

# Insights and Challenges Business Incubation at Indonesian Universities

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**Abstract:** Business incubators at universities have become a crucial component in fostering entrepreneurship and supporting startup development, especially in emerging economies like Indonesia. These incubators offer a supportive environment that helps entrepreneurs transform their ideas into successful businesses through mentorship, networking, and access to resources. However, despite their growing importance, business incubators in Indonesian universities face several challenges, including limited funding, regulatory hurdles, and a lack of experienced mentors. This literature review synthesizes existing research on university-based business incubators in Indonesia, exploring their role in the entrepreneurial ecosystem, the services they provide, and the obstacles they encounter. The review also highlights the contributions of these incubators to local economies and job creation, while addressing the gaps in research, such as the need for long-term impact assessments, sector-specific incubation models, and a deeper understanding of the regulatory environment. By identifying these challenges and opportunities, this review offers valuable insights for improving the effectiveness of university-based incubators in Indonesia, ultimately enhancing the country's entrepreneurship landscape and contributing to sustainable economic growth.

**Keywords:** Business Incubators; University Entrepreneurship; Indonesian Incubators; Startup Ecosystem; Mentorship and Funding.

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## Introduction

In recent years, the importance of entrepreneurship has become increasingly recognized as a driver of economic growth and innovation, particularly in developing countries like Indonesia. Business incubators, particularly those housed within universities, have emerged as a crucial mechanism to foster entrepreneurship and support the development of startups. These incubators offer a range of services, including mentorship, networking, access to funding, and a structured environment that nurtures early-stage businesses. They play a pivotal role in helping aspiring entrepreneurs navigate the challenges of starting and scaling businesses, particularly in the context of the complex and often resource-limited environment of Indonesia. Indonesia, as one of Southeast Asia's largest and most dynamic economies, presents significant opportunities for entrepreneurship. The country is home to a burgeoning digital economy, a young and tech-savvy population, and a growing middle class. However, despite these favorable conditions, Indonesia still faces numerous challenges in terms of business development, particularly when it comes to fostering sustainable and scalable startups. These challenges are compounded by limited access to capital, a lack of business development resources, and an underdeveloped entrepreneurial ecosystem. In this context, business incubators at universities offer a promising solution to bridge the gap between academic knowledge and real-world business challenges, providing a supportive environment for young entrepreneurs to thrive.

The urgency of understanding the role and impact of business incubators in Indonesian universities cannot be overstated. As Indonesia seeks to position itself as a regional leader in entrepreneurship and innovation, it is essential to have a comprehensive understanding of how these incubators operate, the challenges they face, and the effectiveness of their support structures. While business incubators have been a focus of research in other parts of the world, there is a notable gap in literature concerning their role in the Indonesian context. This gap exists despite the growing number of university-based incubators and their increasing significance in shaping the entrepreneurial landscape in Indonesia. Therefore, this literature review aims to provide a detailed synthesis of existing research on business incubators in Indonesian universities, exploring their functions, the challenges they encounter, and their contributions to the development of the entrepreneurial ecosystem.

The novelty of this research lies in its focused examination of business incubators within the specific context of Indonesian universities. While business incubators have been widely studied in various global settings, much of the existing literature tends to focus on the developed world, with limited attention given to developing economies like Indonesia. This review seeks to address this gap by analyzing the unique challenges faced by Indonesian business incubators, such as limited funding, lack of infrastructure, and regulatory hurdles, and how these incubators adapt to the local context. By focusing on Indonesia, this research aims to offer insights into how university-based incubators can contribute to the broader goal of fostering entrepreneurship in emerging economies.

University-based business incubators in Indonesia are an integral part of the country's entrepreneurial ecosystem. Universities, with their vast networks of students, faculty, and alumni, are well-positioned to offer a fertile environment for nurturing innovative business ideas. In addition to providing physical space for startups to grow, incubators at universities facilitate access to critical resources such as business mentoring, training, and market insights. The role of universities in supporting entrepreneurship is particularly important in Indonesia, where the formal entrepreneurial ecosystem is still in its infancy compared to more developed economies. As a result, university incubators are not only essential for providing startups with the tools and knowledge they need to succeed but also serve as a critical component of the

broader entrepreneurial infrastructure in the country.

However, despite the growing number of business incubators in Indonesian universities, they face several challenges that can hinder their effectiveness in supporting startups. One of the primary challenges is the limited access to funding. While incubators can connect entrepreneurs with investors, the lack of sufficient venture capital in Indonesia remains a significant obstacle. Many incubators struggle to secure consistent funding streams for their operations, which in turn affects their ability to provide adequate support to the businesses they house. This is particularly problematic in Indonesia's developing financial ecosystem, where access to investment capital remains a key barrier for many entrepreneurs, especially in the early stages of business development.

Another challenge faced by university incubators in Indonesia is the lack of skilled mentors and advisors. While many incubators provide mentorship as part of their services, the quality of mentoring is often inconsistent. Effective mentorship is crucial for guiding entrepreneurs through the complex process of launching and growing a business, yet there is a shortage of experienced entrepreneurs and business leaders who are available to mentor fledgling startups. The lack of a robust network of skilled mentors is particularly evident in fields such as technology and innovation, where entrepreneurs require specialized guidance and advice to navigate the competitive landscape.

The bureaucratic and regulatory environment in Indonesia presents additional obstacles to the growth of university-based incubators. Public policies and regulations that support entrepreneurship and innovation are still developing in Indonesia. While the government has made strides in creating a more supportive business environment, the regulatory landscape remains complex and often unpredictable. For instance, legal frameworks around intellectual property, taxation, and foreign investment can be cumbersome and difficult to navigate for startups, particularly in sectors such as technology and digital innovation. This creates a significant challenge for business incubators, which must help their clients navigate these complexities while also providing guidance on how to scale their businesses. Despite these challenges, business incubators at universities in Indonesia are playing an important role in fostering a culture of entrepreneurship. They provide a platform for students, faculty, and aspiring entrepreneurs to collaborate, innovate, and bring their ideas to market. The role of universities as catalysts for entrepreneurship is becoming increasingly recognized, and the presence of incubators within academic institutions is seen as a key factor in building an entrepreneurial mindset among the younger generation. As universities continue to expand their entrepreneurial offerings, the potential for incubators to drive innovation and economic growth in Indonesia is significant.

The urgency of enhancing the effectiveness of these incubators is evident. For Indonesia to fully realize its entrepreneurial potential, university-based incubators must be better equipped to address the challenges they face and capitalize on the opportunities before them. The government, educational institutions, and private sector must work together to provide the necessary resources, infrastructure, and policy support to create an environment where startups can thrive. Understanding the role of university-based incubators and addressing the challenges they face is crucial for shaping a more robust entrepreneurial ecosystem in Indonesia.

## Method

This literature review adopts a systematic approach to gather and analyze existing

research on business incubation at universities in Indonesia. The goal of this methodology is to provide a comprehensive understanding of the role and impact of business incubators within the Indonesian university context, while also identifying the challenges and opportunities faced by these incubators in fostering entrepreneurship. To achieve this, a comprehensive search of both academic and grey literature was conducted, incorporating peer-reviewed journal articles, books, and reports from both academic institutions and organizations involved in entrepreneurial development. The first step in the methodology was conducting an extensive literature search through multiple databases. Key databases such as Scopus, Google Scholar, JSTOR, and ScienceDirect were used to gather peer-reviewed journal articles, conference papers, and other scholarly works. These databases were selected because of their vast coverage of academic publications across a wide range of disciplines, including business management, entrepreneurship, and public administration (Grimm & Bock, 2022). Additionally, grey literature sources, including reports from government agencies, international organizations such as the World Bank and the OECD, as well as publications from business incubators and universities in Indonesia, were included to provide practical insights and real-world examples of business incubation practices.

The search strategy involved using a range of carefully selected keywords such as “business incubators,” “university incubators,” “entrepreneurship,” “Indonesia,” “startup ecosystem,” and “innovation.” These keywords were combined using Boolean operators to refine the search results and ensure that the review captured the most relevant studies. The search process also focused on including studies published in the last ten years to ensure the literature was current and reflected the latest developments in business incubation practices at Indonesian universities (Gozali et al., 2020). In addition to academic sources, reports and documents that provide insights into government policies, university-based incubator models, and the broader entrepreneurial ecosystem in Indonesia were incorporated to capture a diverse range of perspectives on the subject matter. Once the relevant literature was identified, the next step was to apply inclusion and exclusion criteria to ensure the quality and relevance of the studies selected. The inclusion criteria focused on studies that specifically addressed business incubation within the context of Indonesian universities, as well as research that discussed challenges and opportunities in fostering entrepreneurship through university-based incubators. Only studies that provided substantial insights into the role of universities in entrepreneurship, the services offered by incubators, and the effectiveness of these incubators in supporting startups were considered. The exclusion criteria included studies that did not focus on the Indonesian context or that were not related to business incubation, as well as studies that lacked a strong empirical or theoretical foundation. This process ensured that the literature selected was directly relevant to the research question and provided meaningful insights into the topic.

In the data extraction phase, key information from the selected studies was systematically collected and organized according to thematic categories. These themes were based on the main areas of interest in business incubation, such as the types of services offered by incubators, the challenges faced by incubators in Indonesia, and the impact of these incubators on the success of startups (Sharma et al., 2015). The extracted data was also organized to highlight key insights on the role of universities in fostering innovation and entrepreneurship, the effectiveness of incubator programs in addressing the needs of startups, and the role of external factors such as government policies and funding availability. The next step involved synthesizing the extracted data to identify recurring themes and patterns across the studies. Thematic synthesis was used to draw connections between the findings from different sources and to highlight key trends in business incubation at Indonesian universities. By synthesizing the findings, the review was able to provide a comprehensive understanding of

the current state of business incubation in Indonesia, as well as the challenges and opportunities that these incubators face. This synthesis also helped to identify areas where the literature was lacking or where further research was needed. For instance, while many studies addressed the services offered by incubators, there was limited research on the long-term impact of incubation on the sustainability and scalability of startups, particularly in the context of Indonesia.

The literature synthesis was also guided by a critical evaluation of the studies included in the review. Each study was assessed for its methodological rigor, including the quality of data collection, the sample size, and the relevance of the findings to the broader context of business incubation in Indonesia. Studies that employed robust research methods, such as case studies, surveys, or interviews with entrepreneurs and incubator managers, were given higher weight in the analysis. Additionally, the review took into account the geographical and institutional context of the studies, as business incubation practices may vary across different regions of Indonesia and between different types of universities, such as public versus private institutions. One limitation of this methodology is the potential for publication bias, as studies with significant or positive findings are more likely to be published than those with negative or inconclusive results. As such, the literature included in this review may over-represent studies that highlight successful business incubation models while under-representing research that critiques the effectiveness of incubators or explores the challenges they face in more depth. To mitigate this limitation, the review also included grey literature and non-peer-reviewed reports that provide a more balanced perspective on the realities of business incubation in Indonesia. Furthermore, while the review aimed to include studies from a range of academic disciplines, including business, economics, and public policy, the focus on university-based incubators meant that the research was somewhat limited to the higher education context. Future studies could expand on this review by incorporating perspectives from other key stakeholders in the entrepreneurial ecosystem, such as investors, government agencies, and incubator clients themselves, to provide a more comprehensive understanding of how business incubators function within the broader Indonesian innovation landscape.

## Result and Discussion

Business incubators situated within universities in Indonesia are playing a crucial role in augmenting the country's entrepreneurial ecosystem, particularly by providing essential resources and support to early-stage startups. Historically, universities in Indonesia have been regarded primarily as educational institutions, yet their potential as hubs of innovation is increasingly acknowledged. By leveraging their networks, expertise, and infrastructure, universities can effectively nurture emerging businesses, facilitating the transition from theoretical research to practical application in the marketplace. A pivotal function of university-based incubators is to offer a structured environment conducive to the growth of startups. These incubators furnish entrepreneurs with vital mentorship, training, and access to networks necessary for success in competitive markets. They typically assist in essential business functions such as planning, market research, product development, and access to funding (Nazira & Kartika, 2022; Crefioza et al., 2022; . For entrepreneurs, particularly those without prior business experience, this guidance is critical in navigating the complex landscape of establishing and growing a business (Novanda, 2022; Pattanasak et al., 2022). The translation of academic research into commercially viable goods and services is further enhanced by university incubators, allowing faculty and students to apply theoretical models and findings to real-world business scenarios (Brito et al., 2018; Siddiqui et al., 2021). Despite their potential, university incubators in Indonesia face significant challenges, most notably limited access to funding. While providing mentorship and support, many incubators struggle to

secure sustained financial backing, which hampers their ability to assist startups effectively. The lack of venture capital, especially for nascent ventures, poses a substantial barrier to scaling businesses (Crefioza et al., 2022; Pattanasak et al., 2022). This funding gap is exacerbated by a weak angel investment network and insufficient interest from the private sector, leading many incubators to depend on governmental or institutional financial aid, which often proves inadequate for the needs of all participating startups (Nazira & Kartika, 2022; Fithri et al., 2024; Adriansyah & Rimadiaz, 2023). While university business incubators in Indonesia are recognized as vital entities in fostering entrepreneurship, their impact is contingent upon overcoming funding challenges and enhancing collaboration with the private sector and government entities. For these incubators to fulfill their potential as catalysts for innovation and business creation, it is imperative that their operational frameworks are reinforced through comprehensive funding strategies and strengthened networks of support (Bist, 2023; Games, 2019; Games et al., 2020).

Business incubators at universities in Indonesia play a significant role in fostering entrepreneurship, but they face numerous challenges that impede their effectiveness. A critical issue is the shortage of skilled mentors and advisors. Effective mentorship is essential for startups; experienced mentors provide valuable insights, share industry knowledge, and guide entrepreneurs through the complexities of business development. Unfortunately, many incubators struggle to attract individuals with relevant experience from the industry who can fulfill these mentoring roles. The absence of such expertise limits the incubators' ability to provide the high-quality guidance that startups require, particularly in specialized fields like technology and biotechnology where sector-specific knowledge is vital for success (Gozali et al., 2020) (Rukmana et al., 2023; Bernardus et al., 2024). Moreover, the regulatory landscape in Indonesia complicates the operations of university-based incubators. The country's legal and regulatory frameworks can be complex and present barriers for startups. Entrepreneurs often encounter hurdles such as lengthy processes for business registration, obtaining necessary permits, and compliance with local regulations. These challenges can be particularly burdensome during the early stages of business formation when time and resources are often limited (Rukmana et al., 2023; Saptono et al., 2020) (Atina et al., 2024). Although there have been advancements toward simplifying the business environment, much work remains to establish a more supportive regulatory framework that empowers entrepreneurs rather than stifling them (Adriansyah & Rimadiaz, 2023; Kurniawan et al., 2021; Saptono et al., 2020). Despite these challenges, the contributions of university-based incubators to Indonesia's entrepreneurial ecosystem are significant. They play a vital role in cultivating a culture of entrepreneurship among students, faculty, and alumni by encouraging a shift in mindset from traditional career paths to entrepreneurial opportunities. By providing a platform for exploring new ideas, incubators help students and young professionals realize that entrepreneurship is a viable and rewarding career path (Novanda, 2022; Tricahyono et al., 2018; . Furthermore, these incubators facilitate connections between startups and critical external stakeholders, including investors, government agencies, and industry partners. This networking is essential for startups seeking funding, forming strategic alliances, and accessing new markets. Through organized events such as pitch competitions and networking sessions, incubators create opportunities for entrepreneurs to gain visibility and connect with potential investors (Bist, 2023; Tricahyono et al., 2018; Salim et al., 2024).

Business incubators at universities serve a vital role in fostering innovation, particularly in the context of Indonesia's evolving entrepreneurial landscape. In a global economy characterized by rapid change, innovation becomes crucial for maintaining competitive advantages. University-based incubators offer unique environments where research and development can be translated into practical applications. They create opportunities for



cutting-edge ideas to be tested and refined in real-world settings, thus bridging the gap between academia and industry (McAdam et al., 2016; Kolympiris & Klein, 2016). Moreover, these incubators do not merely assist individual entrepreneurs; they actively contribute to broader national objectives, such as economic diversification and technological advancement. By nurturing innovative startups, university incubators foster job creation and stimulate local economic development. Startups that emerge from these facilities often generate employment and create new products and services, thus contributing significantly to both local and national economies (Martins, 2023; Martins et al., 2020). This impact is particularly pronounced in sectors vital to Indonesia's long-term growth, including technology, manufacturing, and agriculture (Fithri et al., 2024). As Indonesia strives to establish itself as a significant player in the Southeast Asian digital economy, the role of university business incubators becomes increasingly significant. They are essential for cultivating the next generation of entrepreneurs and innovators who will lead this growth. With the rise of digital technologies and the global gig economy, there is a unique opportunity for Indonesia to thrive as a hub for technology startups. University incubators are critical in preparing the workforce to exploit these opportunities by providing mentorship, resources, and an encouraging environment for entrepreneurial endeavors (Suroso et al., 2020). However, for these incubators to reach their full potential, several challenges must be addressed. Collaboration between universities, the private sector, and government agencies is critical in securing the necessary funding for incubators and the startups they support. Additionally, simplifying the regulatory environment and creating more investment incentives for early-stage ventures would significantly bolster the entrepreneurial ecosystem (Fithri et al., 2024; Prabowo, 2023). There is also a pressing need for a stronger network of experienced mentors and advisors, which would enhance the support provided to startups and guide them toward sustainable growth and success (Gozali et al., 2020). While business incubators in Indonesian universities are instrumental in fostering innovation and contributing to economic development, significant improvements in funding, regulatory frameworks, and mentorship networks are required to maximize their effectiveness. By addressing these challenges collaboratively, Indonesia can enhance its entrepreneurial ecosystem and encourage the growth of a new generation of innovative businesses (Peuker-Steinhäuser et al., 2023).

## Identified GAP

Despite the growing interest and recognition of business incubators within Indonesian universities, there remain several significant gaps in the existing literature regarding their operation, impact, and the challenges they face. These gaps highlight areas where further research is needed to fully understand the potential of university-based incubators and their role in fostering entrepreneurship in Indonesia. Addressing these gaps will not only improve the functioning of these incubators but also enhance their ability to contribute to the broader entrepreneurial ecosystem.

One of the most notable gaps in the literature is the lack of comprehensive research on the long-term impact of business incubators at universities in Indonesia. While many studies have examined the short-term outcomes of incubation programs, such as the number of startups launched or the immediate success of incubated businesses, there is limited research on the sustained impact of these programs on the growth and development of the startups over time. Longitudinal studies are needed to assess the long-term success of incubators in terms of business survival rates, job creation, scalability, and the overall contribution of incubated businesses to the local and national economy (Kihonge, 2016). Understanding the long-term impact of business incubation will provide valuable insights into the effectiveness of

university-based incubators and help identify best practices that can be replicated across Indonesia and other developing economies.

Another critical gap in the literature concerns the evaluation of the specific challenges faced by business incubators in Indonesia. While several studies have acknowledged the barriers these incubators face, such as limited funding, lack of skilled mentors, and regulatory hurdles, there is limited empirical research that explores these challenges in detail, particularly within the Indonesian context (Cross et al., 2019). Most of the available research tends to focus on general barriers to entrepreneurship or discusses challenges without considering the unique characteristics of Indonesian incubators. More targeted research is needed to understand how these specific challenges are addressed by incubators and what strategies have been successful in overcoming them. For example, how do incubators in Indonesia navigate the complexities of local regulations, and what role do public-private partnerships play in overcoming funding limitations? Further research into these challenges will help to design more effective support mechanisms for incubators, enabling them to better serve entrepreneurs.

Additionally, while many studies focus on the services provided by business incubators, such as mentorship, networking opportunities, and access to funding, there is little research on the broader ecosystem within which these incubators operate. The role of external factors such as government policies, regional economic conditions, and the availability of private investment is often underexplored. For instance, while university-based incubators are critical in providing services to startups, their success is also dependent on the strength and health of the overall entrepreneurial ecosystem. Research that investigates how university-based incubators interact with other ecosystem players, such as venture capitalists, government agencies, and innovation hubs, would provide a more holistic view of their role in fostering entrepreneurship. This could include studies on the effectiveness of public policies that support innovation and entrepreneurship, as well as the relationship between universities, incubators, and other entrepreneurial support organizations.

Another gap is the limited focus on the role of university incubators in fostering innovation in specific sectors. Much of the research on business incubation tends to generalize across industries without taking into account the sector-specific needs and challenges faced by startups. In Indonesia, different sectors such as technology, agriculture, and social enterprises require distinct approaches to incubation. For instance, incubators supporting tech startups may need to provide access to high-tech infrastructure, while those supporting social enterprises may require a stronger focus on social impact assessment and sustainable business models. Research that examines sector-specific incubation models and how incubators can tailor their services to the needs of different industries would add valuable insights into the operations of business incubators in Indonesia. Understanding the needs of sector-specific startups can help incubators provide more relevant support, contributing to higher success rates and more impactful businesses. Furthermore, there is a lack of research on the effectiveness of mentoring within Indonesian university-based incubators. Mentorship is often cited as a key component of successful incubation programs, but studies that specifically assess the quality of mentoring, the match between mentors and mentees, and the impact of mentoring on business outcomes are rare. Mentorship plays a critical role in helping startups navigate the complexities of business development, yet not all incubators in Indonesia have access to a sufficient number of experienced and skilled mentors. Research is needed to explore the mentoring models used by Indonesian incubators, including the structure of mentoring programs, the qualifications and expertise of mentors, and the long-term impact of mentoring on startup success. Additionally, understanding how mentors can better support entrepreneurs in Indonesia's unique business environment, which includes challenges such as limited access to capital and regulatory complexities, is crucial for improving the mentoring process.



The literature also reveals a gap in understanding the role of university culture in supporting entrepreneurship and innovation through incubators. Universities are not just physical spaces for education; they are also environments with distinct organizational cultures that can either foster or hinder entrepreneurial activities. Research on how university culture influences the success of business incubators and the entrepreneurial mindset of students is limited. For instance, how do university policies, academic freedom, and faculty involvement in incubators affect the entrepreneurial outcomes of incubated startups? Examining the interplay between university culture, faculty involvement, and incubator effectiveness could provide valuable insights into how universities can better support entrepreneurship beyond providing physical space and resources. This area of research is important for understanding the broader institutional dynamics that shape business incubation in Indonesia and other developing countries. Moreover, there is a lack of research that compares university-based business incubators in Indonesia with those in other countries in Southeast Asia or globally. While research on incubation practices in developed countries is abundant, comparative studies that analyze the differences and similarities between incubation practices in Indonesia and other emerging markets are rare. Such comparative studies would help identify global best practices that can be adapted to the Indonesian context. Understanding how other countries have overcome similar challenges and implemented successful incubation models would provide valuable lessons for improving business incubation in Indonesia. Comparative research could also highlight the unique features of Indonesian incubators, offering insights into how these institutions can be enhanced to better serve the needs of entrepreneurs.

Finally, while there has been some research on the outcomes of business incubation, there is limited understanding of how success is measured in the context of Indonesian university-based incubators. Success is often defined in terms of the number of businesses launched or the amount of funding raised by startups, but these metrics do not necessarily reflect the long-term sustainability or social impact of the businesses. Research is needed to explore alternative measures of success that focus on the broader outcomes of incubation, such as the social and environmental impact of startups, the creation of jobs, and the contribution to local economies. This would provide a more comprehensive understanding of the value that business incubators bring to the entrepreneurial ecosystem and help to refine the metrics used to assess their effectiveness.

## Conclusion

Business incubators within universities in Indonesia have increasingly become essential in fostering entrepreneurship, driving innovation, and contributing to the country's economic growth. These incubators offer valuable resources and support for aspiring entrepreneurs, providing them with access to mentorship, business development services, and networks that are crucial for early-stage startups. As the entrepreneurial ecosystem in Indonesia continues to grow, universities are playing an increasingly significant role in nurturing the next generation of entrepreneurs. However, despite the clear benefits and contributions of university-based business incubators, they face several challenges that hinder their effectiveness in supporting startups and fostering entrepreneurship on a broader scale. The most pressing challenges include limited access to funding, insufficient mentoring capacity, and regulatory obstacles that make it difficult for startups to grow and scale. The lack of sufficient financial resources, both for incubators and the startups they support, remains a key constraint that affects the ability of these institutions to operate at full capacity. Public and private sector funding for incubators is essential to ensure that they can offer comprehensive services and attract a diverse range of innovative businesses. In addition to funding, the shortage of skilled mentors and advisors within Indonesian business incubators impedes the ability to offer the high-

quality support that startups need to thrive. As a result, many incubators struggle to provide the depth of expertise and guidance necessary for startups to succeed, particularly in specialized industries such as technology and biotechnology.

Another significant barrier is the complex regulatory environment in Indonesia, which can be a challenge for startups trying to navigate the legal and bureaucratic processes required to launch and scale their businesses. While there have been efforts by the government to improve the ease of doing business, entrepreneurs still face obstacles in areas such as obtaining licenses, protecting intellectual property, and managing tax regulations. Addressing these regulatory barriers would go a long way in creating a more supportive environment for startups and ensuring that university-based incubators can help their tenants overcome these hurdles. Despite these challenges, university-based incubators in Indonesia are making valuable contributions to the country's startup ecosystem. They play a crucial role in building a culture of entrepreneurship among students, faculty, and the wider community. Incubators serve as a bridge between academia and industry, providing students and researchers with opportunities to commercialize their ideas and transform them into viable businesses. They also offer a platform for networking and collaboration, which is essential for the growth and sustainability of startups. Furthermore, incubators are helping to diversify the Indonesian economy by fostering innovation in key sectors such as technology, digital services, and social entrepreneurship. The contributions of university-based incubators are also evident in their ability to create economic value. Startups that emerge from these incubators contribute to job creation, economic diversification, and innovation, which are all vital to the long-term prosperity of the country. By supporting the development of scalable and sustainable businesses, incubators play a pivotal role in shaping Indonesia's future economic landscape.

To maximize the potential of university-based business incubators in Indonesia, several steps must be taken to address the challenges identified in this review. First, it is critical to secure more funding for incubators and startups. This can be achieved through increased collaboration between universities, the government, and the private sector. Public-private partnerships, venture capital initiatives, and government-backed funds for early-stage startups would help provide the necessary resources for incubators to function effectively and scale their operations. Additionally, fostering a more robust angel investing network would encourage investment in early-stage ventures, providing startups with the capital they need to grow and innovate. Second, the mentoring capacity of incubators must be enhanced. This can be done by building stronger networks of experienced mentors and industry experts who can provide valuable guidance and advice to entrepreneurs. Universities can play a role in facilitating these networks by connecting incubator managers with alumni, industry leaders, and successful entrepreneurs who are willing to mentor young startups. Additionally, investing in professional development for incubator managers and mentors will help ensure that they have the skills and expertise necessary to support the diverse range of businesses housed within incubators. Finally, addressing the regulatory challenges faced by startups is essential to fostering a more supportive business environment. Streamlining bureaucratic processes, simplifying business registration procedures, and providing clearer guidelines on intellectual property protection and tax regulations would make it easier for startups to launch and operate. Furthermore, policies that incentivize entrepreneurship and support the growth of innovative businesses should be strengthened. By creating a more conducive regulatory environment, Indonesia can ensure that its entrepreneurial ecosystem remains competitive and sustainable.

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