two. Nation

POLICY RECOMMENDATIONS REPORT

Strengthening Urban Governance, **Prosperity and Innovation in Jakarta**

















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Introduction

Why should we focus on small and medium-sized businesses? For many Jakartans, starting and owning a business is part of a heritage, that shaped the economy from before the independence of the nation. Today, about two-thirds of jobs in Jakarta are created by small to medium-sized businesses. With the post-pandemic disruption, entrepreneurs see the pivoting to digitalization as an essential move to stay in business.

For many entrepreneurs, the decision to turn into innovations depends on the ease to adopt technology, trained workforces, and multiple sources of finance. Yet, navigating the complex regulation is a major challenge for most lay business people. To expedite the economic recovery post-pandemic recession, the stakeholders in the ecosystem are urged to formulate the right policy to simplify such challenges.

Through the sister city partnership,
Jakarta and Berlin are joining forces to
strengthen the entrepreneurial ecosystem
by implementing the project "Smart
Change", funded by the European Union.
In the movement to improve prosperity
and innovation in the city, Smart Change
believes that a policy co-design will

accommodate inclusive intervention in empowering entrepreneurs, government, academia, and citizens to work hand-inhand.

In collaboration with Sixty Two and Nation Insights, this study gathered indepth research from hundreds of small and medium-sized business owners and 16 seasoned policy experts, focusing on the role of public-private partnership to stimulate the economy in Jakarta to be vibrant again. The result of months of research leads to consolidated policy innovation and renovation for 3 main policy areas, addressing the approach to achieve the change that business society wanted to see.

We hope the initiative presented here shall encourage a further promotion of entrepreneurship, to arrive at a landscape of fair income opportunities in Jakarta.

Best Regards,

Kariem El-Ali, Senior Policy Advisor **Surya Darmadi**, Local Entrepreneurship Expert

www.smartchange.jakarta.go.id

1 Executive Summary

Our research identified three key priority areas each for micro, small and medium enterprises (MSMEs) and technology startups that need the most support from the public and private sector.

Through reviewing the regulatory progress for each area, we determined the top three most urgent areas to prioritize for the codesign workshop. Besides having the most regulatory gaps, these three areas are also critical to business growth and are feasible for the Indonesian and DKI Jakarta government to address.

MSMEs Making

Making digitally empowered growth affordable

How might we make digitally-empowered growth affordable for MSMEs?

STARTUPS

Ease of recruiting & developing tech talent

How might we build the tech talent reservoir to meet the evolving industry demand?

MSMEs

Building strong and up-todate market and industry knowledge

How might we support MSMEs to develop strong and up-to-date market and industry knowledge?

Current Policy Landscape

Micro, small and medium enterprises (MSMEs) are the backbone of the Indonesian economy, but they are dominated by micro and small-sized enterprises with limited growth, productivity, and contribution to GDP. MSMEs are a key focus of the 2020 Job Creation Law, and its implementing regulation the Government Regulation No. 7 of 2021 on the Ease, Protection and Empowerment of Cooperatives and MSMEs (GR 7/2021), which seek to support local MSMEs to grow into scalable businesses. Among other provisions, GR 7/2021 revises how MSMEs are classified, encourages partnerships between microsmall enterprises and medium-large enterprises, provides financing facilities for micro and small enterprises, and mandates the publication of MSMEs' data through a publicly accessible system.

Although the provisions outlined in GR 7/2021 are estimated to have a positive impact on MSMEs, the policy is currently missing operational regulations that could ease its implementation on the ground. The large number of national and regional institutions involved in the policy necessitated further stakeholder coordination to reduce complexities.



While the Ministry of Cooperatives and MSMEs is responsible for overseeing the overall MSME development in Indonesia, regional governments are responsible for the development of specific enterprise sizes, such as micro and small-sized enterprises.1 The Governor of DKI Regulation No. 2 of 2020 on Integrated **Entrepreneurship Development (GR** 2/2020) serves as the basis for the flagship entrepreneurship development program by the Provincial Government of DKI Jakarta, which had been rebranded from the OK OCE program into the Jakpreneur program. To date, Jakpreneur has attracted more than 300,000 participants - which exceeds the five-year target of 200,000 new entrepreneurs - and worked with 120 collaborators.² However, while enrollment has been hugely successful, there are still challenges with regard to facilitating MSMEs in DKI Jakarta with access to financing, providing them with support beyond one-time training, and making their digitalization sustainable.

Meanwhile, technology startups in Indonesia are facing a different set of challenges. Despite the Indonesian government's strong support for startup businesses, which currently numbered 2300 including 12 with unicorn status, the growth of the country's technology sector is currently hampered by a growing deficit of tech talent. This obstacle is acknowledged by the Minister of Communications and Informatics Regulation No. 2 of 2021 on the Strategic Plan 2020-2024, which centered its strategy on tackling the technical skills shortage through the provision of non-formal digital training.⁴

These include, for instance, through the Digital Talent Scholarship (DTS), a program that awards individuals to participate in competency development training courses in the IT and digital world. However, not much is known about the success of the program outside of the graduates' rate of absorption into the workforce. Other work-arounds, such as engagement with software development outsourcing companies, access to overseas talent, or recruitment of vocational secondary school graduates, have received less attention in public policy debates on the tech skills crisis.

¹ Law No. 23 of 2014 on Regional Government assigns the task of supporting each enterprise size to a different government level. The city or regency government is responsible for the development of micro enterprises, while the provincial government is responsible for the development of small enterprises and the national government is responsible for the development of medium-sized enterprises.

² Jakpreneur. https://jakpreneur.jakarta.go.id/index [accessed 17 May 2022].

³ Dukung UMKM, Pemprov DKI Gandeng 120 Kolaborator Gabung di Jakpreneur. https://wartakota.tribunnews.com/2022/02/23/dukung-umkm-pemprov-dki-gandeng-120-kolaborator-gabung-di-jakpreneur

⁴ Digital Economy Expected to Become New Growth Engine. https://jakartaglobe.id/tech/digital-economy-expected-to-become-new-growth-engine

More recently at the start of 2022, the government issued the **Presidential Regulation No. 2 of 2022 on National Entrepreneurship Development for 2021-2024** (PR 2/2022), which aims to increase the number of new entrepreneurs in the country by one million by 2024.⁵
The regulation mandates the creation of a National Entrepreneurship Development Committee that is answerable to the President and tasked to implement the national entrepreneurship development document and action plan for a three-year

period. The committee is chaired by the Minister of Cooperatives and MSMEs, and assisted by the Minister for State-Owned Enterprises, Minister of Tourism and Creative Economy, and Minister of Home Affairs as the Deputy Chairmen, covering 20 ministries and agencies. ⁶⁷ Important to technology startups is the introduction of new thematic categories, which encompasses technology entrepreneurs, in addition to other categories such as youth entrepreneurs and social entrepreneurs.⁸



⁵ Pemerintah Targetkan Cetak 1 Juta Pengusaha hingga 2024. https://money.kompas.com/read/2022/05/12/170300926/pemerintah-targetkan-cetak-1-juta-pengusaha-hingga-2024

⁶ PR 2/2022, Articles 7-10.

⁷ The Minister of Communications and Informatics, who has played a prominent role in supporting startup development in the country, is included as a committee member.

⁴ PR 2/2022, Attachment 1.

Recommendations

The co-design workshop offered 20 key policy recommendations. These recommendations emerged from discussions by workshop participants from government, industry, international organizations, financial institutions, and research or academic institutions. Although the report largely refers to MSMEs as a single entity, the workshop participants had highlighted the importance of focusing support especially on micro and small enterprises, which often possess very scarce resources and skills that hinder their digital adoption and growth. Similarly, the shortage of tech talent disproportionately impacts small or newly-established startups that do not have the means to attract talent or invest in skills development. The recommendations are:

How might we strengthen the MSME ecosystem?

- 1. Synchronize MSME classification
- Measure the effectiveness of MSME development proograms

How might we support MSMEs to develop strong and up-to-date market and industry knowledge?

- 1. Improve MSMEs' access to market and innovation data
- Collaborate on innovationfocused research with MSMEs
- 3. Encourage MSME procurement
- 4. Incentivize collaboration in MSME training and mentorship

How might we make digitally-empowered growth affordable for MSMEs?

- 1. Issue operational regulations to facilitate MSME financing
- 2. Strengthen MSME data
- 3. Improve the infrastructure of MSME financing information
- 4. Offer MSMEs financial coaching services
- 5. Help MSMEs to access production technology
- 6. Incentivize MSMEs to stay digital
- 7. Create a crowdfunding regulation for MSMEs

How might we build the tech talent reservoir to meet the evolving industry demand?

- 1. Improve the job-readiness of Digital Talent Scholarship graduates
- 2. Repatriate Indonesian tech talent
- 3. Revitalize apprenticeships
- 4. Offer non-monetary incentives for potential students to study tech
- 5. Improve access to and boost demand for tech mentoring
- 6. Produce digital talent through the formal education system
- 7. Formulate software house incentive plan

Conclusions

The adoption of these policy recommendations at the national and regional levels will help to strengthen MSMEs and technology startups and tackle the three most urgent challenges facing entrepreneurs in both categories. Entrepreneurship development efforts in Indonesia, as well as in DKI Jakarta as a region, are fragmented and involve many different government institutions in their implementation. The recent issuance of PR 2/2022 is an encouraging step towards consolidating the activities and responsibilities of each stakeholder

and clarifying the resources that they can draw from. The National Entrepreneurship Development Committee along with relevant ministries and other stakeholders, such as the Provincial Government of DKI Jakarta, should account for these priority gaps and recommendations in the implementation and evaluation of policies concerning MSME and startup development.⁹ In turn, this will improve the competitiveness of MSMEs and startups, enabling them not just to survive, but also to thrive, in the digital age.

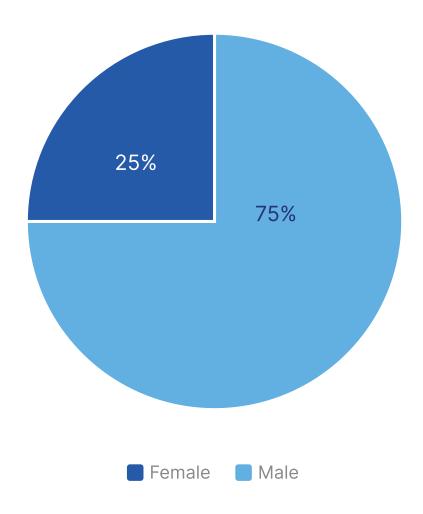


⁹ Entrepreneurship regulation to increase the number of entrepreneurs. https://en.antaranews.com/news/211317/entrepreneurship-regulation-to-increase-the-number-of-entrepreneurs

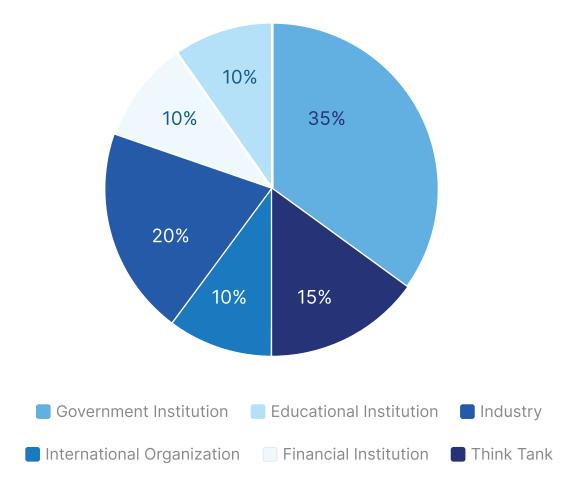
Methodology

Held virtually on Wednesday, 16 January 2022 and Thursday, 17 January 2022 from 13.00 - 16.00 WIB (GMT +7), the co-design workshop brought together researchers, practitioners, and policy-makers to discuss the three key priority areas from the status quo report. We used Miro, an online collaborative whiteboard platform, to brainstorm and document the discussion points. The breakdown of the participants is as follows:

Co-design Gender Distribution



Co-design Industry Distribution

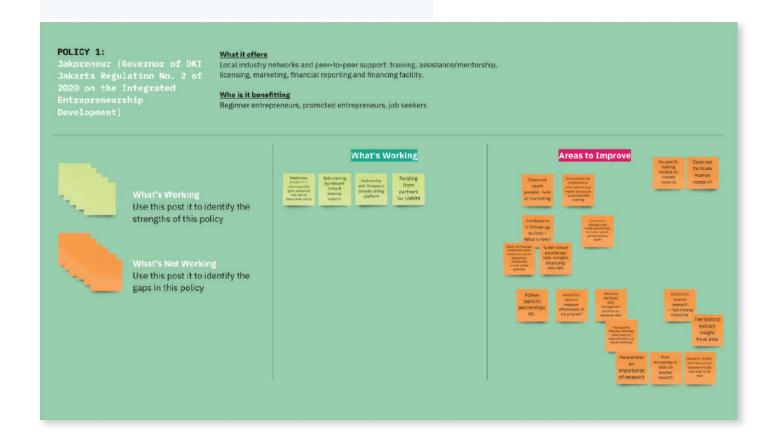


In the two-day discussion, participants had the opportunity to critique current policies and present best practices from their respective fields to inform the policy recommendations.

Review, Ideate and Rank

a) Policy Review

Participants review existing policies and identify where it is delivering well and under delivering.



b) Policy Ideation

Participants then generate ideas to address the gaps in these existing policies. These could be renovation (improvements on existing policies) or innovation (new policies) ideas.

WHAT MSMES NEED

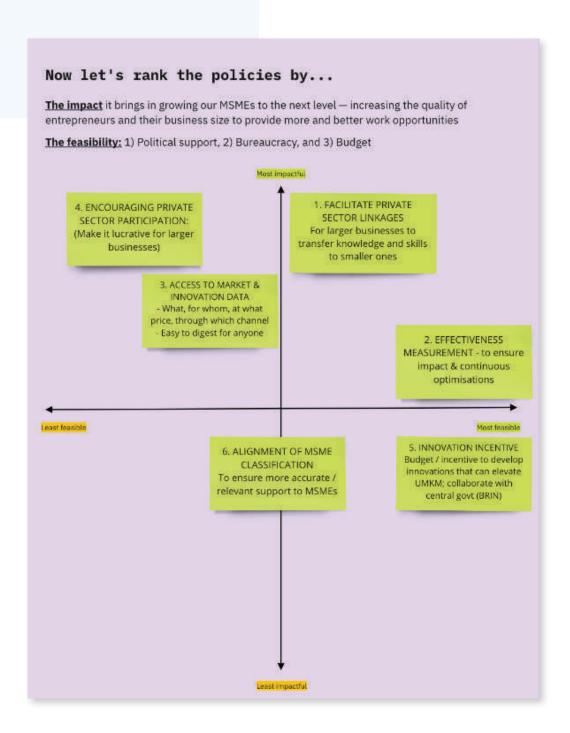
Access to the latest insights around the market, including customers' appetite and pricing, and industry-specific trends or skill set to enable effective and relevant innovation.

What new policies are needed support innovation amongst MSMEs, either through (1) market / industry knowledge or (2) skills development?

- PRIVATE SECTOR LINKAGES:
 PENDAMPINGAN & FASILITASI
 Untuk meingimplementasi hasil
 pelatihan dll driven by private
 sector, govt as intermediary
- ENCOURAGING PRIVATE
 SECTOR PARTICIPATION:
 How to make it lucrative
 for larger businesses
- 2. EFFECTIVENESS
 MEASUREMENT supporting tools from
 private sector
- 5. INNOVATION INCENTIVE Budget / incentive to develop innovations that can elevate UMKM; collaborate with central govt (BRIN)
- 3. ACCESS TO MARKET & INNOVATION DATA
 What, for whom, at what price, through which channel
 Mudah diakses / dibaca
- 6. PENYELARASAN KLASIFIKASI UMKM untuk support yang lebih tepat / relevan

c) Policy Ranking

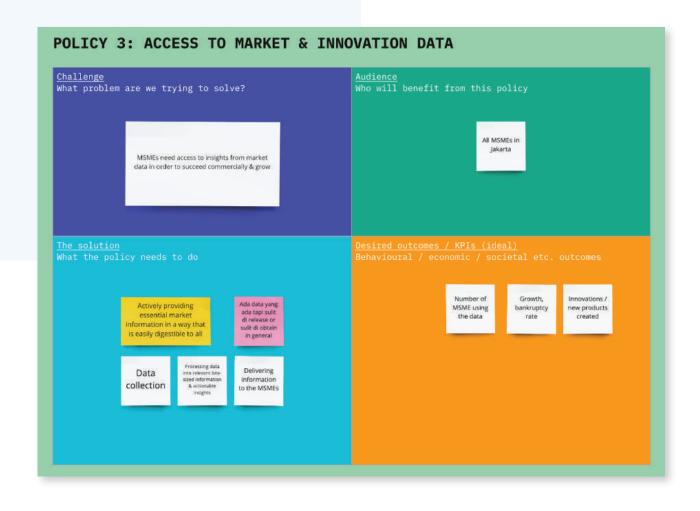
Participants rank the policy ideas based on the impact & feasibility to prioritize for Day 2.



Refining the Policy Ideas

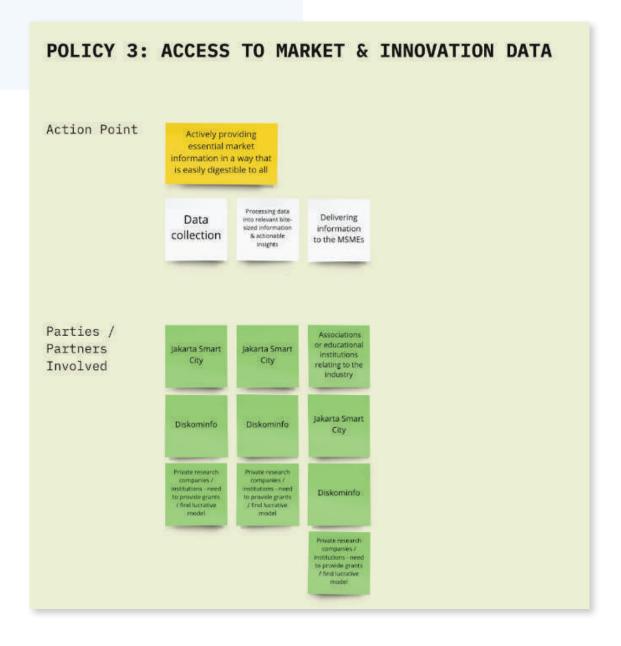
a) Fleshing out the policy concept

Reframe the challenge of each policy and identify the audience who will benefit from the policy, action points, as well as indicators of success.



b) Implementation plan

Identify parties or partners in charge of each of the action points within each policy.



PolicyRecommendations

How might we strengthen the MSME ecosystem?

Synchronize MSME Classification

Innovation

 Ministry of Cooperatives and MSMEs Regulation on MSME Classification

Challenge

While Government Regulation No. 7 of 2021 on the Ease, Protection and Empowerment of MSMEs (GR 7/2021) has expanded the classification of MSMEs, in practice, classification still differs from one program to another, leading to an inconsistent understanding and support. This is exacerbated by the fact that more than 20 ministries and agencies are involved in regulatory policymaking and development of MSMEs. 10 For example, the classification of MSMEs as understood by Law No. 20 of 2008 on MSMEs was different to that by Statistics Indonesia, the non-governmental institute responsible for conducting statistical surveys, and international organizations such as the International Finance Corporation. 11 12

13 14

¹¹ Law No. 20 of 2008 defined MSMEs based on net assets and annual revenues, while Statistics Indonesia (BPS) uses an employment-based definition of MSMEs. The definition by BPS is used in the Indonesian Economic Census and in the BPS Survey of Micro and Small Enterprises.

 $^{^{12}}$ OECD (2018). SME and Entrepreneurship Policy in Indonesia 2018. $\frac{\text{https://www.oecd-ilibrary.org/sites/9789264306264-5-en/index.}}{\text{html?itemId=/content/component/9789264306264-5-en/index.}}$

¹³ IFC classifies MSMEs per number of employees.

¹⁴ International Finance Corporation. (2016). Women-owned SMEs in Indonesia: A Golden Opportunity for Local Financial Institutions. https://documents1.worldbank.org/curated/en/691661477568338609/pdf/109534-WP-ENGLISH-SME-Indonesia-Final-Eng-PUBLIC.pdf

Current Policy

The Indonesian government had issued GR 7/2021 as an implementing regulation of the Job Creation Law No. 11 of 2020, which amended aspects of MSME development related to Law No. 20 of 2008 on MSMEs. GR 7/2021 states that ministries or institutions may use other criteria to define MSMEs according to each business sector, such as: revenue, net worth, investment value, employment, incentive and disincentive, local content, and/ or environmentally-friendly technology application. However, these additional criteria must firstly be considered by the Ministry of Cooperatives and MSMEs.¹⁵

Action

Aligning the criteria of what constitutes MSMEs allows the government to better compare the conditions of MSMEs across industries and regions, and helps benefits and support to be better directed. To synchronize MSME classification, ministries or institutions involved in MSME development must first review the current MSME definitions used by each institution. Then, comparative research on commonly understood MSME definitions can inform stakeholders on MSME classifications in other countries that can potentially be used as a reference point. Lastly, ministries and agencies should consolidate the definitive classifications that all parties can agree with. As the leading ministry for MSME development in Indonesia, it is imperative that the Ministry of Cooperatives and MSMEs take the lead in this process.

¹⁵ GR 7/2021, Article 36.

Indicator of Success

- Adoption of definition by relevant ministries and agencies
- Adoption of definition in MSME development projects or initiatives

ACTION POINTS	PARTIES INVOLVED			
Review the current MSME definition used by each institution	Ministry of Cooperatives and MSMEs	Relevant ministries and government agencies, e.g. Ministry of Industry		
Conduct comparative research on commonly understood MSME classifications outside of business capital and annual turnover	Ministry of Cooperatives and MSMEs	Relevant ministries and government agencies, e.g. Ministry of Industry	Higher education institutions, think tanks, or other research organizations	
Consolidate the definitive criteria of MSMEs	Ministry of Cooperatives and MSMEs	Relevant ministries and government agencies, e.g. Ministry of Industry		

Measure the effectiveness of MSME entrepreneurship development programs

Renovation

- Ministry of Cooperatives and MSMEs Regulation No. 24 of 2015 on the Norms, Standards, Procedures and Criteria of Entrepreneurship Incubator Development
- Governor of DKI Jakarta Regulation No. 2 of 2020 on Integrated Entrepreneurship Development

Innovation

 Ministry of Cooperatives and MSMEs Regulation on MSME Business Training

Challenge

There is no shortage of MSME development programs in Indonesia, especially in the capital city of Jakarta. These often take the form of business incubators, structured programs that provide early-stage enterprises with the support and services they need but find it difficult to access, such as networking opportunities and exposure to financing. ¹⁶ Other MSME development programs are business training run by corporations, financial institutions or the government, each set up with their own goals and objectives, while others offer resources and support exclusively for MSMEs in specific sectors. However, without diagnostic data on their effectiveness on supporting MSMEs, their impact risks being suboptimal.

¹⁶ According to the Minister of Cooperatives and MSMEs Regulation No. 3 of 2021 as the Implementing Regulation of GR 7/2021, incubators can be run by national or regional governments, education institutions, formal or informal enterprises, and civil society.

Current Policy

There are several policies concerning MSME development programs given the myriad of programs that are currently available. ¹⁷ Before the issuance of the Government Regulation No. 7 of 2021 on the Ease, Protection and Empowerment of MSMEs (GR 7/2021), business incubators were regulated by the the Presidential Regulation No. 27 of 2013 on the Development of Entrepreneurship Incubator and its implementing regulation, the Ministry of Cooperatives and MSMEs Regulation No. 24 of 2015 on the Norms, Standards, Procedures and Criteria of Entrepreneurship Incubator Development. While the newly issued GR 7/2021 had introduced changes to the implementation of business incubators - such as the process of curating and ranking of incubators - not all of the changes pertaining to incubator development are included in the recently issued ministerial regulation. ^{18 19} Meanwhile, the regional government is responsible for the implementation of the norms, standards, procedures, and criteria of the incubator programs in its region, and for collecting their data.

In the private sector, business training run by civil society organizations and large enterprises tend to be untracked and short-lived. They often do not use standardized curriculums and are often set up to meet the organizations' own organizational goals. GR 7/2021 now mandates these organizations to inform and convey their plans, implementation, and outcomes to the Minister for Cooperatives and MSMEs.²⁰ Such a requirement is important because it can help the government to estimate each program's impact on the growth and performance of MSMEs in a systematic way.

At the regional level, the Governor of DKI Jakarta Regulation No. 2 of 2020 on Integrated Entrepreneurship Development, which facilitates the flagship region-wide Jakpreneur program in DKI Jakarta, includes provisions on program monitoring and evaluation. Monitoring and evaluation are necessary to identify whether the program is successful in meeting their objectives, but at this time, there are little known indicators used to measure program success beyond the number of sign-ups.

¹⁷ For ease of understanding, the term 'MSME development programs' encompass business incubators, business training by civil society organizations and large enterprises, and government-run programs, such as *Jakpreneur*.

¹⁸ GR 7/2021, Article 134.

¹⁹ Minister of Cooperatives and MSMEs Regulation No. 3 of 2021 as the Implementing Regulation of GR 7/2021 was issued to implement parts of GR 7/2021, such as Articles 9(3), 50(4), 92(3), 97(3) and 135(4).
²⁰ GR 7/2021, Article 97.

Action

MSME development programs must set success metrics, not only to understand how well they are performing, but also to identify whether there are gaps between the program they are delivering and the needs of MSMEs. First, categorizing the variations in MSME development program designs can allow policymakers to design key performance indicators (KPIs) that account for their differences. Second, developing metrics and milestones to identify success beyond sign-up numbers for business incubators and Jakpreneur will improve the value that the programs bring to its participants. Lastly, to ensure that the success measurement data on these programs can be easily accessed by relevant stakeholders, a digital platform can be set up to allow data input, and a dedicated team assigned to process the data.

In addition to the revision of existing regulations, the Ministry of Cooperatives and MSMEs may consider creating a separate operational regulation to encourage the business world and civil society organizations across the country to measure the impact of the myriad of business training they are currently running for MSMEs across the country. Such regulation should understand the priorities of the stakeholders involved and avoid becoming a red tape that disincentivizes them from running the programs.

Indicator of Success

- Development of data collection board & platform
- Development of program metrics and milestones
- Data completeness
- Data uptodate-ness

ACTION POINTS	PARTIES INVOLVE	D		
Categorize variations in MSME development program designs	Ministry of Cooperatives and MSMEs	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	MSME development programs	
Develop metrics and milestones to measure program effectiveness	Ministry of Cooperatives and MSMEs	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	MSME development programs	MSMEs
Develop platform for mandatory data input amongst beneficiaries	Ministry of Cooperatives and MSMEs	Ministry of Communications and Informatics	Office of Communication, Informatics, and Statistics DKI Jakarta	Statistics Indonesia (BPS)
Assign dedicated team to process data	Ministry of Cooperatives and MSMEs	Provincial Government of DKI Jakarta	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	Statistics Indonesia (BPS)

How might we support MSMEs to develop strong and up-to-date market and industry knowledge?

Improve MSMEs' access to market and innovation data

Renovation -

 Governor of DKI Jakarta Regulation No. 2 of 2020 on Integrated Entrepreneurship Development

Innovation

 Governor of DKI Jakarta Regulation on Market and Innovation Data

Challenge

Market research is one of the most useful tools that a business can have to understand their customers, spot industry trends, and seize innovation opportunities. MSMEs need access to insights from market data in order to succeed commercially and grow, but many of them are not familiar with market research or are not aware of its importance. For instance, MSMEs do not tend to know what questions to ask and what to do next, nor have the skills to extract insights from data. While outsourcing to a third party might be a feasible solution, the perceived cost of conducting market research can deter many MSMEs from making this investment.

Current Policy

There is currently no policy that facilitates or guarantees MSMEs' access to market and innovation data. Jakarta's flagship *Jakpreneur* program, which is based on Governor of DKI Jakarta Regulation No. 2 of 2020 on Integrated Entrepreneurship Development, provides structured training for entrepreneurs and potential entrepreneurs, but does not offer direct access to market research facilities or specifically include market research as part of the training module.

Action

Actively providing essential market information in a way that is digestible to all can help MSMEs to pave their way to data-led growth and success. Policy action should focus on who is gathering the data, what data is being gathered, and how to share this data with the intended audience. To achieve this, research institutions or private research companies should be incentivized to collect market and innovation data, which can then be processed into relevant bite-sized information with actionable insights. Associations or educational institutions can assist in delivering the information to MSMEs associated with them. Furthermore, participants of Jakpreneur should be given access to this information as part of their participation in the entrepreneurship development program.

Indicator of Success

- Number of MSMEs accessing market research data
- MSMEs' business growth post-market data access
- Innovations or new products created by MSMEs

ACTION POINTS	PARTIES INVOLVED			
Incentivize research institutions or private research companies to take part	Provincial Government of DKI Jakarta	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta		
Collect market and innovation data	Office of Communications, Informatics and Statistics DKI Jakarta	Jakarta Smart City	Research institutions or private research companies	
Process data into relevant bite- sized information & actionable insights	Office of Communications, Informatics and Statistics DKI Jakarta	Jakarta Smart City	Research institutions or private research companies	
Deliver information to the MSMEs	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	Jakarta Smart City	Office of Communications, Informatics and Statistics DKI Jakarta	Industry associations or educational institutions

Collaborate on innovation-focused research with MSMEs

Renovation

 Governor of DKI Jakarta Regulation No. 131 of 2014 on the Formation of DRD

Challenge

Opportunities for step change innovation requires capital, which MSMEs often deprioritize due to perceived sizable costs. For MSMEs to effectively create or improve their products, services, business models or processes, they need to link with universities and research organizations that can help them to carry out research activities and facilitate the adoption and application of the innovations. However, opportunities for MSMEs to collaborate with external experts, access specialists and tap into research and scientific expertise in Jakarta are currently limited.



Current Policy

Research and innovation activities at the provincial level is not new in DKI Jakarta. The Regional Research Council (DRD) of DKI Jakarta was established as an independent non-structural institution based on Governor Regulation No. 131 of 2014 as a replacement for Governor Regulation No. 101 of 2005 concerning the establishment of Regional Research Council, which is the implementation of Law Number 18 of 2002 on the National Research System and the Application of Science and Technology. DRD has been actively involved in advising the Provincial Government of DKI Jakarta on a wide variety of regional issues such as water needs, access to health facilities, transportation and housing.²¹

However, newly issued regulations, such as the Job Creation Law No. 11 of 2020 and the Presidential Regulation No. 78 of 2021 on the National and Research Innovation Agency (BRIN) (PR 78/2021), put into law the possible creation of a Regional Research and Innovation Agency (BRIDA) for each region. BRIDA is tasked to carry out the research, development, assessment and application, as well as invention and innovation that are integrated in the region. While similar in principle to DRD, BRIDA is designed to be closely connected to BRIN and will have access to resources, such as mentorship, coaching, and coordination by BRIN.²² BRIDA can also play a more significant role in coordinating research and development activities at the regional level compared to DRD.

Furthermore, to assist MSMEs in their research and innovation activities, the Government Regulation No. 7 of 2021 on the Ease, Protection and Empowerment of Cooperatives and MSMEs stipulates that the regional government will provide support in research and development to micro and small enterprises.²⁴ However, the regulation currently offers limited information about the format that this support will take.

²¹ Dewan Riset Daerah. <u>https://drdjakarta.id/</u>

²² PR 78/2021, Articles 4, 34 and 57.

²³ PR 78/2021, Articles 67 and 68.

²⁴ GR 7/2021, Article 125.

Action

Building a vibrant and innovative entrepreneurship ecosystem in DKI Jakarta requires the involvement of research-intensive institutions to help MSMEs in the region innovate and grow. By enabling ideas to come from the outside, MSMEs can focus on their core business without expending a significant amount of resources to seek fresh knowledge. Transitioning DRD to BRIDA will allow the Provincial Government of DKI Jakarta to cultivate closer relationships with academics and higher education institutions across the region. Furthermore, open innovation programs funded by the regional government and administered by BRIDA can help MSMEs benefit from enterprise-led research and innovation. One example of such support is in the form of grants or innovation vouchers, a scheme that offers MSMEs the opportunity to work with research institutions to help their business innovate by developing new processes or introducing new products.



Indicator of Success

- Increased number of interactions between MSMEs and research institutions
- Increased number of collaborations between MSMEs and research institutions
- Adoption of new technologies by MSMEs

ACTION POINTS	PARTIES INVOLVED				
Engage academic or research institutions in the region	BRIDA	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	Academic or research institutions		
Identify needs and challenges to innovate on	BRIDA	Academic or research institutions	MSMEs		
Run open innovation programs: Grants to develop MSME-focused innovation	Provincial Government of DKI Jakarta	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	BRIDA	Academic or research institutions	MSMEs

Encourage MSME Procurement

Innovation

 Ministry of Cooperatives and MSMEs Regulation on Private Sector Procurement

Challenge

Participating in procurement and becoming a part of a supplier network is one way for MSMEs to grow and expand their customer base. For large businesses, the main competitive advantage of procuring from MSMEs is their ability to provide a niche product or service that larger businesses found challenging, or costly, to produce themselves. Meanwhile, large businesses have the potential to support MSMEs by creating demand for their products and services, indirectly transferring knowledge of the procurement process, increasing their sales, and upskilling their workforce to enhance productivity along the supply chain.



Current Policy

The government has made enormous strides in making procurement more accessible for MSMEs. Government Regulation No. 7 of 2021 on the Ease, Protection, Empowerment of Cooperatives and MSMEs (GR 7/2021) obliges ministries, non-ministerial government institutions and regional officials to allocate at least 40 percent of the budget to procure goods and services from the domestic production of micro and small enterprises. ²⁵ Meanwhile, GR 7/2021 also stipulates that the fulfillment of goods and services by medium or large enterprises can be carried out through a supply chain partnership pattern that prioritizes the procurement of goods produced by micro and small enterprises, as long as they meet the necessary quality standards of the required goods and services. ²⁶ Incentives for such partnerships include regional tax and fee reduction or relief for medium and large enterprises. ²⁷ However, at the current time, there is an absence of an operational regulation on private sector procurement which may affect the effectiveness of policy implementation.



²⁵ GR 7/2021, Article 81.

²⁶ GR 7/2021, Article 112.

²⁷ GR 7/2021, Article 102.

Action

Private sector linkages have the potential to develop strategic, long-term relationships between micro and small enterprises with their larger counterparts. To achieve this, the policy must firstly incentivize medium and large enterprises to procure from micro and small enterprises. Further, developing an e-procurement platform where buyers and sellers can invite bids and specify prices can reduce costs associated with labor-intensive procurement processes. To simplify the process and account for risks, medium and large enterprises can create standards and requirements of the micro and small enterprises that can supply them, and develop tools to screen for the micro and small enterprises that meet these criteria. Finally, the formalization and certification of micro and small enterprises are necessary to ease the procurement process for specific industries, for instance food safety or halal certifications in the food and beverage industry.



Indicator of Success

- Number of established linkages
- MSMEs business growth post-linkage
- Number of successfully certified MSMEs

ACTION POINTS	PARTIES INVOLVED		
Incentivize larger businesses to procure from MSMEs	Ministry of Cooperatives and MSMEs	Provincial Government of DKI Jakarta	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta
Develop the online procurement platform	Jakarta Smart City	Office of Communications, Informatics and Statistics DKI Jakarta	Private sector or higher education institutions
Create standards and requirements	Provincial Government of DKI Jakarta	Large businesses	
Screen MSMEs to fulfill the larger businesses' requirements	Provincial Government of DKI Jakarta	Large businesses	
Facilitate formalization & certification of MSMEs	Relevant certification board (e.g. Halal, BPOM)	Industry associations	Provincial Government of DKI Jakarta

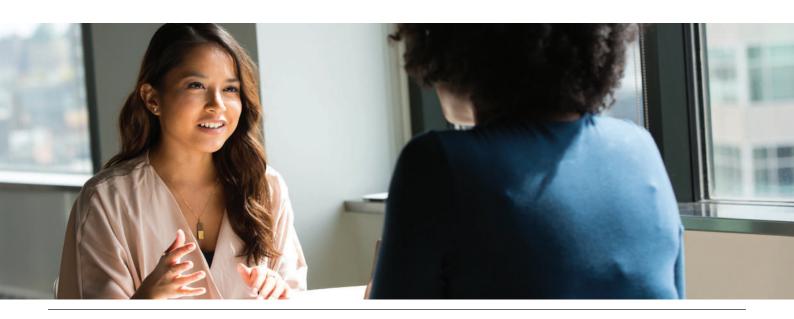
Incentivize Collaboration In MSME Training And Mentorship

Renovation

 Governor of DKI Jakarta Regulation No. 2 of 2020 on Integrated Entrepreneurship Development

Challenge

Micro and small entrepreneurs often face limited budgets and resources to appropriately train themselves and their workforce. Organizations such as large businesses, universities, and nongovernmental organizations can be effective catalysts for smaller-sized enterprises to access market and industry knowledge, and evolve through training, mentorship, and other activities. However, there is currently little incentive for organizations to invest their resources to do so, especially if the activities don't align with their organizational objectives. For example, larger businesses in DKI Jakarta often conduct training for MSMEs as part of their corporate social responsibility (CSR) program, which are separate from the commercial activities of the company.



At the regional level, Jakpreneur has engaged external stakeholders - including startup companies and higher education institutions - to assist in delivering training for MSME entrepreneurs participating in the program. To date, Jakpreneur has worked with at least 120 collaborators. ²⁸ However, benefits that will be received by potential collaborators are currently not clearly established in the Governor of DKI Jakarta Regulation No. 2 of 2020 on Integrated Entrepreneurship Development, which may discourage them from committing their involvement in the Jakpreneur program and assisting MSMEs beyond the delivery of one-off training.

Action

Making it lucrative for potential collaborators to participate in the Jakpreneur program can incentivize them to provide upskilling programs for and mentor their micro and small counterparts. More attention should be paid to benefits that the collaborators can receive for delivering value to MSMEs beyond one-time training, such as through mentorship or business partnership. Furthermore, this policy action should also involve the creation of collaboration agreements that are in line with the collaborating organizations' organizational strategy.

²⁸ Dukung UMKM, Pemprov DKI Gandeng 120 Kolaborator Gabung di Jakpreneur. https://wartakota.tribunnews.com/2022/02/23/dukung-umkm-pemprov-dki-gandeng-120-kolaborator-gabung-di-jakpreneur

- Number of collaboration agreements between Jakpreneur and collaborators
- Number of mentors involved in Jakpreneur
- Number of trainers or training organizations involved in Jakpreneur
- Duration of inter-organizational relationship between Jakpreneur and collaborators

- Conversion from trainer to mentor for MSMEs
- Conversion from trainer to business partner for MSMEs
- Duration of inter-organizational relationship between MSMEs and collaborators

ACTION POINTS	PARTIES INVOLVED		
Detail the benefits that collaborators will receive	Provincial Government of DKI Jakarta	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	Collaborating organizations
Create a collaboration agreement that is in line with the collaborator's company strategy	Provincial Government of DKI Jakarta	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	Collaborating organizations

How might we make digitallyempowered growth affordable for MSMEs?

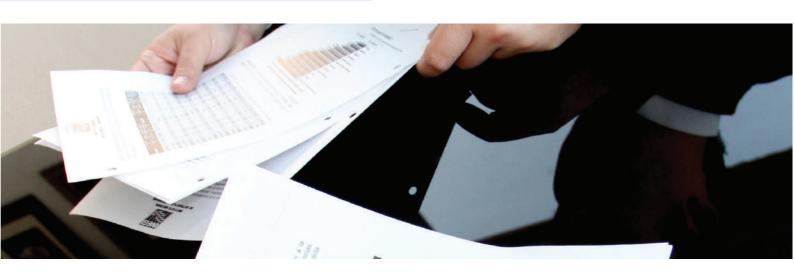
Issue operational regulations to facilitate MSME financing

Innovation

 Ministerial Regulations on Financing Options and Incentives for MSMEs

Challenge

Government Regulation No. 7 of 2021 looks to increase the ease of obtaining financing and incentives for micro and small enterprises. However, to date, operational regulations have not yet been issued by relevant ministries to implement the financing options and incentives outlined by GR 7/2021.



In GR 7/2021, micro and small enterprises are eligible for financing and incentives from stakeholders such as national and regional governments, state-owned enterprises and large businesses in the forms of:

- Regional tax reduction or relief
- · Regional fee reduction or relief
- Subsidized loans
- Capital support for enterprises with innovative products or that are technology-based
- Support for research and development.

While the regulation comprises several financing provisions that can encourage the growth of local MSMEs, operational regulations in the form of ministerial regulations are currently absent.

Action

Establishing operational regulations is necessary to reduce the difficulties and problems associated with implementation in the field. To achieve this, the policy needs to firstly align with the targets and objectives of the 2022 work plans of relevant ministries - such as the Ministry of Finance - since most financing programs by the Ministry of Cooperatives and MSMEs are in the form of social assistance. Furthermore, segmenting financing characteristics of MSMEs and matching them with the available provisions ensures that the beneficiaries are receiving the options that are best suited for them. Lastly, such policy actions should be communicated to the regional governments, who are directly responsible for the development of micro and small enterprises in their respective regions.

- Number of MSMEs that access financing outside of their personal sources
- Proportion of MSME credits outside of all outstanding debts
- Number of financing partners engaged by MSMEs

- Number of financing partnerships between MSMEs and other stakeholders
- Average duration of financing partnerships between MSMEs and other stakeholders

ACTION POINTS	PARTIES INVOLVED			
Align policy with the relevant ministries' work plan for 2022	Ministry of Cooperatives and MSMEs (Deputy of Financing)	Ministry of Finance	Ministry of Home Affairs	Ministry of National Development Planning
Segment MSME financing characteristics and matching them with suitable financial instruments	Research organizations or higher education institutions	Business associations	Entrepreneurship communities	
Delegate authority and responsibilities for implementation	Regional governments	Provincial Government of DKI Jakarta		

Strengthen MSME Data

Innovation

 Ministry of Cooperatives and MSMEs Regulation on MSME Single Data

Challenge

MSME development in Indonesia has long suffered from fragmented data. Data on MSMEs are often limited, opaque and not exhaustive, partly due to the large proportion of informal enterprises and the use of multiple repositories specific to each institution or agency. The fragmented and opaque nature of MSME data creates a challenge in providing financial institutions with accurate credit information.



MSMEs' Single Database is included as a provision in Government Regulation No. 7 of 2021. GR 7/2021 states that the single database involves collecting and checking the suitability of data, managing the data submitted by ministries/agencies and local governments, and spreading the use of data by taking advantage of the data network system and information. According to the regulation, such a database will at least include the business identity and business owner's identity. ²⁹ While a memorandum of understanding (MoU) has been recently signed to mark the cooperation between the Ministry of Cooperatives and MSMEs and Statistics Indonesia (BPS) in strengthening MSME data, an operational regulation has not been issued, which can pose a challenge for smooth implementation in the field given the number of stakeholders involved and the types of data that need to be collected in order to understand the digitalization financing needs of MSMEs. ³⁰

Action

Inventorizing data on MSMEs can help the government and other stakeholders to customize policy, product, and service solutions that meet their specific needs. As the ministry responsible for MSME development at the national level, the Ministry of Cooperatives and MSMEs is responsible for leading the process of building the database. To ensure that MSMEs will receive targeted support to digitize their business, the database needs to include not only the identity of the business and its owner, but also the business activity, financing history and needs, as well as their digitalization needs. These may include the perceived costs needed to employ specialized IT staff or

²⁹ GR 7/2021, Articles 55-59.

³⁰ KemenKopUKM Teken Kerja Sama Dengan BPS, Perkuat Basis Data Tunggal Koperasi dan UMKM. https://kemenkopukm.go.id/read/kemenkopukm-teken-kerja-sama-dengan-bps-perkuat-basis-data-tunggal-koperasi-dan-umkm

to overhaul their existing processes and systems. Regional governments, such as the Provincial Government of DKI Jakarta, should be involved in regularly gathering the most up-to-date data from MSMEs in their region alongside Statistics Indonesia. Finally, it is crucial to digitize the database to ensure that relevant organizations are able to access the data simultaneously.

- Number of organizations with access to data
- Data accessibility
- Data validity
- Data completeness

ACTION POINTS	PARTIES INVOLVED		
Build the database	Ministry of Cooperatives and MSMEs	Regional governments	Statistics Indonesia (BPS)
Gather data on business activity, financing history and needs	Banks and other financial institutions	Financial Services Authority (BI Checking & SLIK)	Statistics Indonesia (BPS)
Gather data on digitalisation needs	Ministry of Communication and Informatics	Regional governments	Statistics Indonesia (BPS)
Digitize the database	Ministry of Communication and Informatics	Statistics Indonesia (BPS)	

Improve the infrastructure of MSME financing information

Renovation

- Coordinating Minister of Economic Affairs Regulation No. 1 of 2022 on Guidelines on the Implementation of People's Business Credit (KUR)
- Financial Services Authority
 Regulation No. 77 of 2016 on
 Information Technology-Based
 Money Lending Services
- Financial Services Authority
 Regulation No. 16 of 2021 on
 Amendments to FSA Regulation
 No. 57 of 2020 on Securities
 Crowdfunding
- Governor of DKI Jakarta Regulation
 No. 2 of 2020 on Integrated
 Entrepreneurship Development

Challenge

Despite the diverse and comprehensive financing options available for MSMEs, many MSMEs are unaware of government incentives that can make business upgrades affordable for them. Plans for information dissemination, as well as the measure of their effectiveness, are often not outlined in regulations on financing options, which create information asymmetries and financing barriers facing MSMEs.

Several regulations have outlined the financing instruments that are available for MSMEs, such as the Coordinating Minister of Economic Affairs Regulation on KUR and the Financial Services Authority Regulation No. 77 of 2016 on P2P lending. At the regional level, the Governor of DKI Jakarta Regulation No. 2 of 2020 on the Integrated Entrepreneurship Development facilitates potential entrepreneurs and entrepreneurs involved in the Jakpreneur program with access to financing.³¹ But while there is a wide variety of financing options and mechanisms that are available for MSMEs, they are not accompanied by a comprehensive communication strategy, leading to a lack and often fragmented understanding among the enterprises themselves.

Action

MSMEs need to be made aware of the options offered by the financial institutions so that they can participate effectively and benefit from them. The government along with other relevant stakeholders should be proactive in disseminating accurate information about the options for MSME financing, either by making such communication part of the financing scheme, or as part of the program that facilitates access to finance, such as Jakpreneur. Some of the scheme or program budget should be allocated for information dissemination activities. Further, an understanding of MSMEs' information needs and where MSMEs receive their information is crucial to ensure that the accurate yet relevant messages are reaching the intended audience. Designing comprehensive information workflow and communication strategy, and engaging stakeholders who are actively involved in MSME development, can further ensure clearer and more accessible information for all MSMEs.

³¹ Currently, Jakpreneur partners with Bank DKI, a commercial bank and a regional-owned enterprise, to disburse loans to qualified Jakpreneur program participants.

- Awareness of financing programs
- Number of MSMEs allocated loans
- Number of financing applications
- Number of successful financing applications

ACTION POINTS	PARTIES INVOLVE	D			
Allocate budget for information dissemination activities	Ministry of Cooperatives and MSMEs and other relevant ministries	Provincial Government of DKI Jakarta	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta		
Map MSMEs' information needs and source	Ministry of Cooperatives and MSMEs and other relevant ministries	Provincial Government of DKI Jakarta	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	Business associations	MSMEs
Design information workflow and communication strategy	Ministry of Cooperatives and MSMEs and other relevant ministries	Provincial Government of DKI Jakarta	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	Financial Institutions	Business associations
Disseminate information to MSMEs	Provincial Government of DKI Jakarta	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	Financial Institutions	Business associations	

Offer MSMEs Financial Coaching Services

Renovation

 Governor of DKI Jakarta Regulation No. 2 of 2020 on Integrated Entrepreneurship Development

Innovation

 Ministry of Cooperatives and MSMEs Regulation on MSME Business Training

Challenge

MSMEs often lack the financial resources to adopt new technologies and build their own internal digital infrastructures. Although there are various financing policies and programs available for MSMEs, micro enterprises in particular suffer from higher loan rejection rates due to their higher risk profiles, coupled with limited financial reporting capabilities and lack of understanding of the qualifications and payment terms. Since existing regulations suggest that collateral is not required for MSMEs aiming to access KUR, banks have little way to mitigate the risks they are undertaking. 32 33 This explains why, despite high program signup rates, graduates of Jakpreneur and other MSME development programs still find it challenging to obtain financing and grow their business.

³² The Coordinating Ministry of Economic Affairs Regulation No. 1 of 2022 on Guidelines on the Implementation of People's Business Credit (KUR).

³³ KUR micro product is an unsecured loan product provided for MSME entrepreneurs.

The Governor of DKI Jakarta Regulation No. 2 of 2020 on Integrated Entrepreneurship Development facilitates potential entrepreneurs and entrepreneurs who participate in the Jakpreneur program with access to financing. One example of the financing options available for program participants is the People's Business Credit program (translates to Kredit Usaha Rakyat or KUR). Based on information gleaned from the co-design workshop, partnership with Bank DKI has enabled Jakpreneur to facilitate KUR financing for more than 2400 program participants since 2018. However, the current regulation does not guarantee that all of the 300,000 Jakpreneur program participants will be successful at obtaining a loan or other sources of financing. ³⁴

Meanwhile, MSME business training run by organizations such as large businesses, higher education institutions or civil society organizations are not obliged to offer participating MSMEs specialized coaching to assist them in their financing applications. These programs do not use standardized curriculums and are often set up to meet the organizations' own organizational goals, such as meeting the interests of non-profit donors or for large businesses to fulfill their corporate social responsibility (CSR).



³⁴ Jakpreneur. https://jakpreneur.jakarta.go.id/index [accessed 17 May 2022]

Action

Financial coaching services can help MSMEs to understand and reliably reveal the future prospects of their business digitalization to potential financiers. They may include banks and other financial institutions that provide loans, or government agencies and civil society organizations that offer small business grants. To achieve this, the government needs to offer MSME development programs (including Jakpreneur and business training by various organizations) incentives to provide their participants with specialized coaching for financing applications.

Second, the programs need to verify whether the MSMEs have the potential and capacity to go digital. Third, the programs can help MSMEs to understand the different financing options, select ones that are best suited for their situation, and guide them through the application process. Upon acceptance, coaching responsibilities can be shared with or passed on to the lender or financier. Continuous coaching is important so that MSMEs can continue to learn to make sound business decisions and manage the cash in their business with confidence.



- · Number of coached MSMEs
- Number of coached MSMEs that successfully obtained financing
- Number of coached MSMEs that successfully obtained unsecured loan
- MSMEs' non-performing loan ratio
- MSMEs' loan repayment rate

ACTION POINTS	PARTIES INVOLVED		
Incentivize or mandating programs to assist MSMEs with their financing applications	Ministry of Cooperatives and MSMEs	Provincial Government of DKI Jakarta	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta
Verify the business potential for going digital	Ministry of Cooperatives and MSMEs	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	MSME development programs
Access bookkeeping with MSME consent	MSME development programs	MSMEs	
Coach and prepare MSMEs for financing applications	MSME development programs	MSMEs	
Post-financing acceptance coaching	MSME development programs	Banks and other financial institutions	MSMEs

Help MSMEs to access production technology

Innovation

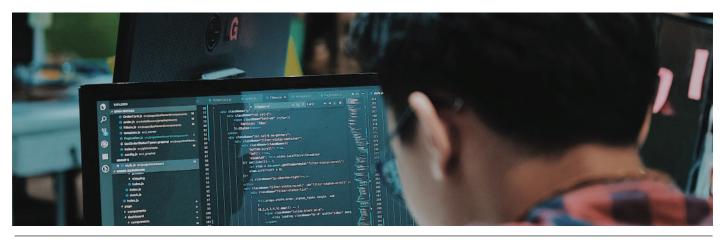
 Minister of Cooperatives and MSMEs Regulation on Shared Production Technology



Challenge

Slow uptake of new technologies and small-scale production are some of the defining characteristics of MSMEs, which often resulted in less efficient production costs and less than optimal product results. Further, products produced by MSMEs tend to lack differentiation, exacerbated by limited access to information about the latest technologies and fears of the costs associated with pursuing them. Given their scale and size, MSMEs do not have the means to constantly upgrade their quality standards in products and processes.

The recently issued Government Regulation No. 7 of 2021 on the Ease, Protection and Empowerment of Cooperatives and MSMEs (GR 7/2021) touches upon the issue of shared production technologies. The regulation outlines the clustering of micro and small enterprises by the National Government, Regional Government, and other relevant stakeholders. These clusters will be organized based on either a general product chain, dependence on similar workforce skills, or the use of similar technologies that are complementary in an integrated manner. They will receive assistance for their production process, which includes facilities and infrastructure (provision of land and buildings to be used as the location where the process of production takes place), as well as the machinery and equipment required for production. To ensure that MSMEs understand how to use new production machinery and equipment, GR 7/2021 further includes competence training as part of the provision for integrated MSME production. 35 However, although there have been reports of factory sharing initiatives by the Ministry of Cooperatives and MSMEs, these are currently limited to only several Indonesian provinces. ³⁶ Issuing an operational regulation on the integrated management and shared production technologies can smoothen the policy implementation at the ground level and allow regional governments to actively participate in the process, especially since they are involved in the development of micro and small enterprises. 37



³⁵ GR 7/2021, Articles 68-71.

³⁶ Rembang Perjuangkan Bantuan Rumah Produksi Bersama ke Kementerian Koperasi dan UMKM. https://rri.co.id/manado/ekonomi/1333331/wongkar-rembang-perjuangkan-bantuan-rumah-produksi-bersama-ke-kementerian-koperasi-dan-umkm?utm_source=news_main&utm_medium=internal_link&utm_campaign=General%20Campaign

³⁷ Tahun Ini Kemenkop Akan Bangun 5 Factory Sharing, https://www.republika.co.id/berita/r509km383/tahun-ini-kemenkop-akan-bangun-5-factory-sharing

Action

Accelerating technological upgrades for MSMEs can enable them to expand their scale of production for eventual growth. The expansion of shared production initiatives to DKI Jakarta, where there is a surge of micro and small enterprises producing culinary and creative products, can help MSMEs in the region to access R&D, tools and facilities for free or at a reduced cost. To achieve this, similar efforts and existing activities to date should first be accounted for, as their successes can be further leveraged for this purpose. Second, facilitating MSMEs with access to facilities, infrastructure, machinery and equipment for free or at a reduced cost can be done in partnership with larger businesses, or through government assistance. Finally, since MSMEs often lack the skills required to successfully implement new technologies in their production processes, formalizing capacity building training agreements with larger businesses can help them to develop the necessary know-how.



- MSMEs' production efficiency
- MSMEs' production costs
- MSMEs' human resource costs
- Number of product and/or service innovations by MSMEs

ACTION POINTS	PARTIES INVOLVED			
Map efforts and activities by the private sector, civil society, and ministries and/or government institutions	Ministry of Cooperatives and MSMEs	Sectoral Ministries	Regional governments	Industry and business associations
Incentive large businesses to participate in the initiative	Ministry of Cooperatives and MSMEs	Sectoral Ministries	Regional governments	Large businesses
Facilitate access to facilities, infrastructure, machinery and equipment	Ministry of Cooperatives and MSMEs	Sectoral Ministries	Regional governments	Large businesses
Establish collaboration agreements for capacity building	Large businesses	MSMEs	Regional governments	Industry and business associations

Incentivize MSMEs to stay digital

Renovation -

 Governor of DKI Jakarta Regulation No. 2 of 2020 on Integrated Entrepreneurship Development

Innovation

 Governor of DKI Jakarta Regulation on MSMEs Digital Sustainability



Challenge

The main challenge facing MSMEs is not how to go digital, but how to stay digital. The plethora of digital skills and onboarding programs created by the government, private sector and other stakeholders have been relatively successful at assisting a number of MSMEs to adopt digital technologies as part of their sales, marketing, and business processes. However, insufficient understanding of the importance of digital technologies, coupled with poor digital skills and the perceived costs associated with ongoing maintenance, present challenges for MSMEs to permanently utilize these technologies.

The Governor of DKI Jakarta Regulation No. 2 of 2020 on Integrated Entrepreneurship Development mandates the regional government to work closely with stakeholders to develop potential entrepreneurs and entrepreneurs in the region as part of the Jakpreneur program. Throughout the pandemic, Jakpreneur has collaborated with ecommerce companies, start-ups, and digital experts to get program participants onboarded in digital platforms and to adopt more sophisticated technologies in their work flow.

Action

MSMEs face daunting challenges in maintaining their digitization and require help in ensuring that they are putting the right technology, tools and processes in place. For this to happen, the government must look beyond meeting number goals and provide ongoing close coaching to ensure the sustainability of digital adoption. Policy action in this space should firstly map the MSMEs that are already digital, and secondly incentivize them to stay digital by offering fiscal or tax incentives; financing the costs of coaching to improve their digital skills; as well as financing the costs of software beyond what is freely available. Furthermore, formalizing the collaboration between the government and the private sector in helping MSMEs stay digital cements the commitment to support MSMEs in pursuing a digital future.

- Number of digitally sustainable MSMEs
- MSMEs' business growth from digital channels

ACTION POINTS	PARTIES INVOLVED		
Map MSMEs that are already digital	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	Private sector involved in MSME development	Online marketplaces / Startups
Provide fiscal or tax incentives for participating MSMEs	Provincial Government of DKI Jakarta	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	
Finance digitalization coaching costs	Provincial Government of DKI Jakarta	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	Private sector involved in MSME development
Conduct continuous collaborative coaching to help MSMEs stay digital	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	Private sector involved in MSME development	Online marketplaces / Startups
Finance software costs	Provincial Government of DKI Jakarta	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	Private sector involved in MSME development
Formalize collaboration between government and private sector	Provincial Government of DKI Jakarta	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	Private sector involved in MSME development

Create a crowdfunding regulation for MSMEs

Innovation

 Government Regulation on Crowdfunding for MSMEs

Challenge

There is no lack of financing alternatives for MSMEs in Indonesia, but low financial literacy and cumbersome loan procedures poses immediate challenges for MSMEs to finance their innovative product ideas. While the internet has opened up opportunities in the realm of MSME financing, there is currently a gap in project-based crowdfunding that could offer a digital platform for entrepreneurs to get their new product off the ground by raising smaller amounts of funding from multiple supporters.



Project-based crowdfunding, which can simplify MSME pitching by hosting the campaign details and progress in one place, is currently unregulated in Indonesia. Meanwhile, donation-based crowdfunding platforms that donate to a charity or a cause are typically registered as a non-profit organization, and are subject to the Minister of Social Affairs Regulation No. 246 of 2021 (general category) and No. 148 of 2021 (natural crises category) on the Collection of Money and Goods. Further, Government Regulation Number 71 of 2019 on the Implementation of Electronic Systems and Transactions obliges electronic system operators, from investment to donation-based crowdfunding platforms, to register with the government.

Action

A crowdfunding regulation that supports the likes of Kickstarter and IndieGoGo can democratize the access to financing for MSMEs that seek to experiment with product innovations. Since project-based crowdfunding activities are housed on a digital platform, it requires the government institutions responsible for MSME development as well as electronic system providers to participate in the policy creation. Given that the platform matches MSMEs with public supporters, the types and levels of rewards that the supporters will receive must also be defined. Furthermore, validating the existence and operations of the MSMEs will help to ensure supporters that the business they are funding is legitimate. Finally, actively promoting project-based crowdfunding as an alternative source of funding for MSMEs can benefit businesses testing the demand for their products online while at the same time bringing their innovation ideas to reality.

- Number of active crowdfunding platform users
- Total funds raised by crowdfunding platform
- Success rate of crowdfunding campaigns (project fully funded)
- Speed of crowdfunding campaign completion (project fully funded)

ACTION POINTS	PARTIES INVOLVED			
Incentivize crowdfunding platform operator	Ministry of Cooperatives and MSME	Provincial Government of DKI Jakarta	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	
License crowdfunding platform operator	Ministry of Communications and Informatics	Financial Services Authority		
Define the 'transactional' relationship between MSMEs and donors	Ministry of Cooperatives and MSME	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	Individual and Organizational Donors	MSMEs
Validate the existence and operations of MSMEs to avoid fraud	Ministry of Cooperatives and MSMEs	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	Crowdfunding platform operators	
Promote crowdfunding	Ministry of Cooperatives and MSMEs and other relevant government institutions	Provincial Government of DKI Jakarta	Office of Industry, Trade, Cooperatives, Small and Medium Business DKI Jakarta	Business associations and other supporting organizations

How might we build the tech talent reservoir to meet the evolving industry demand?

Improve the job-readiness of Digital Talent **Scholarship** graduates

Renovation

Minister of Communications and Informatics Regulation No. 2 of 2021 on the Strategic Plan 2020-2024



Challenge

The Digital Talent Scholarship (DTS) is a program launched by the Ministry of Communications and Informatics in 2018 that aims to increase the quantity and quality of tech talents in the digital and IT sector in the country. While the government works closely with program service providers, such as privatelyrun coding bootcamps, most of the programs available are introductorylevel classes. This creates a "ready for employment" gap because many of the graduates from these programs are still deemed to lack the practical working experience that many potential employers are looking for.

The DTS outlined in the Minister of Communications and Informatics Regulation No. 2 of 2021 on the Strategic Plan 2020-2024 offers training scholarships for technology competency programs, with a maximum duration of 3 months according to the chosen training theme. ³⁸ To accommodate participants from various backgrounds, the DTS was divided into several programs, such as:

- Fresh Graduate Academy: Open to university students and graduates
- Vocational School Graduate Academy: Open to vocational school graduates, including vocational secondary education and higher institution diploma level
- Thematic Academy: Open to the general public

However, the programs currently do not specify the provision of professional development opportunities alongside technical training. ³⁹

Action

Implementing initiatives that can provide students in the program with job-ready skills and industry contacts will help distinguish them in the competitive job market. To ensure success, the program must have a clear KPI and procedures to monitor and evaluate the "job-readiness" of its students based on metrics such as skills improvement, practical work experience, communication capabilities, increased confidence and collaboration with others. Furthermore, DTS initiatives should also include practical training on real-world challenges, having practitioners as teachers, and facilitating networking with peers and professionals in the industry.

³⁸ Digital Talent Scholarship. https://pik.dev.kominfo.go.id/faq [accessed 18 May 2022]

³⁹ Ministry officially opens 2022 Digital Talent Scholarship. https://en.antaranews.com/news/229929/ministry-officially-opens-2022-digital-talent-scholarship [accessed 18 May 2022]

- Students' job-readiness
- Average speed of job placement post-graduation for program graduates

ACTION POINTS	PARTIES INVOLVED		
Develop clear KPIs, monitoring & evaluation procedures to measure job-readiness	Ministry of Communications and Informatics	Tech education institutions e.g. coding bootcamps	Tech Community (Startups, Enablers, Investors, others)
Provide students with exposure to real-case problems & peer learning during training	Tech education institutions e.g. coding bootcamps	Tech Community (Startups, Enablers, Investors, others)	
Recruit practitioners as teachers	Ministry of Communications and Informatics	Tech education institutions e.g. coding bootcamps	Tech Community (Startups, Enablers, Investors, others)
Facilitate networking	Ministry of Communications and Informatics	Tech Community (Startups, Enablers, Investors, others)	

Repatriate Indonesian tech talent

Renovation -

 Presidential Regulation No. 76 of 2017 on Facilities for Indonesian Communities Abroad



Challenge

The exponential growth of technology startups requires quality talent development to ensure success. However, talent development in Indonesia is currently playing catchup with industry demand, especially for more specialized tech skills and leadership, business and management skills. The Coordinating Minister for Economic Affairs Airlangga Hartanto estimated that Indonesia needs 9 million tech talent by 2030 to support its growing digital economy. 40 Despite the government's pleas for members of the Indonesian diaspora to return home and drive its digital revolution, many Indonesian tech professionals have opted to stay abroad for reasons such as better working environment and future prospects. 41

⁴⁰ Menko Airlangga: Indonesia Butuh 9 Juta Talenta Digital hingga 2030, https://www.liputan6.com/bisnis/read/4916104/menko-airlangga-indonesia-butuh-9-juta-talenta-digital-hingga-2030

⁴¹ Why many of Indonesia's best tech minds are staying abroad. https://www.thejakartapost.com/culture/2022/03/22/why-many-of-indonesias-best-tech-minds-are-staying-abroad.html

The Indonesian diaspora has the potential to serve as a pipeline to fill a portion of the country's tech talent gap, but Indonesia currently does not have a diaspora engagement policy aside from a past bid to record their numbers and map out their areas of potential. The Presidential Regulation No. 76 of 2017 on Facilities for Indonesian Communities Abroad (PR 76/2017) and its implementing regulation the Minister of Foreign Affairs Regulation No. 7 of 2017 on the Issuance and Revocation of the Indonesian Community Card Abroad legally established the 'Diaspora Card', which is given to overseas Indonesians who registered themselves with the Ministry of Foreign Affairs, either in Jakarta or through their embassies. The Diaspora Card provides diaspora members who are still Indonesian citizens with the ability to open Indonesian bank accounts, own property and participate in business ventures. ⁴² However, there is little information on the enabling environment should diaspora Indonesians be interested to return to the country and resettle, nor how returning citizens will be assisted in their transition.

Action

Helping overseas Indonesian tech talent to return and settle in quickly and seamlessly will allow the technology sector to benefit from an influx of talents who are bringing home invaluable experiences and skill sets from their time abroad. Providing better government services for members of the diaspora; building an increased awareness about opportunities in the technology sector through events and programs; facilitating an integrated information about said opportunities; along with offering attractive financial and living incentives for them and their families, need to be at the forefront of the diaspora engagement policy.

⁴² PR 76/2017, Article 3.

- Number of diaspora returning to Indonesia
- Number of diaspora joining Indonesia based technology companies
- Number of diaspora filling in tech positions

ACTION POINTS	PARTIES INVO	DLVED			
Set up a dedicated office for diaspora matters	Ministry of Foreign Affairs	Embassies and Consulate Generals			
Build an awareness of tech sector opportunities among members of the diaspora	Ministry of Foreign Affairs	Embassies and Consulate Generals	Ministry of Communications and Informatics	Tech Community (Startups, Enablers, Investors, others)	Diaspora Connect and other existing diaspora communities
Provide a one- stop information portal for diaspora Indonesians who are keen to contribute to Indonesia's tech sector	Ministry of Foreign Affairs	Embassies and Consulate Generals	Ministry of Communications and Informatics	Tech Community (Startups, Enablers, Investors, others)	Diaspora Connect and other existing diaspora communities
Implement fiscal and non-fiscal incentives for returning Indonesian tech professionals	Ministry of Foreign Affairs	Ministry of Finance and other relevant ministries or government institutions	Directorate General of Immigration		
Facilitate residence permits for foreign spouse and children	Ministry of Foreign Affairs	Embassies and Consulate Generals	Directorate General of Immigration		

Revitalize apprenticeships

Renovation

- Minister of Manpower
 Regulation No. 6 of 2020 on the
 Implementation of Domestic
 Apprenticeships
- Minister of Finance Regulation
 No.128 of 2019 on The Facility for
 Human Resources Development in
 Certain Competencies

Challenge

Fresh graduates seeking employment in the technology sector lack real-world skills and experiences sought after by employers. Current educational programs often do not provide enough practical training to solve real-world challenges as well as business and organizational skills. As a result, it creates difficulties and delays for newcomers to thrive and excel in the workplace. Aside from a university degree, apprenticeships are an alternative route to the technology sector with an added element of onthe-job training experience. Although a regulation on apprenticeships exists in Indonesia, they are often conducted informally, which may lack structure and do not lead to qualifications. 43

⁴³ OECD. (2020). Employment and Skills Strategies in Indonesia. https://www.oecd-ilibrary.org/employment/employment-and-skills-strategies-in-indonesia_dc9f0c7c-en

The implementation of an apprenticeship program is currently regulated by the Minister of Manpower Regulation No. 6 of 2020 on the Implementation of Domestic Apprenticeships (MoM Regulation 6/2020), which regulates how apprenticeships are being carried out in Indonesia. According to the policy, businesses of all sizes, formal and informal, are able to participate in an apprenticeship program. ⁴⁴ Successful apprentices will obtain a certificate of apprenticeship program completion, and may take a competency test to obtain a certificate of work competence. ⁴⁵ Further, substantial responsibilities for apprenticeships are placed in the hands of local governments, who are responsible for verifying the apprenticeship agreements, approving the companies' apprenticeship program application, and for providing mentorship for domestic apprenticeships. ⁴⁶

To incentivize companies to take on apprentices, the Minister of Finance Regulation No.128 of 2019 (MoF Regulation 128/2019) on The Facility for Human Resources Development in Certain Competencies, the implementing regulation to Government Regulation No. 45 of 2019, offers to deduct 200 percent of costs incurred by companies in the implementation of their apprenticeship programs in a number of competencies, including digital economy. ⁴⁷ However, digital economy apprenticeship programs are currently limited to partnerships with vocational educational institutions at the diploma level and technical and vocational education training centers (Balai Latihan Kerja or BLK).



⁴⁴ MoM Regulation 6/2020, Article 1.

⁴⁵ MoM Regulation 6/2020, Articles 20-21.

⁴⁶ MoM Regulation 6/2020, Articles 10-12, 17, 27.

⁴⁷ MoF Regulation 128/2019, Article 2.

⁴⁸ MoF Regulation 128/2019, Pages 20-21.

⁴⁹ TVET centers (also known as BLKs) are under the coordination of MoM and managed by local governments. https://blogs.worldbank.org/sites/default/files/preparing_ict_skills_for_digital_economy-revised_7mar2018.pdf

Action

Employers need to play their part in facilitating the career journey of their employees ahead of time if they want to ensure that prospective workers arrive prepared from day one. While existing regulations have offered incentives for companies to take on digital economy apprentices from vocational educational institutions at the diploma level and TVET centers, companies need to be further incentivized to absorb apprentices and graduates from other technology competency programs, such as SMKs and privately-run tech bootcamps. Current incentives should also be evaluated to determine their full impact. Although the MoM Regulation 6/2020 specifies the need for companies to provide instructors for the apprentices, apprenticeship programs should also incorporate peer learning and mentorship in its curriculum. ⁵⁰ Partnering apprentices with both a technical expert and a business or managerial expert as mentors can ensure a well-rounded training. The mentors must undergo an appropriate 'teach the trainer' coaching program to be qualified to undertake the role.

Meanwhile, peer learning is necessary to develop the spirit of collaboration and cooperation - both are important skills in today's world.



⁵⁰ MoM Regulation 6/2020, Article 3.

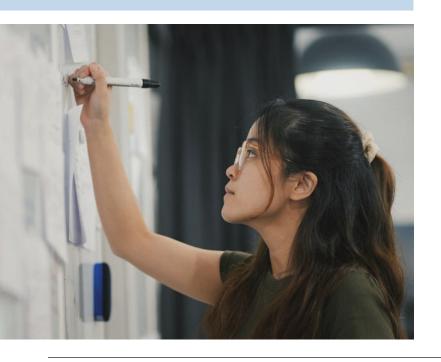
- Number of participating apprentices
- Number of certified apprentices
- Number of participating organizations
- Rate of conversion into full-time employment

ACTION POINTS	PARTIES INVO	DLVED			
Incentivize companies to offer on-the- job training and absorb tech competency program graduates	Ministry of Manpower	Ministry of Communications and Informatics	Ministry of Finance and/ or other relevant ministries and agencies	Technology competency programs	Participating companies
Incorporate peer learning and mentorship in companies' apprenticeship programs	Ministry of Manpower	Technical expert in the company	Business or managerial expert in the company	Existing employees	
Training mentors	Ministry of Manpower	Human Resources Experts			

Provide nonmonetary incentives for potential students to study tech

Renovation

 Minister of Communication Regulation No. 2 of 2021 on the Strategic Plan 2020-2024



Challenge

To increase the future pool of tech talent in Indonesia it is necessary to increase the number of students enrolled in technology-related programs. Non-formal education in the form of programs such as the Digital Talent Scholarship (DTS) have attempted to meet the labor demands in the short term. However, potential students may be disincentivized to enroll in such competency courses due to the high costs involved (e.g. hardware, software, and other materials that students are required to own) and fears about job security in the technology sector. These concerns are particularly discouraging for potential students from disadvantaged backgrounds or underrepresented groups, who tend to face additional hurdles when pursuing tech-related careers due to lack of information and support.

The DTS program outlined in the Minister of Communications and Informatics Regulation No. 2 of 2021 on the Strategic Plan 2020-2024 offers financial assistance for prospective students that contributes towards the cost of their fees. However, funds to assist potential students with other costs associated with the course are currently not available, which may deter some people from applying. Furthermore, although DTS alumni will have the opportunity to intern and receive job recommendations through a digital platform set up by the Ministry of Communications and Informatics, the program currently does not guarantee graduates with pathways to secure employment post program completion. ⁵¹



⁵¹ FAQ - Digital Talent Scholarship. https://digitalent.kominfo.go.id/faq

Action

To incentivize potential students to enroll in technical programs, there are a couple of non-monetary incentives that can be implemented, such as financial assistance and access to information that can help students make better decisions for their career. After calculating the costs associated with enrolling in a technology competency program and determining their eligibility to receive grants, the government could provide students with non-repayable grants to purchase the necessary hardware, software and other materials required in the study programs, or partner with relevant hardware and software companies for the same purpose. To ease fears and uncertainties in regards to a career in the technology sector, the parties involved (i.e. government, private corporations and educational institutions) must educate students on skills taxonomy and future outlook in the technology sector through workshops and seminars alongside technical training. Lastly, easing the steps to job placement through guaranteed job placement in partnership with industry both helps companies to locate the best talents for their business, and gives students the assurance that they will receive assistance in finding a job.



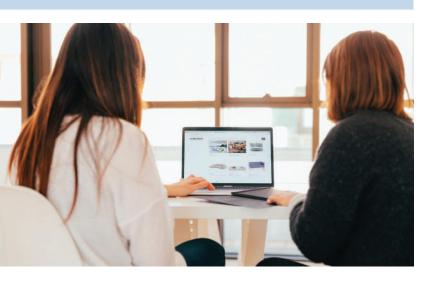
- Number of enrolled students
- Number of enrolled students from disadvantaged backgrounds or underrepresented groups

ACTION POINTS	PARTIES INVOLVED			
Calculate the costs associated with enrolling in a technology competency program	Ministry of Communications and Informatics	Tech schools or bootcamps	Relevant hardware and software companies	Potential students
Determine eligibility criteria to receive grants	Ministry of Communications and Informatics	Tech schools or bootcamps	Potential students	Potential employers
Design funding in the forms of non-repayable grants or partnerships with hardware and software companies	Ministry of Communications and Informatics	Relevant hardware and software companies	Potential employers	
Educate students about future outlook in tech sector	Ministry of Communications and Informatics	Tech schools or bootcamps	Tech Community (Startups, Enablers, Investors, others)	
Facilitate job placements	Ministry of Communications and Informatics	Ministry of Manpower	Tech schools or bootcamps	Tech Community (Startups, Enablers, Investors, others)

Improve access to and boost demand for tech mentoring

Innovation

 Government Regulation on Tech Mentorship



Challenge

There is a lack of qualified mentors available in Indonesia to nurture and develop tech talent. Mentorships offer a number of benefits, but most pressingly it could help close the gap between the demand and supply of:

- Tech talent with niche or advanced skills
- 2. Tech talent in senior or managerial positions.

Having practitioners as mentors can equip the mentees with higher-level tech and business skills that are often not found in educational programs. Moreover, the mentors themselves may benefit by improving their communications and leadership skills, both of which are essential to advance one's career.

Mentorship offers tech talent the opportunity to connect with a more experienced person, who can act as a sounding board and offer constructive feedback to help them further develop their skills and career. However, digital skills shortage in Indonesia means that there is a limited number of senior mentors who can offer guidance to junior tech talent in their areas of expertise. To ease the short-term hiring of skilled foreign workers, the recently issued Government Regulation No. 34 of 2021 on Foreign Workers Utilization and Ministry of Manpower Regulation No. 8 of 2021 on the Employment of Foreign Workers removed the requirement of obtaining a Foreign Worker Utilization Plan (Rencana Penggunaan Tenaga Kerja Asing, or RPTKA) approval from the Ministry of Manpower for technology startups seeking to hire foreign workers for less than three months. A fly-in, fly-out approach can help local tech startups access overseas mentors with specialized skills on a temporary basis.

At the same time, although a number of individual tech startups have implemented their own in-house tech mentorship and knowledge sharing programs, a specific government policy that promotes an industry-wide mentoring network is currently absent. This creates fragmentation in opportunities among junior tech talent, in particular those who are employed by smaller or less visible startups.



Action

Stimulating demand for and improving access to mentoring both in DKI Jakarta - where the majority tech startups are based - and across the country can help to prepare the next generation of tech talent. This can be achieved in several ways, for instance by recruiting and training practitioners to become volunteer mentors; articulating the benefits of mentoring to the industry and the individual careers of both the mentors and mentees; incentivizing and aligning with business-led mentoring programs (for example, by encouraging startups to develop volunteer tech mentoring programs as part of their human resource strategy); providing recognition for the contributions of mentors through monetary and non-monetary rewards; and facilitating access to remote or online mentoring to promote flexibility. While the government holds the crucial role of facilitating and creating the suitable enabling environment, it is crucial that tech talent mentoring is industry-led and not dictated by the government.



⁵² The Pros and Cons of Running a Startup in Indonesia in 2021. https://greenhouse.co/blog/challenges-running-startups-indonesia/

- · Number of high skilled mentors
- Number of mentorship programs
- Participating companies' time to hire
- Participating companies' quality of hire

ACTION POINTS	PARTIES INVOLVED			
Recruit and train local mentors	Ministry of Communications and Informatics	Office of Communication, Informatics, and Statistics DKI Jakarta	Jakarta Smart City	Tech Community (Startups, Enablers, Investors, others)
Recruit overseas mentors	Ministry of Manpower	Tech Community (Startups, Enablers, Investors, others)		
Raise awareness of the benefits of mentorship	Ministry of Communications and Informatics	Office of Communication, Informatics, and Statistics DKI Jakarta	Jakarta Smart City	Tech Community (Startups, Enablers, Investors, others)
Incentivize and align with business-led mentoring programs	Ministry of Communications and Informatics	Office of Communication, Informatics, and Statistics DKI Jakarta	Jakarta Smart City	Tech Community (Startups, Enablers, Investors, others)
Incentivize mentors through monetary and non-monetary rewards	Ministry of Communications and Informatics	Ministry of Finance and other relevant ministries	Provincial Government of DKI Jakarta	Tech Community (Startups, Enablers, Investors, others)
Facilitate 'match-making' and access to online portal	Ministry of Communications and Informatics	Office of Communication, Informatics and Statistics DKI Jakarta	Jakarta Smart City	Mentors

Produce tech talent through the formal education system

Innovation

 Director General of Vocational Education Regulation on Digital Talent



Challenge

To ensure that future demands for high-quality tech talent are met, it is imperative that today's formal education integrates the latest digital tools and technology skills into the curriculum. Given the increasingly high costs of continuing higher education, skills-based study such as those found in vocational secondary schools (Sekolah Menengah Kejuruan or SMKs) offers a new pool of candidates for technical careers in the technology sector. However, SMKs in Indonesia have long faced challenges in producing employable youths. 53 Furthermore, not all of Indonesia's SMKs offer majors related to the digital economy, such as software engineering, machine learning or human computer interaction.

⁵³ Employers find Indonesia's vocational school grads of little use. https://asia.nikkei.com/Economy/Employers-find-Indonesia-s-vocational-school-grads-of-little-use2

SMK education in Indonesia is regulated by the Ministry of Education and Culture under the Directorate of Vocational Education. In recent years, following the implementation of the Presidential Instruction No. 9 of 2016 on the Revitalization of SMKs, the Indonesian government has launched several programs to improve SMKs and strengthen the graduates' readiness to enter the workforce. Building on the past programs, the latest 2022 Center of Excellence (Pusat Keunggulan) program based on Minister of Education and Culture Decree No. 17 of 2021 seeks to establish collaborations between SMKs and the private sector, which involve: joint curriculum development, project/industry-based learning, lecturers from the business world and industry, practical fieldwork, competency certification for graduates, teacher training by industry, commitment by industry to absorb SMK graduates, scholarships or commitment to work by the working world for SMK students. Despite the encouraging development, participation in the program is by application, as it is meant to showcase selected SMKs as a reference center for improving the quality and performance of other vocational schools. This creates an opportunity gap whereby not all students enrolled in SMKs are able to benefit from industry linkages.

Furthermore, fluency in English is a crucial skill for students seeking to pursue a career in the technology sector, but this is currently not supported by the curriculum. For instance, according to the Directorate General of Primary and Secondary Education of the Minister of Education and Culture Regulation No. 7 of 2018 on the SMK Curriculum Structure, the curriculum structure for software engineering, a key major in digital economy, includes only 352 hours for English language and other foreign languages over the course of three years. ⁵⁴ Since English is the main language of the technology sector, more focus and time should be devoted to its practical application at the SMK level so that students can be more prepared before entering the workforce.

⁵⁴ Directorate General of Primary and Secondary Education of the Ministry of Education and Culture Regulation No. 7 of 2018 on the SMK Curriculum Structure, Kompetensi Keahlian: Rekayasa Perangkat Lunak (3 Tahun).

Action

Efforts to produce digital talent through the formal education system require the close collaboration of educators, industry, as well as governments at the national and regional levels, both of whom play a role in the development and delivery of vocational education and training. 55 The expansion of digital economy majors to other SMKs across the country and involving industry in developing the curriculums can help learners to gain skills that are important to technology sector employers. Equalizing access to SMKs that benefit from the Center of Excellence program, or offering SMKs with digital economy majors access to the same facilities, is important since it gives students access to the quality teaching and equipment standards they need in order to succeed in the technology sector. Meanwhile, students' English skills must also not be overlooked as it is a vital skill needed to be able to keep up with educational or training resources - many of which are provided only in the English language. Having practitioners as teachers can ensure that students are receiving the most relevant language skills that are required in the workplace. Lastly, incentivizing the technology sector to hire SMK graduates through fiscal and non-fiscal incentives can boost the rate of employment among SMK graduates, whose high unemployment rates remain a concern to policymakers.



⁵⁵ OECD. (2020). Employment and Skills Strategies in Indonesia. https://www.oecd-ilibrary.org/employment/employment-and-skills-strategies-in-indonesia_dc9f0c7c-en

- · Number of SMKs offering digital economy majors
- Number of collaborations between industry and SMKs offering digital economy majors
- Number of job or apprenticeship placements for SMK digital economy graduates

ACTION POINTS	PARTIES INVOLVED			
Encourage SMKs to offer a digital economy majors	Ministry of Education and Culture, Directorate of Vocational Education	Office of Education DKI Jakarta	Tech Community (Startups, Enablers, Investors, others)	SMKs
Assist SMKs in applying for the Center of Excellence program	Ministry of Education and Culture, Directorate of Vocational Education	Office of Education DKI Jakarta	SMKs	
Facilitate industry linkages for SMKs outside of the Center of Excellence program	Ministry of Education and Culture, Directorate of Vocational Education	Office of Education DKI Jakarta	SMKs	Tech Community (Startups, Enablers, Investors, others)
Provide intensive and practical English language training for students	SMKs	Tech Community (Startups, Enablers, Investors, others)		
Incentivize the tech sector to hire SMK graduates	Ministry of Education and Culture, Directorate of Vocational Education	Ministry of Manpower	Other relevant government institutions or agencies, for example the Ministry of Communications and Informatics and Ministry of Finance	Tech Community (Startups, Enablers, Investors, others)

Formulate software house incentive plan

Innovation

 Government Regulation on Incentives for Software Houses

Challenge

There is no tech bootcamp program shortage in Jakarta. However, these programs tend to focus on basic level skills and seldom equip students with practical working experience. As such, there is a huge pool of beginner-level fresh graduates but a very limited pool of highly-skilled tech talent. This creates a formidable challenge for startups seeking to hire specialized workers for niche positions in the face of budget or time constraints.



⁵³ Employers find Indonesia's vocational school grads of little use. https://asia.nikkei.com/Economy/Employers-find-Indonesia-s-vocational-school-grads-of-little-use2

Most of the policies and programs concerned with tech talent shortage have largely focused on addressing the problem through education and training. For example, the Digital Talent Scholarship outlined in the Minister of Communications and Informatics Regulation No. 2 of 2021 on the Strategic Plan 2020-2024 was created to provide potential students from various educational backgrounds with scholarships to attend technology competency programs. Meanwhile, there has been little mention of support for software development outsourcing companies (also known as software houses), which can help startups execute temporary projects faster at an affordable cost.

Action

Handing off short-term and time-sensitive tech projects to software houses can help technology startups quickly access pipelines of a pre-vetted, skilled workforce. A policy that seeks to increase the quantity and quality of software houses can support them by providing tax breaks and easing the requirements and paperwork involved in setting up the corporation. Furthermore, providing incentives to software houses who hire and train technology competency program graduates can empower them to absorb and train fresh tech talent, and contribute to job creation in the technology sector.

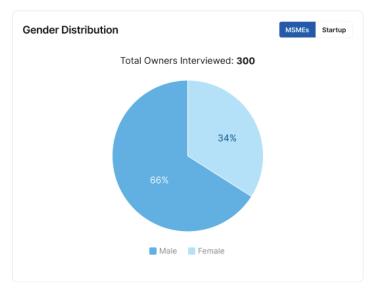
- Number of new software houses
- Average number of years a software house is in operation
- Number of fresh graduates absorbed by software houses

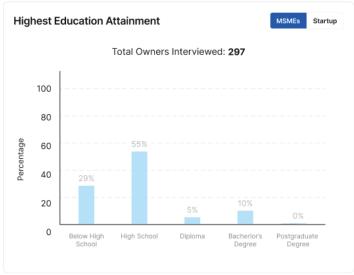
ACTION POINTS	PARTIES INVOLVED			
Ease the requirements and paperwork for the establishment of legal entity	Ministry of Law and Human Rights	Ministry of Communications and Informatics	Ministry of Investment (OSS)	
Provide tax breaks for new and existing software houses	Ministry of Communications and Informatics	Ministry of Finance		
Incentivize software houses to hire and train bootcamp graduates	Ministry of Communications and Informatics	Ministry of Finance	Ministry of Manpower	Technology competency programs

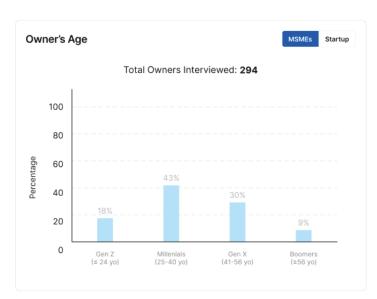
3 Appendix

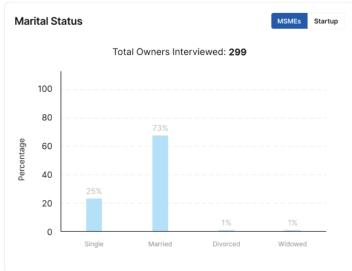
Research Demographics

Quantitative Demographics



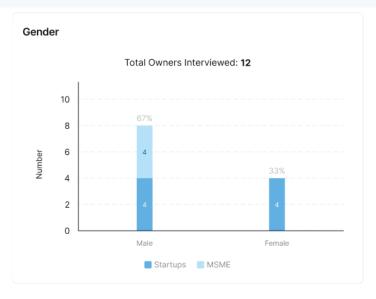


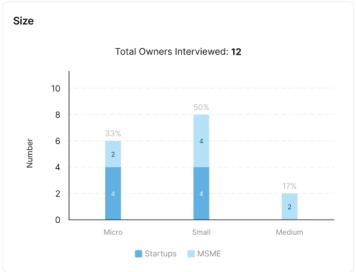


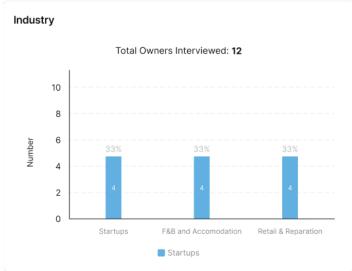


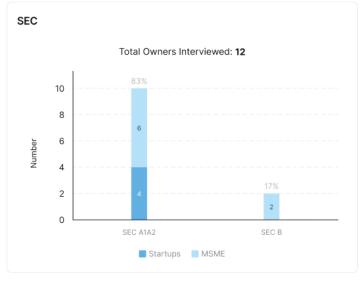


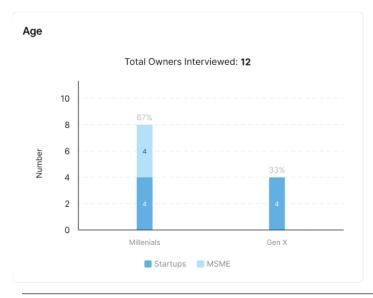
Qualitative Demographics

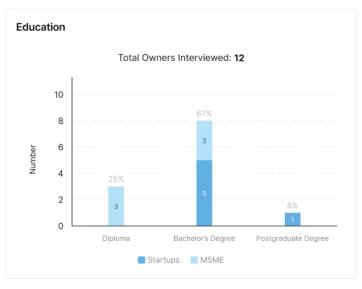












Codesign Demographics

NO.	NAME	ORGANISATION	POSITION	CATEGORY			
	Priority Area 1: How might we support MSMEs to develop strong and up-to-date market and industry knowledge?						
1	Olansons Girsang	Office of Industry, Trade, Cooperatives, Small and Medium Business	Head of Industry Development Division	Government Institution			
2	Adhitya Pratama Yudhasaput	Office of Industry, Trade, Cooperatives, Small and Medium Business	Head of Small and Medium Enterprise Infrastructure Division	Government Institution			
3	Suhono Harso Supangkat	Think20 (T20)	Head of Small and Medium Enterprise Infrastructure Division	Think Tank			
4	Sigit Purwanto	Institute for Innovation and Entrepreneurship Development (LPIK- ITB)	Head of Monitoring and Evaluation Division	Think Tank			
5	Aufa Doarest	World Bank	Private Sector Specialist	International Organization			
6	Timothy Astandu	Populix	CEO	Industry			
7	Alam Medina	Governor's Team for the Acceleration of Development (TGUPP)	Policy Analyst	Government Institution			
8	Manael Sudarman	Jakarta Experience Board	Business Director	Government Institution			
9	Zidny Ilman	Gojek	Public Policy & Government Relations Jr. Manager	Industry			

Priority Area 2: How might we make digitally-empowered growth affordable for MSMEs?						
10	Presthysa Nagitha Lestari	Gojek	Vice President, Public Policy and Government Relations	Industry		
11	Tauhid Ahmad	INDEF	Executive Director	Think Tank		
12	Puji	Bank DKI	SME Division	Financial Institution		
13	Teddy Trilaksono	Universitas Prasetya Mulya	Faculty Member	Educational Institution		
14	Frida Elizabeth	Office of Industry, Trade, Cooperatives, Small and Medium Business	Head of Creative and Digital Industry Division	Government Institution		
15	Emana Fasianti	Office of Industry, Trade, Cooperatives, Small and Medium Business	Head of Creative and Digital Industry Division	Government Institution		
Priority Area 3: How might we build the tech talent reservoir to meet the evolving industry demand?						
16	Andy Sulasikin	Jakarta Smart City		Government Institution		
17	Tendy Gunawan	International Labor Organization	National Program Officer	International Organization		
18	Erika Dianasari Go	Alpha JWC	Partner	Financial Institution		
19	William Hendradjaja	Skilvul / Impact Byte	Co-founder & Chief of Business	Educational Institution		
20	Nursida Yaru	Tokopedia	Senior Public Policy and Government Relations Associate	Industry		

