

Development and Strengthening Strategies for the Business Incubator of the Jakarta Industrial Training Center (Balai Diklat Industri Jakarta) in Enhancing the Competitiveness of Micro, Small, and Medium Enterprises (MSMEs)

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ABSTRACT

Micro, Small, and Medium Enterprises (MSMEs) play a vital role in Indonesia's economy but remain less competitive than those in other ASEAN countries. Business incubators serve as strategic solutions by providing services, facilities, coaching, and mentoring. This study analyzes internal and external environmental conditions, formulates alternative strategies, and determines priority strategies for business incubator development. Data were collected through in-depth interviews with internal and external experts and analyzed using the Internal-External (IE) matrix, SWOT analysis, and the Quantitative Strategic Planning Matrix (QSPM). Findings indicate that BDI Jakarta is in the "growth and build" quadrant, with internal strengths outweighing weaknesses and greater external opportunities than threats. The SWOT analysis identifies nine alternative strategies: SO strategies (financial institution partnerships, product innovation based on local culture and intellectual property, and digital marketing enhancement), WO strategies (collaboration with the government and private sector for facility development and business analytics services), ST strategies (alignment with

government policies, strengthening networks with media and academia, and marketplace collaboration), and a WT strategy (partnership with research institutions for human resource and product development). QSPM analysis prioritizes digital transformation and improved financial access. Thus, incubators should strengthen MSME funding access through financial institution partnerships and enhance technology adoption in mentoring programs to expand market reach.

Keywords: Business Incubator, Internal-Eksternal Matriks, SWOT Analysis, QSPM

INTRODUCTION

Indonesia stands as a nation significantly reliant on the growth of Micro, Small, and Medium Enterprises (MSMEs). The number of MSME units in Indonesia is recorded at 65.46 million, positioning the country as having the largest number of MSMEs in ASEAN (The ASEAN, 2022; UNCTAD, 2022). The contribution of MSMEs to Indonesia's Gross Domestic Product (GDP) reaches 60.5 percent, with national labor absorption accounting for 96.9 percent (Limanseto, 2022). However, the performance of Indonesian MSMEs lags in competitiveness, particularly in the export

sector. The findings of research conducted by Limanseto (2022) indicate that MSMEs in Indonesia exhibit a low export contribution within ASEAN. This observation is detailed in Table 1.

Table 1 indicates that Indonesian MSMEs exhibit the lowest export value level when compared to four other nations. This data serves as a reference point for enhancing the performance of MSMEs in Indonesia. Survey results conducted by MIKTI (2021) identify six key challenges faced by MSMEs in Indonesia: capital, human resources, regulations and legislation, market access, strategy, and facilities.

One potential effort to address these challenges faced by MSMEs is to foster their development through Business and Technology Incubator programs (Bergek & Norman, 2008). Business incubator programs not only provide financial support but also assist MSMEs in developing networks, improving managerial skills, and accessing capital (Morris, 2011).

Table 1. MSMEs' percentage share of exports

Country	Export (%)
Singapore	38,3
Thailand	28,7
Myanmar	23,7
Vietnam	18,7
Indonesia	15,69

Source: Limanseto (2022)

Business incubators can aid MSMEs in providing solutions to their problems and building a robust foundation for long-term growth. Syarif (2009) posits that business incubator programs represent an appropriate endeavor to develop MSMEs by offering services, facilities, coaching, and mentoring. Furthermore, business incubator programs can provide training and funding to enhance the performance of MSMEs, enabling them to compete in national or global markets. The legal basis for MSME mentoring in Indonesia is stipulated in the Regulation of the Minister of Cooperatives and Small and Medium Enterprises of the Republic of Indonesia Numbers 3 and 7 of 2021, as well

as Number 14 of 2023. These three regulations detail the protection of MSME businesses up to the procedures for MSME mentoring, one of which involves the empowerment of incubators. This strong legal foundation should serve as a reference for the importance of the role of business incubators in supporting the resolution of complex MSME issues.

One effort undertaken to resolve these issues is the crucial support of stakeholders, particularly the government, in the implementation of incubator programs. Research findings by Susiang (2024) elucidate problematic aspects of incubators in Indonesia, namely the importance of government support in the development of incubator programs, especially concerning policy, mentoring programs, intellectual capital, and funding. The government's role is vital in establishing funding for incubated businesses. These findings underpin the emergence of several government-owned incubators. This is supported by a strategic review report by the Ministry of Investment in 2023, which suggests that the Indonesian government can draw lessons from the UK government in enhancing the performance of business incubators through collaboration between regional or central government, business and trade associations by improving performance through modern business practices. However, business incubators face several challenges during MSME mentoring. The primary issue is the limited resources of incubators in facilitating expert personnel (Ramadian et al., 2024). Additionally, some incubator programs do not align with market needs, particularly for start-up businesses and the existing geographical conditions in Indonesia.

Based on the type of incubator institution, there are five categories: central and regional government incubators, educational institutions, business entities, and community-based organizations. Several previous studies have explored the problems and strategies of incubators originating from

educational institutions, such as Sitorus (2022) who investigated strategies for enhancing IPB's incubator, Sarjono (2024) who analyzed business incubators at State-Owned Legal Entity Universities (PTN-BH), and Rukmana et al. (2024) who analyzed incubators at Vocational schools. Literature and analysis concerning government incubator institutions are very limited, despite the highly complex problems faced by government incubator institutions. This can be observed in Table 2, which compares the ranking of incubators from educational institutions with central

government incubators. Table 2 shows that the majority of incubators originating from educational institutions have an A ranking, indicating the quality of these incubator programs, while only one government incubator received an A ranking. Furthermore, the number of fostered tenants is also smaller compared to the number of tenants fostered by incubators from educational institutions. One incubator that requires strategies for performance improvement is the MAJU BDI Jakarta incubator.

Table 2. A comparative analysis of accreditation status between educational and governmental incubators

Incubator	Type	Accreditation
Inbis Invapro-KP	Government	A
SMESCO Labo Inkubator	Government	B
MAJU Inkubator bisnis BDI Jakarta	Government	has not yet submitted a ranking application
Inkubator Bisnis Teknologi Balai Diklat Industri Makassar	Government	has not yet submitted a ranking application
INBIS Asia Malang	Education	A
Inkubator Bisnis Teknologi Technopark	Education	A
LKST IPB	Education	A

MAJU Incubator BDI Jakarta is one incubator striving to enhance the performance of MSMEs through a three-stage selection process: pre-incubation, incubation, and post-incubation. Established in 2020, this incubator employs several strategies to improve its quality. However, issues persist concerning tenant performance enhancement, particularly in the post-incubation phase, as indicated by incubator performance evaluation reports from 2022 and 2023. The number of tenants successfully sustaining their businesses in the post-incubation stage only reaches 50%. This constitutes a primary challenge for the BDI Jakarta incubator. The desired outcome is the incubator's success in ensuring the viability of its incubated businesses once they become independent. Beyond this issue, surviving tenants do not exhibit significant revenue growth, posing a challenge for MAJU BDI Jakarta in improving its overall performance. The incubator's approach to preventing tenant business failure is primarily

preventive, lacking an exploration of these failures through a management perspective (Nair & Blomquist, 2019). The incubator's success in enhancing tenant performance is predicated on crucial resources provided at the early stages of business development, notably mentoring, networking, funding, and training (Judijanto & Widyatmoko, 2024). One effort undertaken to achieve this is the formulation of strategies to realize the vision and mission of the BDI Jakarta incubator, especially concerning the improvement of incubator performance. David and David (2015) outline three stages in strategy formulation: the input stage, the matching stage, and the decision stage. The input stage involves internal and external identification to understand the incubator's environmental conditions. The matching stage comprises several recommendations for strategy formulation based on environmental identification, and the decision stage involves recommending priority strategies to resolve the identified problems. Several previous studies have

explored business strategies, such as Sitorus (2022), Soba et al. (2018), and Hasbullah et al. (2015), which analyzed incubator performance through strategy formulation. Accordingly, the objective of this research is to formulate strategies for BDI Jakarta using a management approach based on the three stages: input stage, matching stage, and decision stage.

LITERATURE REVIEW

Several theories elucidate strategy based on a management approach. Strategy is defined as a large-scale plan focused on the long term to achieve business objectives (Pearce & Robinson, 2013). One prominent management theory from David and David (2015) posits that strategy is the art and science of formulating, implementing, and evaluating cross-functional decisions that enable an organization to achieve its goals. The management theory of strategy development is conceptualized as actions undertaken by managers to develop organizational strategies through planning, organizing, and controlling activities. This perspective emphasizes that strategy is fundamentally a systematic approach designed by a company to attain its objectives (Robbins & Coulter, 2016).

Two major theories explain strategic management: those of Wheelen and Hunger, and David and David. Strategic management is a series of long-term decisions and actions taken by a company (Wheelen & Hunger, 2012). Wheelen and Hunger outline four stages in their strategic management concept: environmental scanning, strategy formulation, strategy implementation, and evaluation and control. Meanwhile, the theory proposed by David and David comprises three stages: strategy formulation, strategy implementation, and strategy evaluation. Strategy formulation, in turn, involves three phases: the input stage, the matching stage, and the decision stage (David & David, 2017). These strategy formulation stages from David and David

serve as the foundational framework for this research model.

Several prior studies highlight the importance of analyzing incubators to support the success of MSMEs. Incubators play a crucial role in the entrepreneurial ecosystem (Aerts et al., 2007). Furthermore, incubators are vital in assisting MSMEs to access resources (Breivik-Meyer et al., 2019) and in enhancing their competencies based on innovation orientation (Hamdan, 2013). Key factors determining incubator success include program and staff quality, access to capital, business networks, and government support (Subroto & Tricahyono, 2023). Additionally, the importance of downstreaming (hilirisasi) of fostered SMEs and the business models designed under incubator guidance are significant (Marzaman & Hasan, 2020). Stakeholder aspects also play a critical role in the success of business incubators. Academic, business, and government collaboration can accelerate incubator efforts to improve MSME performance in terms of market access, technology, and funding (Bismala et al., 2019). Primary challenges faced by business incubators include post-incubation guidance, particularly concerning funding and bureaucracy (Rukmana et al., 2023). Business incubators are also expected to adapt to digitalization and strengthen collaborations (Sitorus, 2022).

MATERIALS & METHODS

This research was conducted at the BDI Jakarta Business Incubator under the supervision of the Ministry of Industry of the Republic of Indonesia. Data collection took place from October to November 2024. The types and sources of data for this research are primary data, supported by secondary data. The primary data were obtained through interviews, questionnaire administration, and direct observation at the research site, while the secondary data comprised official documents from BDI

Jakarta, previous research findings, and other secondary data relevant to this study. The collected data were analyzed using a mixed-methods approach, combining qualitative and quantitative techniques based on three stages: input stage, matching stage, and decision stage. The research employed a judgment sampling method, utilizing expert analysis from three internal and three external experts. The environmental analysis was conducted through in-depth interviews regarding internal and external factors. Internal factors were assessed based on management functions, while external factors were analyzed using the Political, Economic, Social, and Technological (PEST) framework. Subsequently, the interview data were analyzed for internal evaluation using the Internal Factor Evaluation (IFE) matrix, while external factors were analyzed using the External Factor Evaluation (EFE) matrix. These stages constitute the input stage. The results of this analysis were then

analyzed using the Internal-External (IE) matrix to determine the organization's position based on IFE and EFE scores. The IE matrix results served as a reference for strategy formulation using the SWOT Matrix. Both of these methods fall under the matching stage. Finally, the Quantitative Strategic Planning Matrix (QSPM) was used for the decision stage. The results of the decision stage analysis provide the basis for managerial implications.

RESULT AND DISCUSSION

The business environment analysis of the incubator, based on internal conditions, encompasses aspects of facilities and infrastructure, human resources, financial resources, intellectual resources, and the incubator's reputation and network. The results of this internal analysis identify the strengths and weaknesses of the BDI Jakarta incubator. The findings of the incubator's internal environmental analysis are presented in Table 3.

Table 3: Results of Internal Environmental Analysis Based on Internal Expert Interviews

Strength	
<ul style="list-style-type: none"> Facilities supporting tenant operational activities. Facilities supporting business sustainability. Availability of two mentors (resident and technical) to assist tenants in business development. 	<ul style="list-style-type: none"> Operational funding sourced from the State Budget (APBN). Provision of training and guidance on Intellectual Property (IP). Provision of access to current and timely information related to IP. Facilitation of meetings with potential partners.
<ul style="list-style-type: none"> Presence of planning and programs in the form of training initiatives. Provision of support for accessing external funding opportunities. Provision of financial training and risk management guidance 	<ul style="list-style-type: none"> The incubator possesses a strategic plan for enhancing its reputation. The incubator collaborates with industry stakeholders in providing marketing training to tenants.
Weakness	
<ul style="list-style-type: none"> Limitations in the quantity and performance of machinery and equipment. Mentors are currently external personnel. Lack of alternative revenue streams for incubator activities. Insufficient support for technology transfer from research institutions. 	<ul style="list-style-type: none"> Non-provision of capital to tenants. Limited collaboration with researchers. The incubator is not yet capable of providing international marketing facilities. he incubator lacks specific achievements in enhancing its reputation.

Subsequently, an external analysis was conducted to analyze the incubator's

developing environment using the PEST approach. The results of this analysis serve

as a reference to identify opportunities and threats for the business incubator. The findings of the external environmental analysis are presented in Table 4.

Table 4. Results of External Environmental Analysis Based on Expert Interviews

Opportunity	
<ul style="list-style-type: none"> Incubator development is supported by the Regulation of the Minister of Cooperatives and Small and Medium Enterprises and is further supported by the programs of the Jakarta Industrial Training Center (Balai Diklat Industri Jakarta). The government provides tax incentives for MSMEs to support tenant development. The government facilitates ease of marketing access for MSMEs, both nationally and internationally. Economic growth increases demand for MSME products. Ease of access to information regarding taxation. 	<ul style="list-style-type: none"> Consumer evaluation information regarding products is readily accessible. Market development and information from communities can be leveraged. Innovation utilizing local culture as a product differentiator. The advancement of information media facilitates greater consumer reach for MSMEs. Ease of obtaining data for business development and access to global markets. The KUR (People's Business Credit) program facilitates access to funding for MSMEs. Quality of technological resources in developing MSME products or services
Threat	
<ul style="list-style-type: none"> Fluctuating government policies and policy uncertainty. Bureaucracy and complex requirements in accessing funding. Policy discrepancies between central and regional governments. Unstable inflation rates and raw material prices in the global market. Difficulty for MSMEs in securing funding from investors. The primary raw materials for tenant products are still imported. 	<ul style="list-style-type: none"> Consumer preferences are easily subject to change. Difficulty for MSMEs in acquiring qualified human resources. Geographical conditions pose challenges for market development. Inadequate human resources within the incubator's MSMEs for promoting products through information media. Dependence on technology poses risks of system failure or damage. High data security costs.

The results of the internal and external environmental analyses serve as the basis for weighting factors in the IFE and EFE matrices. The IFE analysis results are presented in Table 5. The IFE analysis indicates that the primary strength of the BDI Jakarta business incubator is its operational funding, which originates from the State Budget (APBN) or government funds. This result suggests that BDI Jakarta can leverage this as a supporting aspect for incubator development. The second major strength of BDI Jakarta, besides government

funding, is the availability of facilities that support the operational activities undertaken by tenants. This strength serves as a reference indicating that the BDI Jakarta incubator possesses facilities capable of fostering the development of nurtured MSMEs into independent entrepreneurial ventures. The third highest strength is the existence of a plan to enhance the reputation of BDI Jakarta. BDI Jakarta has currently submitted a ranking application to improve its reputation while providing services to tenants.

Table 5. IFE Analysis

Symbol	Internal Factor	weight	Rating	Score
S1	Facilities supporting tenant operational activities.	0,067	4,0	0,266
S2	Facilities supporting business sustainability.	0,045	3,6	0,162
S3	Availability of two mentors (resident and technical) to assist tenants in business development	0,047	3,8	0,177
S4	Presence of planning and programs in the form of training initiatives.	0,047	3,8	0,179
S5	Provision of support for accessing external funding opportunities.	0,061	3,6	0,220
S6	Provision of financial training and risk management guidance	0,069	3,6	0,247
S7	Operational funding sourced from the State Budget (APBN).	0,081	3,8	0,310
S8	Provision of training and guidance on Intellectual Property (IP).	0,044	3,8	0,169
S9	Provision of access to current and timely information related to IP.	0,041	4,0	0,164
S10	Facilitation of meetings with potential partners	0,069	3,4	0,234
S11	The incubator possesses a strategic plan for enhancing its reputation	0,069	3,8	0,261
S12	The incubator collaborates with industry stakeholders in providing marketing training to tenants	0,058	3,6	0,208
W1	Limitations in the quantity and performance of machinery and equipment.	0,028	1,75	0,049
W2	Mentors are currently external personnel.	0,063	1,6	0,101
W3	Lack of alternative revenue streams for incubator activities	0,027	1,2	0,032
W4	Non-provision of capital to tenants	0,035	1,6	0,057
W5	Insufficient support for technology transfer from research institutions	0,044	1,2	0,053
W6	Limited collaboration with researchers	0,041	1,0	0,041
W7	The incubator is not yet capable of providing international marketing facilities	0,037	1,0	0,037
W8	The incubator lacks specific achievements in enhancing its reputation.	0,029	1,4	0,040
Total				3,004

Subsequently, the primary weakness of the BDI Jakarta business incubator is that its mentors are external rather than internal to BDI Jakarta. While effective collaboration with third parties can align with tenant needs, the reliance on external mentors, rather than those internal to BDI Jakarta, presents a limitation. This can potentially hinder the improvement of the incubator's performance. Furthermore, the sole reliance on a single source for operational funding constitutes the second major weakness for BDI Jakarta. This results in limitations in supporting activities for the incubator due to funding constraints. The third weakness of the BDI Jakarta business incubator is its insufficient support for technology transfer from research institutions, which impacts the potential for innovation among tenants. Table 6 presents the results of the business incubator environmental analysis based on

the EFE score. The analysis indicates that the primary opportunity for business incubator development is the support from the Indonesian government through the Ministry of Cooperatives and Small and Medium Enterprises in endorsing the BDI Jakarta program as a business incubator. The analysis results show that the development opportunities for the BDI Jakarta business incubator can stem from government support as a key external stakeholder. Furthermore, an exploitable opportunity is the government's support for market access for MSME development, both nationally and globally. These findings suggest that the development opportunities for fostered tenants in terms of market expansion can be readily pursued by leveraging the opportunities provided by the government in MSME development.

Table 6. EFE Analysis

Symbol	Faktor external	weight	Rating	Skor
O1	Incubator development is supported by the Regulation of the Minister of Cooperatives and Small and Medium Enterprises and is further supported by the programs of the Jakarta Industrial Training Center (Balai Diklat Industri Jakarta).	0,060	3,2	0,193
O2	The government provides tax incentives for MSMEs to support tenant development.	0,050	2,8	0,140
O3	The government facilitates ease of marketing access for MSMEs, both nationally and internationally.	0,054	3,2	0,172
O4	Economic growth increases demand for MSME products.	0,038	3,4	0,128
O5	Ease of access to information regarding taxation.	0,050	2,6	0,130
O6	Consumer evaluation information regarding products is readily accessible.	0,026	3,0	0,078
O7	Market development and information from communities can be leveraged.	0,034	3,2	0,110
O8	Innovation utilizing local culture as a product differentiator.	0,034	3,0	0,103
O9	The advancement of information media facilitates greater consumer reach for MSMEs.	0,022	3,2	0,070
O10	Ease of obtaining data for business development and access to global markets.	0,038	3,4	0,128
O11	The KUR (People's Business Credit) program facilitates access to funding for MSMEs.	0,050	3,0	0,149
O12	Quality of technological resources in developing MSME products or services	0,039	3,2	0,125
T1	Fluctuating government policies and policy uncertainty.	0,053	2,0	0,106
T2	Bureaucracy and complex requirements in accessing funding.	0,045	2,0	0,089
T3	Policy discrepancies between central and regional governments.	0,047	1,8	0,084
T4	Unstable inflation rates and raw material prices in the global market.	0,057	2,4	0,137
T5	Difficulty for MSMEs in securing funding from investors.	0,041	2,2	0,090
T6	The primary raw materials for tenant products are still imported	0,036	2,2	0,078
T7	Consumer preferences are easily subject to change.	0,023	2,2	0,051
T8	Difficulty for MSMEs in acquiring qualified human resources.	0,047	2,6	0,121
T9	Geographical conditions pose challenges for market development.	0,048	2,4	0,115
T10	Inadequate human resources within the incubator's MSMEs for promoting products through information media.	0,038	2,0	0,076
T11	Dependence on technology poses risks of system failure or damage.	0,029	2,0	0,058
T12	High data security costs	0,043	2,0	0,087
Total				2,62

The primary obstacle in the incubator's development is global inflation, which affects the raw materials used by MSMEs in Indonesia. This hinders the incubator's growth as a companion for trained MSMEs. The impact of this inflation makes it difficult for MSMEs to thrive and indirectly affects the performance of the business incubator. The second obstacle is the issue of human resource quality, which impacts MSME performance. Limited expertise in human resources causes difficulties in the development of products or services owned by MSMEs. This affects the incubator's

performance, necessitating specialized training to enhance the skills of the human resources within the MSMEs.

Based on the previous IFE and EFE matrix analysis, the total IFE score obtained was 3.00 (strong internal) and the total EFE score was 2.62 (average external). Based on the combination of these total IFE and EFE scores, it was found that the existence or position of the BDI Jakarta business incubator is in cell IV of the IE matrix. This indicates that the strategic development position of the BDI Jakarta business incubator falls into the "growth and build"

category. The IE matrix results for the BDI Jakarta business incubator are shown in

Figure 1.

		IFE Total Score		
		Strong	Average	Weak
		3,0-4,0	2,09-2,9	1,0-1,9
EFE Total Score	High 3,0-4,0	I Growth and Build	II Growth and Build	III Hold and Maintain
	Medium 2,09-2,9	IV Growth and Build (3,0; 2,62)	V Hold and Maintain	VI Harvest or Divest
	Low 1,0-1,9	VII Hold and Maintain	VIII Harvest or Divest	XI Harvest or Divest

Figure 1. IE Matrix analysis

The internal position of the BDI Jakarta business incubator is strong. This indicates that the incubator possesses a favorable internal environmental condition, although there are still several factors that require improvement. The strong internal environment is characterized by the operational funding of the BDI Jakarta incubator originating from the State Budget (APBN). This represents a key advantage that supports the sustainability and operational stability of the incubator. Furthermore, internal strengths also include factors in the aspects of facilities and infrastructure that can support tenant operations, financial resources in the form of financial training and risk management as well as support for accessing external funding, and the incubator's network by facilitating meetings with potential partners. The EFE score of 2.62 indicates that the external position of the business incubator is average. This suggests that the incubator is reasonably effective in responding to opportunities and managing threats from its external environment. However, it also signifies the presence of challenges that need to be anticipated, such as economic conditions that can affect the instability of raw material prices, one of which is the

inflation rate. This can also indicate that there is still significant potential from external opportunities that can be leveraged, such as implementing innovation as a form of product differentiation using local culture.

According to David (2011), relevant strategies that can be employed in quadrant IV of the IE matrix are intensive strategies or integrative strategies. Intensive strategies involve a company's competitive efforts using existing products to increase sales and productivity through market penetration (increasing market share with existing products or services), market development (expanding market reach), and product development (increasing sales by improving or modifying existing products or services) (Suranta, 2014). Intensive strategies such as market development can be implemented by providing new incubation services or innovations in incubation programs, such as digital mentoring or legal consultation, to attract more potential tenants. One action that can be taken as a form of market development is targeting more potential tenants in underdeveloped and growing industrial sectors such as agritech or the creative digital sector. Meanwhile, market penetration can be achieved through

increased promotion and branding by utilizing digital media to reach and introduce incubation programs to a larger pool of potential tenants.

On the other hand, integrative strategies are a way for companies to control external factors that were previously uncontrolled. These strategies include backward integration (the ability to control raw material suppliers), forward integration (the ability to control distribution channels), and horizontal integration (the ability to bind competitors through acquisition or collaboration) (David, 2011). Forward integration strategies can be implemented by building connections or partnerships with investors to facilitate tenant access to funding or by establishing a global network to assist access to international markets. Horizontal integration that can be undertaken includes collaborating with other incubators, universities, or research institutions to share best practices, create joint programs, and support more in-depth innovation. One form of backward integration strategy that can be implemented is establishing cooperation with research or training institutions to support relevant research and innovation according to market needs or to enhance tenant capacity through technical or soft skills training programs.

The formulation of alternative development strategies for the BDI Jakarta incubator was conducted using SWOT analysis. Based on the SWOT analysis, four main strategies will be derived: Strengths-Opportunities (SO) strategies, Strengths-Threats (ST) strategies, Weaknesses-Opportunities (WO) strategies, and Weaknesses-Threats (WT) strategies. SO strategies represent alternative strategies that the incubator can implement by leveraging its existing strengths while capitalizing on available opportunities. Three alternative strategies were formulated within the SO quadrant for the BDI Jakarta business incubator. The formulation of the first SO strategy is to establish collaboration with financial institutions regarding access to funds and

financial training for tenants (SO1). This strategy formulation is derived from S6, S7, O2, O5, and O6. This strategy represents an integrative approach. Several literatures on this strategy highlight the necessity of collaboration between incubators and financial institutions. External actors play a crucial role, particularly in funding, technical expertise, and marketing (Panakaje et al., 2024). Furthermore, Rosado et al. (2024) explain that one of the accelerators for tenant growth is collaboration between the private sector and the government. Additionally, financial issues are a significant constraint for incubators, so increasing funding can enhance incubator performance. This research finding is also supported by the research conducted by Rahman et al. (2023), which indicates that the highest KPI (key performance indicator) for incubators is the facilitation of access to funding sources. The second SO strategy is to optimize tenant product innovation by leveraging local culture and Intellectual Property (IP) (SO2). This strategy is derived from S1, S2, S9, S10, O9, and O12. This strategy represents an intensive strategy focused on product development. Panakaje et al., (2024) explain that a business incubator transforms academic research into commercially viable ventures with a sustainable foundation. Key areas for incubator development include fostering strong relationships between institutions, sponsors, businesses, government, and the community. The final SO strategy is to develop marketing access by leveraging information technology such as websites and applications (SO3). This strategy is derived from S11, S13, O7, O8, O10, and O11. The primary element is the ease of access for tenants or MSMEs in obtaining consumer evaluations of a product. Furthermore, the communities associated with each MSME can be leveraged for market development. These two identified opportunities can be utilized to enhance tenant performance, indirectly impacting the

incubator's performance. Additionally, these opportunities can be capitalized on by leveraging the incubator's existing strengths, particularly its planned reputation enhancement and collaboration with industry for marketing purposes. The synergy between the incubator's strengths and the exploited opportunities can be achieved by developing an intensive strategy focused on market development through the establishment of information access. This is done to acquire consumers with a broader reach, both nationally and globally.

The next strategy is a strategy derived from the combination of strengths and threats (ST). There are three strategies derived from this combination: Synchronizing training programs with long-term government policies related to MSMEs based on the collaboration of the incubator, government agencies, and industry players (ST1); Building networks with media, academics, and business actors to enhance the incubator's visibility (ST2); and Collaborating between the incubator and marketplaces to reach consumers (ST3). The ST1 combination is derived from S4, S6, T1, T2, and T3. Rahman et al. (2023) explain that the role of central and regional governments or related institutions is crucial in the development of incubators. One strategy that can be implemented is to synchronize training programs with government policies, especially long-term policies. This is to avoid rapid changes caused by government policies. Government policies have a significant potential impact on the improvements or obstacles experienced by incubators. Government policies or programs related more to maintaining economic stability rather than encouraging industrial growth may result in the absence of specific policies regulating business incubators (Marzaman & Hassan, 2020). This second strategy, focusing on building networks with media, academics, and business actors to enhance the incubator's visibility, aims to address

obstacles faced by MSMEs, particularly in the aspects of funding and marketing. The incubator faces a challenge related to its limited capacity to assist tenants in terms of innovation. To address this, the incubator needs to establish strong networks with media, researchers, and business actors. Farissi and Roudab (2024) explain that common obstacles encountered by MSMEs or tenants within incubators include aspects of marketing, administration, legal matters, and the personal factors of the entrepreneurs themselves. Collaborating between the incubator and marketplaces to reach consumers (ST3) which Several obstacles are generally faced by MSMEs, along with limitations of the incubator as a platform for MSME development. The incubator can collaborate with marketplaces to enhance the marketing capabilities of its tenants. The advancements in information media and technology necessitate leveraging opportunities, particularly the emergence of numerous marketplaces.

The next strategy is the WO strategy, which comprises two strategies: Collaboration among the incubator, government, and private sector in the development of facilities within the incubator (WO1) as an integrative strategy, and Providing marketing analysis and product development facilities utilizing business analytics (WO2) as an intensive strategy. The incubator already provides facilities that tenants can use. However, the incubator has limitations, particularly in the aspect of developing innovation within the facilities to achieve production efficiency and effectiveness. Therefore, effective collaboration with other stakeholders, especially the government and private sector, is crucial. Panakaje et al. (2024) explain that for MSMEs or tenants, business obstacles include competition and initial market entry, making a conducive environment highly necessary. Adequate facilities are a vital requirement for tenants. The primary focus of this strategy is cost efficiency and sustainable innovation for

tenant performance growth, enabling the incubator to achieve its targets. Research conducted by Judianto and Widyatmoko (2024) highlights the importance of building stakeholder relations, particularly in aspects related to other businesses, investors, and customers. The second strategy is to provide facilities for tenants to analyze marketing analysis and product development using business analytics. This strategy is based on leveraging the ever-evolving information technology, allowing marketing analysis tools to be utilized as opportunities for the incubator. Some businesses require business analytics to understand existing problems. Classical analysis tools only explain historical data but are unable to explain dynamic data. In the current environment, consumer behavior analysis is highly needed, and data availability is very affordable. What the incubator needs to do is provide facilities for marketing analysis to improve marketing and business operational performance.

The final strategy is a combination of weaknesses and threats (WT), with one strategy identified: The incubator collaborates with research institutions regarding the development of human

resources, products, and marketing (WT1). The primary weakness in incubator performance lies in the limitations of tenants, particularly in enhancing certain aspects of their business lines and existing resources. The role of incubator management is crucial in developing tenant products, especially concerning tenant-driven innovation. Essential elements for a business incubator include resources, competence, expertise, training or learning opportunities, and social capital (Panakaje et al., 2024).

These nine strategies were evaluated across all aspects, revealing one priority strategy as shown in Table 13. The results of this analysis indicate that the priority strategy is SO1, which involves establishing collaboration with financial institutions regarding access to funds and financial training for tenants. This analysis suggests that the prioritized development of the incubator favors an integrative strategy over an intensive strategy. This conclusion is supported by the top three ranked strategies based on the QSPM analysis, which indicate that collaboration is a particularly relevant strategy for the BDI incubator at this time.

Table 7. QSPM result analysis

No.	Strategy Alternative	STAS Value	Strategy Priority
1	Collaborating with financial institutions regarding access to funds and financial training for tenants.	4,893	1
2	Collaboration among the incubator, government, and private sector in the development of facilities within the incubator.	4,712	2
3	Synchronizing training programs with long-term government policies related to MSMEs based on the collaboration of the incubator, government agencies, and industry players.	4,706	3
4	Developing marketing access by leveraging information technology such as websites and applications.	4,699	4
5	Optimizing tenant product innovation by leveraging local culture and Intellectual Property (IP).	4,603	5
6	Building networks with media, academics, and business actors to enhance the incubator's visibility.	4,600	6
7	Providing marketing analysis and product development facilities utilizing business analytics.	4,392	7
8	The incubator collaborating with research institutions regarding the development of human resources, products, and marketing.	4,221	8
9	Collaborating between the incubator and marketplaces to reach consumers.	3,637	9

The priority strategy for enhancing the performance of the BDI incubator is an integrative strategy involving collaboration with financial institutions regarding access to funds and financial training for tenants. The outcome of this strategy highlights the paramount importance of tenant performance improvement. Therefore, tenant management must be able to devise steps for the implementation of collaborations with financial institutions. Crucial aspects to analyze include selecting financial institutions that align with the vision and mission of the BDI incubator in Jakarta in fostering the growth of MSMEs in Indonesia. The potential positive and negative impacts of such collaborations with financial institutions need careful consideration.

The collaborations undertaken must have mutually beneficial agreements to enhance tenant performance, enabling them to thrive. This priority strategy needs to be supported by other strategies, such as those ranked second and third in priority. These three strategies collectively indicate that the incubator's development requires support from stakeholders in enhancing the performance of trained tenants. Key stakeholders in improving incubator performance are financial institutions, particularly in supporting tenants post-incubation. Subsequently, the government's role as a policymaker and controller of the development of incubators and tenants as MSMEs is crucial. Government involvement in incubators is vital because short-term and long-term government programs related to MSME businesses can influence the programs implemented by the incubator. Therefore, alignment of incubator programs and government involvement in controlling these programs are necessary. The government has a clear role in enabling tenants to grow within the incubator, especially government support in attracting investment to incubator programs. Important aspects of government policy include taxation and regulations affecting

the industry, particularly the financial burden on MSMEs or tenants (Panakaje et al., 2024). The third most important stakeholder in the development of incubators and tenants is the private sector, concerning the incubator's development. The limitations faced by the incubator affect tenant performance and consequently the generated output.

Several key elements contribute to tenant success, namely access to funding, collaborative relationships, and the incubator's network (Rosado et al., 2024). This research finding is supported by Panakaje et al. (2024), which emphasizes the need for collaboration among institutions, education, investors, lenders, and business professionals. This research highlights the importance of education or training conducted through effective collaboration to enhance effectiveness. The most crucial aspect of training is the relationship between mentor or incubator staff and tenants, particularly in providing recommendations for business improvement with a reciprocal relationship. External actors play a vital role, especially in funding, technical expertise, and marketing (Panakaje et al., 2024).

The analysis results, spanning from the input stage to the decision stage, reveal that the BDI incubator benefits from government regulations and possesses a significant strength in its government-sourced funding. However, it still requires the involvement of other stakeholders for further development. Consequently, the primary strategy is to foster collaboration, particularly with financial institutions. To effectively collaborate, the business incubator needs to align its vision and mission with the development of tenants within the incubator. The design of incubator programs should involve collaboration with other stakeholders, namely the government, financial institutions, and the private sector, to support facilities. This is especially crucial for the evaluation of selected MSMEs from the pre-incubation to the post-

incubation stages. This supports the incubator's output, which is to enhance the performance of MSMEs as tenants. Therefore, the design of effective and equitable collaborations for all involved stakeholders needs to be undertaken, particularly in the aspects of funding and financial training. The analysis results underscore that the most important aspect in implementing the existing strategies is to provide a favorable ecosystem for tenant businesses. The incubator's limitations and strengths serve as key capital for establishing collaborations aimed at enhancing the incubator's performance. However, several aspects require attention, particularly the alignment of corresponding visions and missions

CONCLUSION

The primary strength of the BDI Jakarta incubator is its operational funding sourced from the State Budget (APBN). Meanwhile, the main weakness factor is that mentors are still external parties. The primary opportunity for the development of the BDI Jakarta business incubator is the government's support for incubator development through the Regulation of the Minister of Cooperatives and Small and Medium Enterprises Number 14 of 2023 and the programs of the Jakarta Industrial Training Centre (Balai Diklat Industri Jakarta). The main threat factor is economic conditions such as the inflation rate, which can cause instability in raw material prices in the market. The BDI Jakarta business incubator is positioned in quadrant IV of the IE matrix, indicating a "growth and build" strategy. Based on the SWOT analysis, nine alternative strategies can be implemented, comprising three SO strategies, two WO strategies, three ST strategies, and one WT strategy. SO strategies include collaboration with financial institutions to obtain access to funds and financial training for tenants, optimization of tenant product innovation leveraging local culture and Intellectual Property (IP), and the development of

marketing access through information technology such as websites and applications. WO strategies encompass collaboration among the incubator, government, and private sector in facility development and the provision of marketing analysis and product development services based on business analysis. Furthermore, ST strategies focus on synchronizing training programs with government policies related to MSMEs, building networks with media, academics, and business actors to enhance the incubator's visibility, and collaborating with marketplaces to reach consumers. Finally, the WT strategy involves collaboration with research institutions in the development of human resources, products, and marketing. The priority strategy for the development of the BDI Jakarta incubator is SO1, which involves establishing collaboration with financial institutions regarding access to funds and financial training for tenants. This indicates that the prioritized development of the incubator is an integrative strategy rather than an intensive strategy, by collaborating with financial institutions concerning access to funds and financial training for tenants. The other two priority strategies are to foster collaboration among the incubator, government, and private sector in the development of facilities within the incubator and to synchronize training programs with long-term government policies related to MSMEs based on the collaborative efforts of these three parties: the incubator, government agencies, and industry players.

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