (70%) and internet (70%) renting transportations (70%), accommodation and maintenance (70%) in relation to shared factor of incubation centers.

The third dimension that influence business incubation centers is the *Service*. The experts identified 30 items that closely link to leader's attitude towards CSR under 13 sub categories. Expert observes Financial aspect (85%), the Laboratory and the library (85%), Company legality (85%), and Mentoring new business (85%), as the prominent business incubation centers. The result also indicates aspects like Market problem (80%), Research and development (80%), Opportunity analyses (80%), Administrative assistance (80%), and Assistance in obtaining financing (80%) and business issue (80%) as the second influential sub category in this study. Further other factors like Receptionist area (75%), Technical assistance (75%) and Offering opportunities (75%) also knit with a service factor of business incubation centers. The fourth dimension that influence business incubation centers is the *Support*. The experts identified 24 items under 14 sub categories of support. The result indicates that the Business development (90%) as the prominent sub category which influence entrepreneurial grooming with the support of business incubation centers. Further the result also pointed out Academic support (85%) and Networking support (85%) as the second prominent factors in relation to business incubation centers. Some of the factors like Technology access (80%), Social support (80%), Informational support (80%), Financial sector support (80%), and Government support/policy (80%) are also identified by the experts in relation to grooming students through business incubation centers. Minor factors like environmental support (75%), Emotional support (75%), Esteem support (75%), Access to research (75%), Technology support (70%), and Instrumental support (70%) also contributes well to the business incubation centers. The fifth factor considered for the study is the *Skill* development. The result indicates that the experts identified 33 items which come under 15 categories of Skill development factor. The table showed that Creative thinking process (90%), as the prominent factor which closely knit with entrepreneurial training through business incubation centers. The experts also identified Business plan (85%), Communication skill (85%), Leadership skills (85%), and Presentation skills (85%) as the second prominent factors in relation to business incubation centers. Moreover the result also shows the importance of categories like Transforming character (80%), Transforming beliefs (80%), Stress management (80%), Time management (80%), and Motivation skill (80%) that are knit with preparing students through business incubation centers. Though much difference in the scoring is further observed, the experts have given minor scoring to categories like Change Management (75%), Learning techniques (75%), Networking Skills (75%), and Negotiation skills (75%), and Self-marketing skills (75%).

#### Factors Related To Entrepreneurial Incubation Centers



The sixth factor that linked to business incubation centers is the *Seed* capital. The experts identified 25 items under 11 categories in relation to going with CSR. The major categories identified by the experts are the Capital access (85%), Long term soft credit (85%), and Relationship with capital providers (85%). Expert further observes Capitalist (80%), Applying for Loan, (80%) Getting revolving loans (80%), Initial funding (80%) and Combining provision of Capital – grants, loans and equity (80%). Though much difference in the scoring is further observed, the experts have given minor scoring two categories like Presentation of venture (75%), Revenue for tenants (75%) and Business Plan (75%) which are closely knit with entrepreneurial training through business incubation centers. The seventh factor that correlated to business incubation centers is the *Synergy*. The experts identified 23 items under 9 the categories of the major factor Synergy in relation to business incubation centers. The experts pointed out major influential categories like Cooperation between tenants and stakeholders (85%), Sharing experience (85%), and Synergy between government, university and industry (85%) that are

closely coupled to students effective learning and development through incubation centers. Further the study also pointed out categories like Business network (80%), Learn from one another (80%), Exchanging business contacts (80%), and Establish collaborative business (80%), as categories in closely knit with incubation centers. In addition to the above factors, the experts also related the Aesthetic values (80%) of the leader in their locus towards incubation centers. The experts have given minor scoring two categories like Competition between Tenants (75%) and Sharing resources (75%) also have close affinity with incubation centers learning and development activities.

**Discussion:** This particular qualitative research that focuses on fixing variables on the requirements of an effective incubation center by offering varied model available in the literature, that groom young generation towards entrepreneurial intention and behavior, in the Indonesian context. The expert opinion that closely connected with a business incubation center are identified through this research. It is observed that there are major 7 factors viz the space, shared, service, support, skill development, seed capital and synergy as the major variables that are related to business incubation center effective performance. This expert identification is quite similar to the theory developed by Reith (2000) which incorporates 7's services on effective incubation center. The 7's service is basically included the requirement of the space to start the business, sharedness of business services and equipment like communication system, infrastructure facilities, etc. the services that include management consulting, market problem, financial aspect, etc.. This support that can help to access research and professional networking technology, etc. the skill development through effective impartment of knowledge, making provision of effective seed capital from financial institution and sound synergy between higher education system, research institution, entrepreneurs, professional institution and international community. The main goal of any business incubation program is to bring on effective learning and development opportunities through knowledge, skill acquisition and attitude development with the support of effective incubation center. As the cooperative department and small medium enterprise in Jakarta pointed out 'business incubation is an institution that develops aspiring entrepreneur to be independent, confident and competent entrepreneur through integrated development. By making provision of appropriate workplace exposure, guidance in management consulting, research and development, capital acquisition and facilitating effective business networks that provides an understanding of local and international business opportunities.

A student entering into any university learning and development system may not have appropriate knowledge, skill and attitude to become an entrepreneur. It is a role of higher education system that ensure appropriate institution environment, deviate away from traditional and conventional education structure towards market oriented education where the young wards work as self employed as 'enterpreneur' rather become 'employee' of an organization. The role of business incubation center is to provide an appropriate understanding about the labor market condition and orienting them toward more self employable option. Here the incubation program of any business school of the universities has a keen role in inducing entrepreneurial orientation among new generation young graduates. It is pointed out in the literature that the business incubation center in business schools and universities in Indonesia does not have the competence and the facilities that impart effective learning and development through their current facilities. This particular study has identified 7's model of Reith (2007) have highly significant on its applicability to higher research on the weaknesses of incubation centers among universities and business schools, especially in Indonesia. Among the seven factors, the expert identified *business development support* as the major factor which relate in developing confidence among young generation to take up entrepreneurial opportunities with the support of incubation centers. It is observed that in the '*support factor*' of incubation center, business development, knowledge of technology access to government support policy information support to start the business and appropriate support from various networking institution as the major categories that need to be given importance by incubation center for effective entrepreneurial grooming. The other important factor that needs to be imparted through business incubation centers are the information related to '*seed capital*' for example making provision of grants, loans, equity, pooling the capital, getting the revolving loans, how to develop an effective business plan, etc. It is rightly pointed out by Alma (2010) that making provision of capital such as building which is on strategic location will trigger someone desire to start a business. To access the building in the right location, initial funding, long term soft credit, relationship with capital provider are required and the effective incubation program should provide all such information and facilities to the young wards that support starting up a new business.

Another factor identified by the expert is the '*service*' information regarding marketing, financial support, infrastructural support, that how to access to the research and development, legal complication, identifying opportunities, etc. An effective incubation center should provide all these services information to the young wards that encourages them to start a new business. As the expert pointed out the most important aspect that an incubation program should transfer to their young wards is the '*skill*' development initiative. It is expected that the incubation cell should be capable enough to provide skills on networking, leadership, self marketing, negotiation, presentation, creative thinking, effective time management, etc. that support starting a new business. In addition to that the incubation cell should induce entrepreneurial character and attitude for effective transformation of themselves from an employee mindset to an entrepreneurial mindset. The incubation cells should act as change agent considering the outcome of such program. An appropriate understanding of '*space*' acquisition development and maintenance that provide better insight on how to effectively manage workspace towards profitability and sustainance of business. The incubation cell has a responsibility to induce space concepts like right locality well equipped spaces that are affordable for a start up business, flexibility in altering the structure and having the property of effective security need to be imparted to the young wards. The incubation cell having a keen role in making provision of effective space management concept to the young entrepreneur. The incubation program imparted by the business school and univestities should have the objective of inducing the importance of sharedness of facilities for example' the conference room, security, internet, maintenance, utility, etc. to the young wards. Maximal utilization of shared resources that leads to get an awareness about how to manage facilities effectively for profit and business development. The last but not least to the incubation program it is expected by the expert group that there should be a synergy between university, government and industry.. It is pointed out by the expert that the information regarding cooperation between tenant ant stakeholders, sharing experiences, etc. with varied institutions can provide better learning and development for the young generation.



**Implication:** The study once again stresses the importance of 7's factors with space, sharedness, service, support, skill development, seed capital and synergy in correlation with incubation center effective performance. It has been pointed out in the literature that in the Indonesian scenario even when funding is allocated for business incubation program that are not effectively run to induce confidence and competitiveness among young Indonesian students. These weaknesses of incubation center need to be given high priority and its rectification through proper understanding, development and maintenance of these 7's factors to be made. Those universities and business schools which do not have the 7's factors of course this study will be an eye opener to facilitate or making provision of such facilities.

## 5. Conclusion

This qualitative research paper provides an understanding into an influential factor of a business incubation program for young business graduates in Indonesian scenario. The experts have no differences of opinion regarding the 7's factors influence on entrepreneurial learning and development through business incubation program. In this context these particular study realizes that these 7's factors can be considered for fixing up variable to make a study on incubation center's weaknesses or success. This qualitative research which substantiates the importance of 7's model of Reith (2000) applicability for the extensive level of quantitative research studies. This particular qualitative study through Delphi technique firmly fixes appropriate variables for entrepreneurial research linking incubation factors.

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