

Completing Missing Link between Business Incubation Model & Startup Business Performance in a Developing Country

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Abstract: This research attempted to create and explore the startup business performance improvement model through an effective incubation model. In the model improvement, the researchers used the entrepreneurship and resources based view theory to introduce a supportive entrepreneurial environment concept and empowered business startup as a variable, which can be used to fill the gap in the research. The research model was tested empirically to startuppreneurs in a developing country who had joined business incubation with 120 respondent samples. It was then analyzed using structured equation modeling. The research result shows that an effective incubation model does not have a significant impact on startup business performance. However, it must be mediated by an empowered startup business. Supportive Entrepreneurial Environment is known to have an essential role in building an empowered startup business, which then will increase startup business performance.

1 INTRODUCTION

Many studies and research acknowledge that entrepreneurship has a significant contribution to the economy and industry development in a country (Gabriel and Kirkwood, 2016). Today, entrepreneurship develops so rapidly; the economy experts specifically postulate that the world is entering the “entrepreneurial economy” era (Nabi et al., 2011). This trend has been growing not only in developed countries but also in developing countries. (Fahmi et al., 2016). There were even several studies which found some eye-opening facts about interest in entrepreneur being higher in developing countries than in developed countries (Chari and Dixit, 2015). How is it possible? According to a study conducted by Poole (2018), in developing countries, the eagerness to increase the level of economic, health, and well-being has become the primary factor for the entrepreneur to create startup businesses. Such a primary factor then triggers the entrepreneur world in developing countries to educate, enhance the capability, innovate, and finally lead to spreading the entrepreneurship paradigm to the society, which is a social responsibility to the community (Paul and Shrivatava, 2016).

The importance of entrepreneurship role will cause stakeholders, who are starting a business in a country to develop the initiative in increasing the number of their startup businesses. (Pillai and Ahamat, 2018). One of the strategic initiatives which can accelerate the growth of startup businesses is business incubator development (David-West et al., 2018). A business incubator is considered to have a role in boosting a startup business success and survivability level. In achieving that role, a business incubator usually has four services. The first service is providing infrastructures, such as office rooms, meeting rooms, laboratories, and other facilities, which will support a startup business to start operating (Hong et al., 2018). The second service is providing business services such as business consultation, market research, workshop, and training (van Weele et al., 2017). Besides that, a business incubator also provides a capital system and can collaborate with many financial providers to give leverage for the startup business in developing its business scale (Wright, 2017). The fourth service is usually related to people connectivity, which is mentoring, coaching, and linking to other entrepreneurs, both new or experienced. This service will provide the opportunity for business sharing and market expansion (Kiani Mavi et al., 2019).

Through those services, the business incubator will conduct business incubation activities to assist and construct its startup business partner. These incubation activities are essential because they will establish the foundation of the capability enhancement and are the facilities support for each startup business to develop its business (Pomerol, 2018). Each business incubator has a different incubation model. However, generally, startup businesses which become the partner usually will obtain several things in the business incubation such as basic knowledge in business and management, business networking development, market and market research training, finance access and integrated technology for commercialization (Iyortsuun, 2017). When the startup business participates in these business activities, the output is that the business performance will increase and will step up to the bigger scale of business (Bikse et al., 2018).

However, not all startup business which had done business incubation can improve its business performance. Several studies conducted by Hong et al. (2018), Wonglimpiyarat (2017), and Fischbacher-Smith (2017), stated that in several developing countries, it is found that post business incubation activities, many startup business performances were not very satisfying or were stagnant. Several researchers like De Mattos and Salciuviene (2017) and Bergmann et al. (2018), who administered entrepreneurship study in several university business incubators, found that interest and orientation in entrepreneurship were stagnant even though the students had joined in the university business incubation activities. This matter is the reason why the startup business growth in the academic community is low – perhaps because the academic community's focus is only on the academic activity. However, several researchers like Liu and Bell (2019) and Petrucci (2018) in their study stated that the business incubation activities in which the startuppreneur participated did give significant influence to the business performance, even though it came from practical experience in developed countries. Researchers such as Galvão et al. (2019) and Blanck et al. (2019) also found business incubator success from the people connectivity and technology integration side, though it does not touch the precondition required, so that the business incubation will support the startup business performance.

From the studies mentioned above, it can be concluded that there is a missing link that must be identified more precisely, so that the business incubation can improve startup business

performance, especially in developing countries. Thus, this research tempted to create and explore the startup business performance improvement model through improving the effective incubation model. In improving the particular model, the researcher borrows entrepreneurship theory and resources based view in introducing the supportive entrepreneurial environment and empowered business startup as a variable that can be used to fill the research gap. This article is arranged into several parts. First, we will discuss the concept and theory as the base of the model development and several hypotheses that are tested to support the operational model. In part two, we will provide a model which its goodness of fit has been tested to be used in proving the hypotheses. In the last section, we will discuss findings that will complete the research gap explained.

2 LITERATURE REVIEW

2.1 Developing Effective Incubation Model

In general, a new business or initiative needs a sort of test, market testing, or piloting before it will run entirely. In this stage, the business will encounter limited experience, minimum managerial skill, small business network, or limited public trust and support (David-West et al., 2018). With all of those limitations, the success possibility of a new business or initiative is relatively low. The business incubator could be a solution to improve business performance and get through the early stages, which often come with uncertainty (Ayatse et al., 2017).

There are many approaches and methods for business incubators to implement their incubation model in developing the startup business (Somsuk et al., 2012). For instance, Smilor (1987) created a structured incubation model by explaining primary incubator affiliation, supporting system, and main description result of the incubation process. He considered the incubator as the transformation mechanism, which will assist the entrepreneurs in building their business. Sara et al. (2009) also introduced the Generic Five-Step Incubation Process, which consists of Idea Formulation, Post Entry Development, Opportunity Recognition, Entry and Launch, Pre-Start Planning and Preparation which are often adopted by several established business incubators. From these elaborations, it can be concluded that there are many incubation models and each has a different focus: some focus on the result, some discuss the importance of internal process, and

some provide holistic unity between the power of community and internal process (Moreira and F S Carvalho, 2012). Thus, in general, incubation business models can be defined as a unique and flexible combination of business development process, business infrastructure provider and human empowerment which are designed to support the startup businesses to survive, grow and pass the early development stages, which are often vulnerable (Soetanto and Jack, 2016).

The success of a business incubation in mentoring its business partner depends on whether or not the program initiated can reduce the possibility of failing in the early stages of the startup business, and at the same time support the business development in order for the business to survive in the future (Xiao and North, 2017). With that being said, for a business incubation to be considered effective, it has to be able to provide the infrastructure required in running a startup business, give healthy and sustainable entrepreneurial support, which can be in the form of training and workshop to improve the partner capability. This will create space and access to the market where startup businesses will conduct leverage of the market share and product or service selling.

2.2 Presenting the Supportive Entrepreneurial Environment

By the Entrepreneurship theory, it is not sufficient to “cultivate” interest and orientation in entrepreneurship through training and mentoring. It requires a welcoming environment for the innovator and the startup business (Pillai and Ahamat, 2018). It can be inferred that the capability and competitiveness of a startup business can be improved if they are in the supporting entrepreneurial environment, atmosphere, or ecosystem. (Cowell et al., 2018). Furthermore, Resource-Based View theory states that to obtain a competitive excellence – valuable, rare, distinctive, and irreplaceable business, an entrepreneur must pay attention to the business and entrepreneurship environment where it is possible to create Resources Based Opportunity (Björklund and Krueger, 2016).

Creating a supportive environment for entrepreneurial activities is not an easy task. The people need to be educated to accept entrepreneurship as one of the promising professions, especially in a developing country, where people still consider being an employee or civil servant is more secure (Soetanto and van Geenhuizen, 2019). Besides that, the entrepreneurs' surroundings must be set to trigger the

measured risk-taking and to prompt new ideas in creation, such as products, services, marketing activities, and even technology usage (Long et al., 2018). In addition to that, a business incubator can create a sharing and consultative atmosphere which are flexible among the entrepreneurs, established business owners as the mentors, government, universities, banks, capital provider, and entrepreneurial activity related government stakeholder (Ferrandiz et al., 2018). Business incubator often expands its networking to present the people connectivity service, which is also a collaboration between the startup business and the customers. (Ao and Liu, 2015).

2.3 Forming the Empowered Startup Business

Resources-Based View theory emphasizes that in strategic management, the primary resources and the factors which will boost competitive advantage and superior performance are often associated with costly, and difficult to be imitated element (Davicik and Sharma, 2016). This concept is built with the assumption that strategic resources are evenly distributed between the company and the fact that each difference is stable. There are four main conditions that indicate resources can be a competitive advantage; these conditions are when the resources are valuable, rare, difficult to imitate, and irreplaceable. (Barney and Mackey, 2005). Barney (1991) also stated that resources include all assets, the process in the organization, information, and knowledge owned and controlled by the company to support the running strategy.

For that reason, to obtain company capability as described by Resource-Based View, a startup business must have the power to compete. A particular empowered startup business must be able to utilize information in its business environment to create a business development opportunity (Huo et al., 2016). Besides that, to create a business which is valuable to its customer, all entity in the startup business must have the superior technical skill to overcome all operational problems, and at the same time, plan a strategy with a tested managerial skill (Warnier et al., 2013). Also, to become a distinctive and difficult to imitate and irreplaceable business, high innovation skill is required as well. A startup businessman must own enthusiasm to explore new updates in the market, seize every opportunity, and transform it to become innovation while running the business (Tselepis, 2018).

2.4 The Relation between Effective Incubation Model and Startup Business Performance

A business incubator aims to combine service and its resources to form an effective incubation model, which is useful for startup business development. (Gao and Hu, 2017). This purpose is conducted through supportive business infrastructure – coworking space, laboratory to make the prototype, until digital technology access provider. Business service is also given to startup businesses in the form of training, workshop, and strategy consultation, which can affect the partners' business skill improvement. Besides that, business incubation activity also provides access to the market, both markets to offer product or service, and capital market (Mrkajic, 2017). Through these activities, the startup business performance is expected to improve significantly, which can be seen through market share control, sales growth level, and new product launching (Selase Asamoah, 2014).

The explanation above formed a hypothesis that represents the relation between Effective Incubation Model and Startup Business Performance.

H1: The more effective business incubation model conducted by the business incubator, the higher startup business performance is.

2.5 The Relation between Effective Incubation Model and Empowered Startup Business

Effective Incubation Model initiated by a business incubator might not be immediately able to improve startup business performance. To achieve performance which is competitive and able to grow strategically, the startup business entity must first become empowered and competitive (Torun et al., 2018). According to Tselepis (2018), business incubation activity enables startup businessmen to have power, which is characterized by their ability to search, filtering and processing information from the market to be used as a strategic weapon. On top of that, the business incubation in which they are participating can be a medium to test their technical skills in conducting business. The business incubator must as well include motivation material in order to trigger endless startup businessman enthusiasm in innovating and business development because innovation and continuous improvement are the requirements to obtain strategic competitiveness. (Tselepis, 2018).

The explanation above formed a hypothesis which represents the relation between Effective Incubation Model with Empowered Startup Business:

H2: The more effective business incubation model conducted by the business incubator, the more empowered its startup business partner is.

2.6 The Relation between Supportive Entrepreneurial Environment and Empowered Startup Business

Supportive Entrepreneurial Environment is one of the requirements to create Empowered Startup Business. A startup business will be improved if supported by an accepting environment. (Yi and Uyarra, 2018). Entrepreneurs will be encouraged to enhance their competitiveness if their surrounding has the culture of risk-taking and innovating. The passion for becoming empowered in startup business will also be pumped if the society supports all activities in creating the value of entrepreneurship activities that have been conducted. Supportive Entrepreneurial Environment also gives freedom for the entrepreneurs to initiate sharing, consultation, or counseling both with a business incubator, succeeded business mentor, or even directly collaborating with the community (Qian, 2018). Those described conditions will surely create enthusiasm and passion for the entrepreneurs to develop their business. (Ao and Liu, 2015).

The explanation above formed a hypothesis which relates Effective Supportive Entrepreneurial Environment with Empowered Startup Business:

H3: The more supportive the environment in which entrepreneurship is conducted, the more empowered the startup business is.

2.7 The Relation between Empowered Startup Business and Startup Business Performance

Empowered Startup Business enables every entity in the business to utilize its resources strategically in facing competition in the market (Hahn et al., 2018). Technical and managerial capability, the skill in utilizing information strategically, and enthusiasm in developing innovation is the fundamental asset to create a valuable business model for the customers, to make a significant distinction from the competitors, and also to gain profit. (Tselepis, 2018). The startup business' awareness to initiate empowerment allows forming a productive team and competent to do optimum planning, follow the consumer change in

preferences, take market opportunities, and also to achieve efficiency (Hsieh and Wu, 2018). If the startup business performance can be maintained continuously, the possibility for it to scale up is high, and it can even spread to a bigger market. (Grossberg, 2018).

The explanation above formed a hypothesis which relates Empowered Startup Business and Startup Business Performance which is formulated below:

H4: The higher level of Empowered Startup Business is, the company will achieve higher Startup Business Performance.

Based on the discussion of the theory and hypotheses above, a framework can be formed to explain how the business incubation model and entrepreneurship environment can improve startup business performance through empowered startup business development in a developing country. The theoretical framework of the developed model is shown in Figure 1.

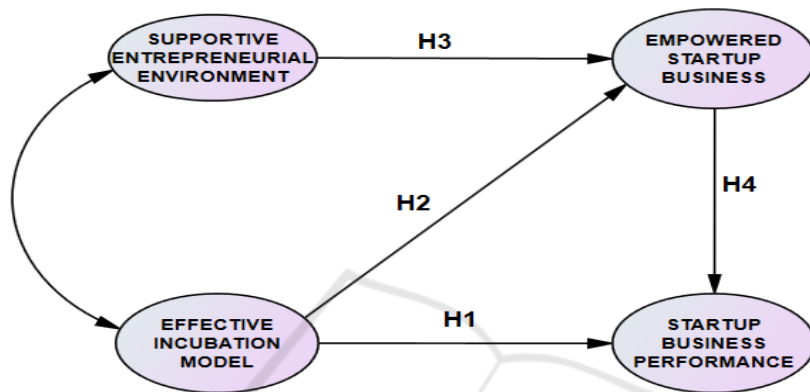


Figure 1. Theoretical Framework

3 METHOD

3.1 Sample and Data Collecting

This research involved startuppreneurs from 20 business incubators in Indonesia as the sample, both a university-based business incubator and the private sector. The sample was 120 mentored startuppreneurs. These startuppreneurs had joined business incubation conducted by its partner business incubators. The method which was used to collect the data is the survey method, and the data collecting instrument was questionnaires.

3.2 Measuring Method

The survey instrument was measured in 10 Likert scales ranging from Strongly Disagree to Agree Strongly. The instruments first passed the validity and reliability test and then were distributed offline and online. The survey instrument created was the development of the previous research measurement scale, namely: For the Effective Incubation Model construct, was developed by Mrkajic (2017), while Supportive Entrepreneurial Environment was the development of measurement conducted by Ao and

Liu (2015). The Empowered Startup Business was developed from Tselepis's (2018) measurement, and Startup Business Performance was the development of Selase Asamoah (2014) measurement.

3.3 Analysis Method

The researcher used the Structural Equation Modeling analysis method, supported by statistic AMOS 24.0 software, which allowed to test several complicated alternative models. The test using SEM-AMOS was conducted in two stages: the measurement test, and then the structural test. The purpose of this analysis is to explore the effect of the Effective Incubation Model towards Startup Business Performance and adds Empowered Startup Business as a mediation variable. This research also aims to explain the effect of the Supportive Entrepreneurial Environment variable towards Empowered Startup Business and Startup Business Performance.

4 RESULTS

The data collected from the 120 startuppreneurs respondents, were then analyzed using SEM IBM-

AMOS 24 Software to test the model compatibility and the relation among variables in the model. Before further analysis, the researcher first conducted a data normality test to ensure the data quality. From the analysis result and normality test conducted, the c.r value in all indicators was between +2.58 and -2.58, and the Courtois multivariate showed 3.273 below cut off value 8. Thus, it can be concluded that there was no proof of non-normal distribution in the data.

After the model passed the data normality test, the process continued to the validity and reliability test. Table 1 provided the list of measurement items with standardized estimates to evaluate the validity of the construct of the concepts used in this research based on the output AMOS 24.0 from confirmatory factor analysis.

Table 1. Scale, Measurement, Validity & Reliability

Scale Indicators	Reference	Std. Estimate	Critical Ratio	Convergent Validity-AVE	Construct Reliability
EFFECTIVE INCUBATION MODEL	Mrkajic (2014)			0.815	0.930
Infrastructures Provider		0.909	15.067		
Business Capability Development		0.893	14.544		
Market Reach Development		0.906	14.544*		
SUPPORTIVE ENTREPRENEURIAL ENVIRONMENT	Ao & Liu (2015)			0.888	0.960
Creation & Risk Taking Culture		0.928	20.161		
Public Attitude Towards Entrepreneurship		0.947	21.808		
Counselling & Support Services Availability		0.952	21.808*		
EMPOWERED STARTUP BUSINESS	Tselepis (2018)			0.755	0.902
Information Utilization Skills		0.930	14.01*		
Enhanced Technical & Business Skills		0.863	14.01		
Enthusiasm to make innovation and Development		0.810	12.262		
STARTUP BUSINESS PERFORMANCE	Selase Asamoah (2014)			0.802	0.924
Market Performance		0.877	13.835*		
Sales Growth		0.904	13.835		
New Product Success		0.905	13.855		

*) This variable is estimated twice. First, as the constrained variable, second as the unconstrained variable to count the critical ratio.

In the confirmatory factor analysis, it can be seen that each indicator showed acceptable magnitude/value, which means all was above 0.60 with a critical ratio above 1.96. Therefore, the indicators were able to reflect well in representing the construct. Meanwhile, the measurement of the construct validity showed that each variable has a pleasant AVE (Average Variance Extracted) value: Effective Incubation Model (0.815), Supportive Entrepreneurial Environment (0.888), Empowered Startup Business (0.755) and Startup Business Performance (0.802). All of the values are above the cut off AVE >= 0.50. Therefore, it can be concluded

that the instrument used to measure the four variables, and the indicators are valid and reliable.

The measurement of the reliability of the construct also showed a good result: Effective Incubation Model (0.930), Supportive Entrepreneurial Environment (0.960), Empowered Startup Business (0.902), and Startup Business Performance (0.924). All of the values are above the cut off CRI >= 0.70

Having finished with the validity and reliability analysis conducted, the next stage is to test the hypotheses. Diagrammatically, the empirical model analysis and testing are shown in Figure 2.

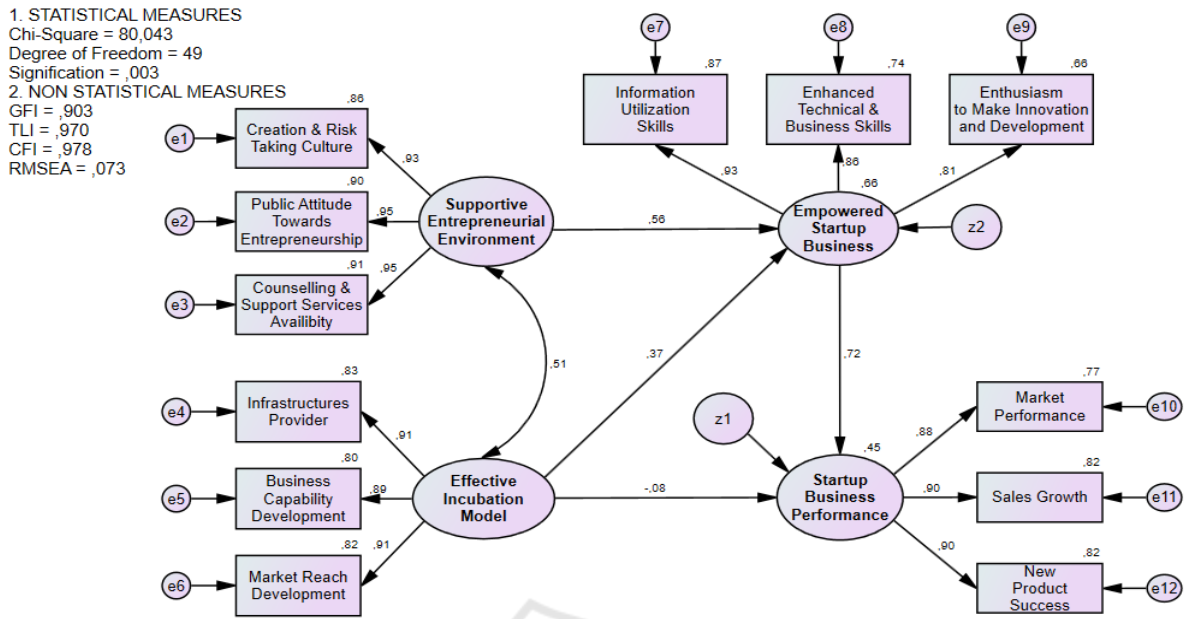


Figure 2. Empirical Research Model Testing

In Figure 2, we can see the result of the structural equation model analysis. The goodness of fit test was conducted using two methods, which are Statistic and Non-Statistic Measurement. The result obtained from the Statistic Measurement method is Chi-Square value = 80.043, and the degree of freedom = 49 with probability = 0.003. This result proves that this model does not fit, because the SEM prerequisite requires low Chi-Square value or near zero, and the probability value must be higher than 0.05.

However, if we use the Non-Statistical Measures, the model can be considered fit because the GFI (0.903); TLI (0.970); CFI (0.978) index is above the cut off value 0.90. RMSEA also shows a good result: 0.073, which is in the expected range of 0.03 – 0.08. Because the model can fit in one of the methods used, which is Non-Statistical Measurement method and seeing from the GFI, TLI, CFI and RMSEA value which meets the SEM prerequisite, it can be said that the developed model fits and compatible to the empirical data.

Table 2. The Coefficient of Regression

HYPOTHESIS	Std. estimate	Estimate	Std. error	Critical Ratio	Significance	Conclusion
H1: Effective Incubation Model --> Startup Business Performance	-0.080	-0.065	0.088	-0.733	0.463	Not Supported
H2: Effective Incubation Model --> Empowered Startup Business	0.369	0.333	0.070	4.734	***	Supported
H3: Supportive Entrepreneurial Environment --> Empowered Startup Business	0.557	0.530	0.074	7.205	***	Supported
H4: Empowered Startup Business --> Startup Business Performance	0.723	0.645	0.105	6.149	***	Supported

The analysis suggests that H1 Hypothesis, which stated “the more effective business incubation model conducted by the business incubator, the higher startup business performance is” was rejected because the critical ratio value is only $-0.733 < 1.96$ with a weak parameter value of 0.463 – either at the significance level of 0.05 and 0.10. This means that even though the incubation model has been conducted effectively, it does not immediately improve the startup business performance. H2 Hypothesis H2, which stated, “the more effective business incubation model conducted by the business incubator, the more empowered its startup business partner is” is accepted, revealed by the critical ratio value of $4.734 > 1.96$ and the parameter value of 0.369. H3 Hypothesis, which stated, “The more supportive the environment in which entrepreneurship is conducted, the more empowered the startup business will be” is also accepted, due to its critical ratio value of $7.205 > 1.96$ with parameter value 0.557. The last but not the least, H4 hypothesis, which stated, “The higher the level of Empowered Startup Business is, the higher the Startup Business Performance will be achieved by the company” is accepted as well. This is conveyed through the critical ratio value of $6.149 > 1.96$ and the parameter value of 0.723.

5 DISCUSSION

This research aimed to seek a fundamental answer to the question: why some of the incubation business fails to improve its startup business performance? To answer that particular question, the researcher attempted to introduce the empowered startup business concept as the result of business incubation, which is derived from Resources Based View theory. Besides, this research also attempted to explore the answer to the question: “what is the role of a supportive entrepreneurial environment in forming empowered startup business? The research then combined those questions in the developed model where the antecedent variable is the effective incubation model, and the supportive entrepreneurial environment is aimed to improve startup Business performance while mediated by the empowered startup business. Based on the accepted hypotheses and the magnitude of the relation between the variables, the findings will be elaborated in the next part.

Building upon the developed structural model, the result obtained is that the effective incubation model does not automatically improve the startup business performance. This finding confirmed the research

conducted by Hong et al. (2018), Wonglimpiyarat (2017), and Fischbacher-Smith (2017), which suggested that the incubation activity does not always significantly stabilize the business started. Based on the result of the observation and interview regarding this matter, the researcher found that several business incubators run the incubation model too long and not to the point – the incubation period could last for 8-14 months. This condition caused the startup business could not validate the ideas effectively, which caused a delay in product launching. Some of the startuppreneurs only expected initiative from the business incubator and tend to be passive when it comes to the effort to develop their business. Another problem that induced the failure in the incubation activity is the lack of attention from the business incubator toward the partners. This is often done by an incubator that has too many partners. When the incubators become unfocused, they only run the business incubation activities without monitoring and maintenance toward the startup business partner. (Blanck et al., 2019).

Inadequateness in the market, mentor, investor, and other entrepreneurship development-related stakeholder networking could also be the cause of the failure in business incubation activity. Business incubation usually only focus on the technical training and workshop, and neglect to expand networking, which can boost the expansion of the startup business market share and even further development. This typical incubator usually assumes that training and workshops are enough to improve business performance. Unfortunately, that is not the fact. All of the incubation business elements must be implemented completely, starting from infrastructure providers, capability development, and also connectivity with the market and investor.

Lastly, the reason for the business incubation activity fails is when the incubator is inexperienced in adopting the replicated the incubation business model. Multiple business incubation business varieties exist; however, to find effective business incubation is not an easy task. It requires consistency and adjustment in order for the model compatible with the custom and culture of a particular place.

If the business incubator can handle the problems mentioned above, the incubation activity will run well, and it usually will not directly affect business performance. Almost all the business incubation models – both process-oriented and result oriented has the same characteristic. All of them attempt to plant the entrepreneurial mindset and orientation in the startup business partner. (Aloulou, 2018). With the mindset and orientation planted, the startup

business will have enthusiasm in creating new ideas, innovating, and developing technical and managerial skills. This is the essence of the acceptance of the second hypothesis.

Startup business empowerment will then automatically direct the startuppreneurs to the activities which enhance their performance. The acceptance of the H4 hypothesis can prove this. They are fully aware that once they dived in this business, there is no going back, they must set their focus on the performance-enhancing in order to survive in the fierce business competition. This does not necessarily apply to all startup businesses, because some new entry business player might decide to be easy going, and some might only do it only for the experience. That is why it is crucial for the business incubator always to motivate the partner to form KPI (Key Performance Indicator) to monitor how successful the empowerment activities are. (Hsu and Wang, 2018).

An environment that can support entrepreneurial activity also plays a vital role in establishing an empowered startup business. This is conveyed in the acceptance of the H3 Hypothesis. The conducive environment will allow the startuppreneur to freely explore their capability while collaborating with the stakeholders in the form of sharing and business consultation. The supportive environment can also support the community in which they take shelter – this is proven to be one of the essential factors to empower the business. Whether they like it or not, business incubators must try to create a condition the environment for it to be supportive toward entrepreneurship. This is not an accessible initiative to make. It demands a great effort, for in the process of conditioning the environment, it requires culture shaping and positive attitude toward entrepreneurial professions (St-Pierre et al., 2016). Another challenge to this attempt is the stigma owned by the people living in the developing countries, the stigma which consider entrepreneurship is a less decent profession compared to the profession in a multinational company or government sector.

Several strategies can be implemented to create a supportive environment for entrepreneurship – surely, these strategies cannot be implemented by the business incubator alone; it requires all stakeholders to collaborate. The first strategy requires a business incubator to collaborate with multiple stakeholders, such as local government, the business community, established company which pays more attention to the entrepreneur development. This collaboration is expected to strengthen the business networking among startup businesses, and at the same time to spread the “seed” and the passion of entrepreneurship

in the society. The second strategy is creating a public relations program, possibly through mass media or entrepreneurial events, to introduce the startup business to society. This strategy should emphasize the benefits of becoming an entrepreneur. Besides that, it will also promote the startup business partner. The third strategy is to create a business competition that is open to the public – this will need funding which can be obtained from either the third party or donation. This competition will give motivation to the startup business and at the same time, shape the surrounding's positive attitude towards the entrepreneurial professions.

6 CONCLUSION AND FUTURE RESEARCH

The implication of this research is the formed startup business performance enhancement model through an effective Incubation model, mediated by empowered startup business variables. This variable is also the solution to the missing link, which caused the business incubation not able to improve the startup business performance. Therefore, even though the business incubator can conduct the effective incubation model – which is characterized by its capability to become the Infrastructure Provider, give Business Capability Development to its business partner, provide access to the market, it does not necessarily mean that it can automatically improve the business performance in market share control, or ensure the launching of a new product. The incubation business should be directed to trigger the enthusiasm in the startuppreneurs in innovating and developing, passion for enhancing technical and managerial skills, gaining skill in utilizing information strategically to promote the startup until they earn their title as the empowered business startup. An environment that is supportive of entrepreneurship plays a vital role in the model as well. It is in the shelter of a supportive environment, the opportunity for an empowered startup business to grow shall rise.

Studies about empowered startup business and a supportive entrepreneurial environment related to startup business performance and supportive entrepreneurial Environment is not commonly explored. This means that there is room for further research to complete the model. The Key Performance Indicator to measure the empowered startup business can be researched further to find out how the business incubator should monitor and scale

up its potential partners. This model can also be combined with the business uncertainty variable to test whether or not the empowered startup business concept is still proper to be used as the basis for the business performance enhancement. This model can also be tested, especially in business incubators in universities, because recently, many universities progressively create a business incubator to create a university-based entrepreneurial atmosphere.

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REFERENCES

- ALOULOU, W. J. 2018. Examining entrepreneurial orientation's dimensions – performance relationship in Saudi family businesses. *Journal of Family Business Management*, 8, 126-145.
- AO, J. & LIU, Z. 2015. What impact entrepreneurial intention? Cultural, environmental, and educational factors. *Journal of Management Analytics*, 1, 224-239.
- AYATSE, F. A., KWAHAR, N. & IYORTSUUN, A. S. 2017. Business incubation process and firm performance: an empirical review. *Journal of Global Entrepreneurship Research*, 7.
- BARNEY, J. 1991. Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17, 99-120.
- BARNEY, J. B. & MACKEY, T. B. 2005. Testing Resource-Based Theory. 2, 1-13.
- BERGMANN, H., GEISLER, M., HUNDT, C. & GRAVE, B. 2018. The climate for entrepreneurship at higher education institutions. *Research Policy*, 47, 700-716.
- BIKSE, V., LUSENA – EZERA, I. & RIVZA, B. 2018. Innovative start-ups: challenges and development opportunities in Latvia. *International Journal of Innovation Science*, 10, 261-273.
- BJÖRKLUND, T. A. & KRUEGER, N. F. 2016. Generating resources through co-evolution of entrepreneurs and ecosystems. *Journal of Enterprising Communities: People and Places in the Global Economy*, 10, 477-498.
- BLANCK, M., RIBEIRO, J. L. D. & ANZANELLO, M. J. 2019. A relational exploratory study of business incubation and smart cities - Findings from Europe. *Cities*, 88, 48-58.
- CHARI, M. D. R. & DIXIT, J. 2015. Business groups and entrepreneurship in developing countries after reforms. *Journal of Business Research*, 68, 1359-1366.
- COWELL, M., LYON-HILL, S. & TATE, S. 2018. It takes all kinds: understanding diverse entrepreneurial ecosystems. *Journal of Enterprising Communities: People and Places in the Global Economy*, 12, 178-198.
- DAVCIK, N. S. & SHARMA, P. 2016. Marketing resources, performance, and competitive advantage: A review and future research directions. *Journal of Business Research*, 69, 5547-5552.
- DAVID-WEST, O., UMUKORO, I. O. & ONUOHA, R. O. 2018. Platforms in Sub-Saharan Africa: startup models and the role of business incubation. *Journal of Intellectual Capital*, 19, 581-616.
- DE MATTOS, C. & SALCIUVIENE, L. 2017. The negative influence of the entrepreneur's level of higher education on the attractiveness of European SMEs as alliance partners in Brazil: the role of practical experience and international entrepreneurial orientation. *The International Journal of Human Resource Management*, 1-29.
- FAHMI, F. Z., KOSTER, S. & VAN DIJK, J. 2016. The location of creative industries in a developing country: The case of Indonesia. In: RI, K. P. D. E. K. (ed.) *Cities*.
- FERRANDIZ, J., FIDEL, P. & CONCHADO, A. 2018. Promoting entrepreneurial intention through a higher education program integrated in an entrepreneurship ecosystem. *International Journal of Innovation Science*, 10, 6-21.
- FISCHBACHER-SMITH, D. 2017. When organisational effectiveness fails. *Journal of Organizational Effectiveness: People and Performance*, 4, 89-107.
- GABRIEL, C.-A. & KIRKWOOD, J. 2016. Business models for model businesses: Lessons from renewable energy entrepreneurs in developing countries. *Energy Policy*, 95, 336-349.
- GALVÃO, A., MARQUES, C., FRANCO, M. & MASCARENHAS, C. 2019. The role of start-up incubators in cooperation networks from the perspective of resource dependence and interlocking directorates. *Management Decision*.
- GAO, Y. & HU, Y. 2017. The upgrade to hybrid incubators in China: a case study of Tuspark incubator. *Journal of Science and Technology Policy Management*, 8, 331-351.
- GROSSBERG, K. A. 2018. A startup's strategy: doing good sets the stage for doing well. *Strategy & Leadership*, 46, 44-47.
- HAHN, R., SPIETH, P. & INCE, I. 2018. Business model design in sustainable entrepreneurship: Illuminating the commercial logic of hybrid businesses. *Journal of Cleaner Production*, 176, 439-451.
- HONG, J., YANG, Y., WANG, H., ZHOU, Y. & DENG, P. 2018. Incubator interdependence and incubation performance in China's transition economy: the moderating roles of incubator ownership and strategy. *Technology Analysis & Strategic Management*, 1-15.

- HSIEH, Y.-J. & WU, Y. J. 2018. Entrepreneurship through the platform strategy in the digital era: Insights and research opportunities. *Computers in Human Behavior*.
- HSU, C.-Y. & WANG, S.-M. 2018. Social entrepreneurial intentions and its influential factors: A comparison of students in Taiwan and Hong Kong. *Innovations in Education and Teaching International*, 1-11.
- HUO, B., HAN, Z. & PRAJOGO, D. 2016. Antecedents and consequences of supply chain information integration: a resource-based view. *Supply Chain Management: An International Journal*, 21, 661-677.
- IYORTSUUN, A. S. 2017. An empirical analysis of the effect of business incubation process on firm performance in Nigeria. *Journal of Small Business & Entrepreneurship*, 29, 433-459.
- KIANI MAVI, R., GHEIBDOUST, H., KHANFAR, A. A. & KIANI MAVI, N. 2019. Ranking factors influencing strategic management of university business incubators with ANP. *Management Decision*.
- LIU, P. & BELL, R. 2019. Exploration of the initiation and process of business model innovation of successful Chinese ICT enterprises. *Journal of Entrepreneurship in Emerging Economies*.
- LONG, T. B., LOOIJEN, A. & BLOK, V. 2018. Critical success factors for the transition to business models for sustainability in the food and beverage industry in the Netherlands. *Journal of Cleaner Production*, 175, 82-95.
- MOREIRA, A. & F S CARVALHO, M. 2012. Incubation of New Ideas: Extending Incubation Models to Less-Favored Regions.
- MRKAJIC, B. 2017. Business incubation models and institutionally void environments. *Technovation*, 68, 44-55.
- NABI, G., NABI, G. & LINÁN, F. 2011. Graduate entrepreneurship in the developing world: intentions, education, and development. *Education + Training*, 53, 325-334.
- PAUL, J. & SHRIVATAVA, A. 2016. Do young managers in a developing country have stronger entrepreneurial intentions? Theory and debate. *International Business Review*, 25, 1197-1210.
- PETRUCCI, F. 2018. The incubation process of mid-stage startup companies: a business network perspective. *IMP Journal*, 12, 544-566.
- PILLAI, T. R. & AHAMAT, A. 2018. Social-cultural capital in youth entrepreneurship ecosystem: Southeast Asia. *Journal of Enterprising Communities: People and Places in the Global Economy*, 12, 232-255.
- POMEROL, J.-C. 2018. Business uncertainty, corporate decision and startups. *Journal of Decision Systems*, 27, 32-37.
- QIAN, H. 2018. Knowledge-Based Regional Economic Development: A Synthetic Review of Knowledge Spillovers, Entrepreneurship, and Entrepreneurial Ecosystems. *Economic Development Quarterly*, 32, 163-176.
- SARA, C., JONES-EVANS & DYLAN 2009. *Enterprise and Small Business: Principles, Practice and Policy* (2nd ed.). *Strategic Direction*, 25.
- SELASE ASAMOAH, E. 2014. Customer based brand equity (CBBE) and the competitive performance of SMEs in Ghana. *Journal of Small Business and Enterprise Development*, 21, 117-131.
- SMILOR, R. W. 1987. *Managing the Incubator System: Critical Success Factors to Accelerate New Company Development*. *IEEE TRANSACTIONS ON ENGINEERING MANAGEMENT*, EM-34, 146-156.
- SOETANTO, D. & JACK, S. 2016. The impact of university-based incubation support on the innovation strategy of academic spin-offs. *Technovation*, 50-51, 25-40.
- SOETANTO, D. & VAN GEENHUIZEN, M. 2019. Life after incubation: The impact of entrepreneurial universities in the long-term performance of their spin-offs. *Technological Forecasting and Social Change*, 141, 263-276.
- SOMSUK, N., WONGLIMPIYARAT, J. & LAOSIRIHONGTHONG, T. 2012. Technology business incubators and industrial development: resource-based view. *Industrial Management & Data Systems*, 112, 245-267.
- ST-PIERRE, J., FOLEU, L., ABDULNOUR, G., NOMO, S. & FOU DA, M. 2016. SME Development Challenges in Cameroon: An Entrepreneurial Ecosystem Perspective. *Transnational Corporations Review*, 7, 441-462.
- TORUN, M., PECONICK, L., SOBREIRO, V., KIMURA, H. & PIQUE, J. 2018. Assessing business incubation: A review on benchmarking. *International Journal of Innovation Studies*, 2, 91-100.
- TSELEPIS, T. J. 2018. When clothing designers become businesspeople: a design-centered training methodology for empowerment incubation. *International Journal of Fashion Design, Technology and Education*, 1-11.
- VAN WEELE, M., VAN RIJNSOEVER, F. J. & NAUTA, F. 2017. You can't always get what you want: How entrepreneur's perceived resource needs affect the incubator's assertiveness. *Technovation*, 59, 18-33.
- WARNIER, V., J.M. FERREIRA, J. E. V. A. J., WEPPE, X. & LECOCQ, X. 2013. Extending resource-based theory: considering strategic, ordinary and junk resources. *Management Decision*, 51, 1359-1379.
- WONGLIMPIYARAT, J. 2017. Technology auditing and risk management of technology incubators/science parks. *World Journal of Entrepreneurship, Management, and Sustainable Development*, 13, 44-56.
- WRIGHT, F. 2017. How do entrepreneurs obtain financing? An evaluation of available options and how they fit into the current entrepreneurial ecosystem. *Journal of Business & Finance Librarianship*, 22, 190-200.
- XIAO, L. & NORTH, D. 2017. The role of Technological Business Incubators in supporting business innovation in China: a case of regional adaptability? *Entrepreneurship & Regional Development*, 30, 29-57.
- YI, G. & UYARRA, E. 2018. Process Mechanisms for Academic Entrepreneurial Ecosystems: Insights from a Case Study in China. *Science, Technology and Society*, 23, 85-106.