



Incubator and Accelerator Startup Program on Startup Performance (Study Case in Indigo Telkom Indonesia)

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ABSTRACT: The rise of technology-based startups in Indonesia, which has led to an increase in the number of startups and failures due to their inability to grow and generate profits. Business incubators and accelerators are seen as an alternative solution to aid startups in overcoming their challenges. Indigo, an Incubator and Accelerator Program for digital startups owned by PT Telkom Indonesia, offers a complete program to support Indonesia's digital startup ecosystem. This study aims to determine how respondents perceive the variables of Infrastructure, Management Support, Training & Development, Financial Support, Network, Synergy, and Startup Performance so that they can improve the program that is considered insufficient. In addition, this study also aims to determine the effect between the variables of Infrastructure, Management Support, Training & Development, Financial Support, Network, Synergy on Startup Performance. The research method used in this research is descriptive quantitative method with saturated sample sampling technique and the analysis technique used is descriptive analysis and multivariate SEM PLS.

KEYWORDS: Accelerator, Incubator, Startup, Startup Performance.

1. INTRODUCTION

The rise of technology-based startups in Indonesia is inspired by the success of companies like Facebook, Google, and Uber. Indonesia has many startups, but many of them have failed due to an inability to grow and turn profitable. Business incubators and accelerators are seen as a solution to help startups overcome their challenges. The startup ecosystem in the country has created opportunities for accelerators and incubators to provide education to startup founders in business and technology development. These programs are crucial in increasing the chances of success for startups, particularly in the early stages. Indigo, an Incubator and Accelerator Program for digital startups owned by PT Telkom Indonesia, offers a complete program to support Indonesia's digital startup ecosystem, which includes nurturing creativity activities in the pre-startup stage, startup incubation/acceleration, business synergy programs, and follow-on funding. The program runs for 6 to 18 months, and it is expected that startups will achieve stable, growing, and sustainable business performance, including further funding at the seed funding stage. The program's objective is to create successful startups that can contribute to the growth of Indonesia's digital economy ecosystem, aligning with Telkom's vision as a state-owned company. However, the journey in obtaining sustainable business is not that easy even though the startup has participated in the incubator or accelerator program at Indigo. For their seed stage, only several startups are able to secure a follow-on investment from VC. In this case, Since 2013 Indigo has incubated and accelerated more than 100 startups, but only 28 startup alumni programs that managed to get further funding (FoF). Indigo needs to determine why only several of its alumni have been successful in securing follow-on funding. It appears that startups with successful performance are those that have been able to offer products that are suitable for existing market demand. To address this issue, it is essential to identify the factors within the incubation and acceleration program that can influence the improvement of startup performance, leading to profitability and sustainability. Startups, incubators, and accelerators should focus on these factors during the startup development process, which will ultimately contribute to the growth of Indonesia's digital startup ecosystem and have a positive impact on the Indonesian economy.

2. INCUBATOR PROGRAM

According to information from the Department of Cooperatives and small entrepreneurs, in the KUKM ministry in 2002 an incubator is a corporate institution that provides 7 (seven) S, which is called the 7S, namely: Space, Shared, Services, Support, Skill development, Seed capital, and Synergy. (Anggerina, 2020). Further explanations are:

- 1) Space: The incubator provides a physical space for startups to develop their business ideas at an early stage.



- 2) Share: The incubator offers office facilities, such as receptionist services, conference rooms, internet access, computers, and security, that can be shared among startups.
- 3) Services : The incubator provides management consulting services, market research, financial and legal support, trade information, and technology services to help startups grow.
- 4) Support: The incubator helps startups access research, professional networks, technology, international markets, and investment opportunities.
- 5) Skill Development: The incubator provides opportunities for startups to develop their skills in preparing a business plan, management, and other relevant areas.
- 6) Seed Capital: The incubator may offer funding through an internal revolving fund or help startups access existing funding sources or financial institutions.
- 7) Synergy: The incubator promotes cooperation or competition between startups and networks with universities, research institutions, private businesses, corporations, professionals, and the international community to help startups grow and succeed.

Meanwhile, according to (Awan, 2022) the incubator program is evaluated based on five parameters:

- 1) Infrastructure: Refers to the physical facilities of the incubator, such as offices, conference rooms, and support services.
- 2) Management Support : Includes the provision of business management services, such as marketing and the creation of business plans, to ensure the success of startups in the incubator, and support in identifying, guiding, encouraging collaborations, and solving startup business problems.
- 3) Training & Development : and support in identifying, guiding, encouraging collaborations, and solving startup business problems.
- 4) Financial Support : focuses on supporting the creation of funds for startups.
- 5) Networking : Refers to exposure to professional networks for information sharing and learning, with access to markets, suppliers, expert networks, nodes, and external partnerships.

3. THE DIFFERENCE BETWEEN INCUBATOR AND ACCELERATOR PROGRAM

Incubators aim to support businesses at various stages of development, from the idea phase to those with a minimum viable product. Their primary focus is to provide guidance and support during the initial stages of development. Accelerators, on the other hand, are geared towards scale-ups that have a minimum viable product and are ready to grow. Since accelerators often invest in these businesses, their selection process is more stringent, with a focus on admitting only those with a high probability of success. (Samsir, 2021). To put it simply, while accelerators share similarities with incubators, they differ in three key aspects: the size and quality of the mentoring network they provide, the level of pressure and discipline they enforce, and the availability of future capital funding opportunities (Adiningsih, 2019).

4. STARTUP PERFORMANCE

According to Mahani (2019) measuring startup performance before and after incubator participation is considered successful if it shows an improvement in the following aspects:

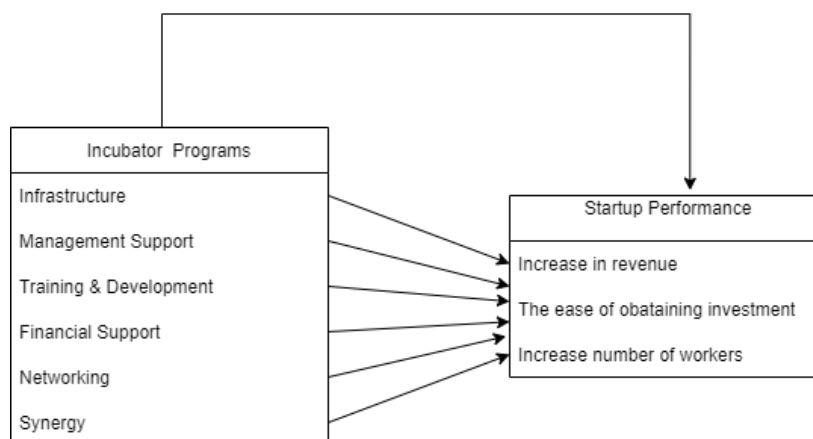
- 1) Income increase : A noticeable difference in income before and after joining the incubator or accelerator program.
- 2) Increase in the number of workers : A change in the number of employees or teams before and after participation in the incubator or accelerator program.
- 3) Improved ease of obtaining business investment : Greater convenience in obtaining further funding after participation in the program.

5. CONCEPTUAL FRAMEWORK

In the implementation of its startup incubator and accelerator program, Indigo has adopted the method used by Shah Hussain Awan (2022), which covers various aspects such as infrastructure, management support, training and development, financial support, and networking. In addition to this, Indigo has also incorporated the theory of startup incubator programs from the Ministry of KUKM (2012), specifically focusing on the sub-variable of synergy. The utilization of incubation and accelerator programs by the Indigo



incubator is expected to yield positive effects on the performance of startup businesses. In evaluating the impact of these programs, the authors of this study utilized three main performance indicators: revenue growth, ease of obtaining investment, and expansion of the workforce/teams (Mahani, 2019).



The startup incubator program is used as a basis for ranking the hypotheses that have a positive effect on startup performance. This program consists of six variables: infrastructure, training and development support, management support, financial support, networking, and synergy. Infrastructure refers to the facilities provided to foster startups, including physical facilities and support services. Training and development support involves providing coaching and mentoring to startups with dedicated mentors and industry expertise. Management support requires the provision of business management services, such as marketing and the creation of business plans and support in identifying, guiding, encouraging collaborations, and solving startup business problems. Financial support helps create funds for startups. Networking involves exposure to professional networks that enable information sharing and learning, while synergy creates opportunities for collaboration between startups and other stakeholders in the digital business ecosystem. This study aims to determine whether the incubator program has a positive effect on startup performance, and which program factors have the most influence on the performance of Indigo-assisted startups. Networking and synergy received the highest rating from respondents in accessing markets, channels of suppliers, networks of experts, network nodes, and external partnerships.

Based on the conceptual framework above, the hypotheses in this study are as follows:

- H1: Infrastructure incubator has a positive and significant effect on startup performance.
- H2: Management Support incubator has a positive and significant effect on Startup performance.
- H3: Training & Development incubator has a positive and significant effect on Startup performance.
- H4.: Financial Support incubator has a positive and significant effect on Startup performance.
- H5: Networking incubator has a positive and significant effect on startup performance.
- H6 : Synergy incubator has a positive and significant effect on startup performance.

6. RESEARCH METHODOLOGY

Based on research methodology used, this study uses quantitative method. According to (Indrawan Rully, 2017) research quantitative tends to search, explain, and prove about the relationship between one variable with other variables. This quantitative research was carried out to obtain an explanation of the results hypothesis of the influence of the Incubator Program on Startup Performance in the Incubator Indigo that has been determined to produce answers to problems that have been formulated using SEM-PLS. Based on the research objectives, this research is conclusive (Indrawan Rully, 2017), the purpose of conclusive research is to test whether between variables have a relationship that is found in previous research, There is also the research object used at this time. As well as research This conclusive also aims to understand which variable to be cause and effect and see if there is a positive relationship between them causal variable and effect variable.



7. DESCRIPTIVE ANALYSIS

A. Incubator and accelerator Programs

No.	Dimensi	Persentase Skor	Kategori
1	Infrastructure	89.4%	Very Good
2	Management Support	81.5%	Good
3	Training & Development	71.7%	Good
4	Financial Support	83.5%	Good
5	Networking	76.6%	Good
6	Synergy	67.2%	Moderate
Persentase Skor Total		78.3%	Good

Based on table above, the overall incubator & accelerator program variable (X) is included in the Good category with an ideal percentage value of 78.3%. This shows that Indigo as an incubator and startup accelerator as a whole has implemented the six dimensions of the incubator & accelerator program variable well even though there is one variable that needs to be improved, namely the synergy dimension which gets a score of "moderate" on the indicator "collaboration process with Telkom group runs smoothly". This is in accordance with the conditions in the field when there is potential for synergy between Telkom and Indigo-assisted startups, it does not continue, only limited to initiation. According to the interviews with Telkom Indigo synergy officers, the things that caused the constraints of the synergy startup process did not run smoothly:

1. Mismatch between Indigo's startup portfolio and the needs of Telkom's stakeholders (Tribe/CFU/Subsidiaries).
2. Mismatches between Telkom and Startup's capabilities in terms of startup products/features or revenue sharing model resulted in not finding a suitable cooperation role map.
3. Startups only rely on Telkom but do not have a clear business partnership scheme.
4. The flow of the synergy process is sufficiently long that there are coordination problems between startups and Telkom stakeholders.

B. Startup Performance

No.	Dimensi	Persentase Skor	Kategori
1	Increase in Revenue	73.1%	Good
2	Ease of Obtaining Investment	61.7%	Enough
3	Increase Number of Workers	74%	Good
Persentase Skor Total		69.6%	Good

Based on table above, the overall startup performance variable (Y) is still in the good category with a percentage value of 69.6%. This shows that Indigo has three dimensions of good startup performance variables even though there is one variable whose results not good enough yet, namely the ease of obtaining investment which gets a score of "enough" on the indicator "After participating in the program, startups get follow on funding". This can be seen from Indigo alumni data where out of 102 startup alumni only 28 startup alumni programs that managed to get further funding (FoF). In spite of the influence of incubator or accelerator programs, the ease of obtaining follow-on investment is also driven by the ability of the startup itself. According to Muhammad Affan Naufal Rohmat, a Business Development Associate at Cakra Venture, a startup's ability to attract follow-on funding from venture capitalists depends on several factors. These might include factors such as the startup's overall business model and strategy, the team's experience and expertise, the market potential and scalability of the product or service, and the startup's ability to demonstrate traction and progress towards its goals. Ultimately, the success of a startup in securing follow-on funding depends on its ability to convince investors that it has a promising and sustainable business model with strong growth potential.



8. HYPOTHESIS TESTING

Variabel	Original Sample (o)	T Statistics (O/STDEV)	P Values	Keterangan
Infrastructure -> Startup Performance	0.167	1.163	0.245	H1 accepted (insignificant)
Management Support -> Startup Performance	0.398	3.422	0.001	H2 accepted (Significant)
Training & Development -> Startup Performance	0.111	1.008	0.314	H3 accepted (insignificant)
Financial Support -> Startup Performance	0.062	0.429	0.668	H4 accepted (insignificant)
Networking -> Startup Performance	0.120	0.803	0.665	H5 Daccepted (insignificant)
Synergy -> Startup Performance	0.235	1.437	0.151	H6 accepted (insignificant)

1. The Influence of Infrastructure on Startup Performance

In figure above, shows Tvalue $1.163 < 1.96$, the significance level is 0.245 which is greater than 0.05 and the path coefficients value is positive 0.167 which shows the direction of the relationship between infrastructure and startup performance is positive but the significance level has not met the requirements. Thus, this study states that infrastructure affects startup performance is accepted..

2. The Influence of Management Support on Startup Performance

In figure above,shows Tvalue $3.422 > 1.96$, the significance level is 0.001 which is smaller than < 0.05 and the path coefficients value is positive 0.398 which shows the direction of the relationship between management support and startup performance is positive and significant. Thus, this study states that management support affects startup performance is accepted. The positive relationship shows that the increase in management support will be followed by an increase in startup performance. Meanwhile, the significant relationship between management support and startup performance means that it can be generalized to the entire population where the sample in this study is the population of alumni of the Indigo incubator and accelerator program..

3. The Influence of Training & Development on Startup Performance

In figure above, the Tvalue is $1.008 < 1.96$, the significance level is 0.463 which is greater than 0.05 and the path coefficients value is positive 0.314 which shows the direction of the relationship between training & development on startup performance is positive but the significance level does not meet the requirements. Thus, this study states that training & development has an effect on startup performance.

4. The Influence of Financial Support on Startup Performance

In figure above, the Tvalue is $0.429 < 1.96$, the significance level is 0.668 which is greater than 0.05 and the path coefficients value is positive 0.062 which shows the direction of the relationship between financial support and startup performance is positive but the significance level does not meet the requirements. Thus, this study states that financial support has an effect on startup performance..

5. The Influence of Networking on Startup Performance

In figure above, it can be seen that the Tvalue is $0.665 < 1.96$, the significance level is 0.506 which is greater than 0.05 and the path coefficients value is positive 0.120 which shows the direction of the relationship between networking and startup performance is positive but the significance level does not meet the requirements. Thus, this study states that networking affects startup performance but is not significant.

6. The Influence of Synergy on Startup Performance

In figure above, it can be seen that the Tvalue is $1.437 < 1.96$, the significance level is 0.151 which is greater than 0.05 and the path coefficients value is positive 0.235 which shows the direction of the relationship between synergy and startup performance is positive



but the significance level does not meet the requirements. Thus, this study states that synergy affects startup performance but not significant.

9. CONCLUSION

This research was conducted to 51 respondents, alumni assisted by Indigo incubators and accelerators. This study aims to determine how respondents perceive the variables of Infrastructure, Management Support, Training & Development, Financial Support, Network, Synergy, and Startup Performance so that they can improve the program that is considered insufficient. In addition, this study also aims to determine the effect between the variables of Infrastructure, Management Support, Training & Development, Financial Support, Network, Synergy on Startup Performance.

Data collection and data analysis have been carried out to obtain the conclusion that based on descriptive analysis Indigo Incubator and accelerator program is in good condition, with a value of 78.3%, although there is one variable that is still in the "moderate" category, namely Synergy which obtained a value of 67.2%. Based on descriptive analysis, the performance conditions of Indigo Incubator and accelerator alumni startups are in good condition with a value of 69.6%, although there is one variable that is still in the "Moderate" category, namely Ease of Obtaining Investment which obtained a value of 61.7%. Furthermore, based on the results of hypothesis testing, all incubator and accelerator program variables have a positive effect on startup performance. However, the variable that has a positive and significant effect is the Management Support variable. The significant relationship between management support and startup performance means that it can be generalized to the entire population where the sample in this study is the population of alumni Indigo incubator and accelerator program.

RECOMMENDATION

Based on the results, analysis, and conclusions of the study, the following recommendations have been proposed below:

1. To increase synergy, Indigo management could conduct a mapping of Indigo's startup portfolio capabilities as well as the capabilities and needs of other Telkom group units or companies to explore potential synergies between startups & Telkom through project collaboration using the "Ambition Matrix" framework. Afterwards, Indigo management could conduct regular monitoring through dedicated PICs from Indigo & stakeholders to ensure the project is well delivered and if there are obstacles, they could be mediated directly.
2. To improve the ease of obtaining investment, Indigo management can also use an ambition matrix for startup intake criteria at the "Transformational" point which focuses on possible future trends outside Telkom's portfolio to get benefit from market trends & investment insight. Moreover indigo could use filters that emphasize on aspects of the quality of startup founders, innovative products or services that meet market needs, and large market potential so they have a good path to profitability for upcoming filter intake Indigo. In addition to increasing the effect of Follow on Funding in the Demo Day program, Indigo management can classify the Demo Day event into three parts; pre-Demo Day, Demo Day, Post Demo Day.

REFERENCES

1. Adiningsih, S. (2019). Indonesia's Digital-Based Economic Transformation. Jakarta: PT Gramedia Pustaka
2. Anggerina, V. (2020). Effect of Business Incubator Program on Startup Performance (Case Study on Cubic Incubator).
3. Indrawan Rully, P. Y. (2017). *Research Methodology*. Bandung: PT Refika Aditama. *Development Management Journal*, 84-92.
4. Mahani, S. A. (2019). PERFORMANCE OF DEVELOPMENT STARTING BUSINESS ASSISTANCE ON ORANGENEST INCUBIZ.
5. Samsir, M. S. (2021). THE ROLE OF VENTURE CAPITAL FIRM IN DEVELOPING THE INDONESIAN STARTUP ECOSYSTEM (CASE STUDY: MDI VENTURES & INDIGO CREATIVE NATION PROGRAM).

Cite this Article: Hilma Maulida S.Ab, Dr. Dina Dellyana S. Farm, Apt., MBA (2023). Incubator and Accelerator Startup Program on Startup Performance (Study Case in Indigo Telkom Indonesia). International Journal of Current Science Research and Review, 6(4), 2403-2408