

## Strategic Support from Business Incubators: Unveiling their Impact on Entrepreneurial Success in Malaysia's Start-Ups

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### Abstract

The objective of this study is to examine the influence of business incubators' business support and infrastructure on the success of early-stage companies in Malaysia. The performance of early-stage companies may not be adequately assessed due to certain perceived deficiencies. Consequently, there is ongoing debate regarding the extent to which the components of a business incubator effectively contribute to the success of early-stage companies. The study's respondents consist of entrepreneurs who have completed programs at business incubators in Sabah, Sarawak, Johor, Kuala Lumpur, Selangor, and Penang. The analysis will be based on 100 questionnaires and will utilize the Structural Equation Modeling (SEM) technique employing Partial Least Squares (PLS). The findings of this research may be valuable for policymakers and government authorities in establishing benchmarks and may also provide business incubators with insights into the entrepreneurs within their programs. Additionally, other researchers can utilize this study as a point of reference for future investigations in related fields of study.

**Keywords:** Performance of Entrepreneurs, Early-Stage Companies, Business Support, Infrastructure, Business Incubator.

### Introduction

In the realm of entrepreneurship, failure is an inevitable occurrence that can happen unexpectedly (Pisoni, Aversa, & Onetti, 2020). Early-stage companies in Malaysia experience a concerning trend of high failure rates within the first five years (Yatim et al., 2017; Ahmad & Seet, 2009). It is crucial for the government to closely monitor the alarming 60 percent failure rate (Hasin et al., 2023; Husin & Ibrahim, 2014; Nordin, Hamid & Woon, 2011). Prior studies

have suggested the rise in failure rates of early-stage companies and such problems need to be given considerable attention and possible interventions respectively. Various studies suggest that the lack of substance and the likelihood of early-stage companies' errors could impede their performance, leading to a rise in failure rates (Shin, 2014; Pena, 2004).

Business incubators are the modern-day initiatives that have the ability to change the dynamics of early-stage companies and increase their life span by providing extra assistance and help (Fithri et al., 2024; Hackett & Dilts, 2004). According to the National Business Incubation Association (2007), an impressive 87 percent of early-stage companies who completed a business incubator program are now successfully running their businesses. Furthermore, over 80 percent of entrepreneurs who received assistance from a business incubator have not only obtained resources but also survived, illustrating the significance of business incubators for early-stage companies (Valliere & Nicholls-Nixon, 2024; Abetti, 2004). A company's performance in the industry is closely tied to its survival rate during the early stages of start-up. For a survival rate to be considered high, it should fall within the 81 percent to 90 percent range (Al-Mubarak, Busler, & Aruna, 2013). Successful early-stage companies in Malaysia such as REDtone International Berhad, IRIS Corporation Berhad, Green Packet Berhad, and Tricubes Berhad have all graduated from a business incubator (Santoso, 2019). Previous research has highlighted that business incubators are a valuable resource for early-stage companies, significantly enhancing their chances of survival and success in the sector.

Emerging companies undoubtedly face significant challenges and are at high risk of failure within their industry (Roumani et al., 2019; Saffar, 2007). The performance of these newly established businesses is rigorously evaluated over a three-year period following their graduation from a business incubator (De Oliveira Haase et al., 2024; Rogova, 2014). However, accurately measuring the performance of these early-stage companies can be challenging due to the lack of essential components, as noted by Sun and Cheng (2021) and Bergek and Norrman (2008). Consequently, there are legitimate concerns regarding whether business incubators effectively fulfill their objective of enhancing the performance of early-stage companies (Valliere & Nicholls-Nixon, 2024; Hong & Lu, 2016). In response, previous researchers have recognized this issue and have actively explored the critical components that business incubators can utilize to support early-stage companies (Pattanasak et al., 2022; Bergek & Norrman, 2008). This study specifically targets entrepreneurs who have completed a business incubator program in Malaysia and aims to comprehensively understand the situation and evaluate the influence of business support and infrastructure provided by business incubators on the performance of early-stage companies in Malaysia.

This research will ensure the achievement of the business incubator's objectives by identifying and explaining the components that enable early-stage companies to succeed, particularly in their formative stages, thereby providing better control over entrepreneurship performance and sustainability in Malaysia (Alzaghal & Mukhtar, 2017). Furthermore, this research is important for stakeholders such as entrepreneurs, policymakers, and business incubator managers because it generates knowledge that can assist in designing better business incubator programs (Fithri et al., 2024; Yordanova, 2023). In particular, the study tries to determine whether business support, infrastructure, or both are useful in the long run through intensive tracking of companies in the post-incubation phase. The results will assist

in building support frameworks, which are actual determinants of problems encountered by early-stage companies, thereby increasing survival rates and ensuring a vibrant and innovative entrepreneurship environment in Malaysia.

### **Objectives**

In this paper, we aim to investigate the potential positive impact of business support and infrastructure on the success of entrepreneurs in early-stage companies in Malaysia. Specifically, we seek to determine which elements of business incubation, whether business support or infrastructure, or both are critical to the performance of entrepreneurs in this context.

### **Literature Review**

#### *The Performance of Entrepreneurs in the Early-stage Companies*

The study examines the performance of entrepreneurs in early-stage companies as the dependent variable. In the literature, two key indicators are commonly used to assess entrepreneurial performance: the success and failure of entrepreneurs in early-stage companies (Eniola & Entebang, 2015). Entrepreneurial performance is measured based on the successful achievement of goals set by early-stage companies (Mabhungu & Van Der Poll, 2017). Additionally, the evaluation of entrepreneurial performance is conducted to gauge the prosperity of early-stage companies over time (Fuel et al., 2021). Therefore, entrepreneurs in early-stage companies prioritize performance as a crucial aspect (Usama & Yusoff, 2018). When an early-stage company enters a business incubator, it may receive adequate resources. Upon graduation from the business incubator, it is expected to demonstrate competence and success in the industry (Jimainal et al., 2022).

### **Business Support**

Business support encompasses intangible services provided by business incubators, including coaching, mentoring, entrepreneurial training, business development advice, and assistance with general business matters such as accounting, marketing, advertising, and financial aid. These services are designed to facilitate the growth of early-stage companies (Robinson & Stubberud, 2014; Somsuk & Laosirihongthong, 2014; Al-Mubarak, Busler, & Aruna, 2013; Bergek & Norman, 2008; Aerts, Matthyssens, & Vandenbempt, 2007). Intangible resources include non-physical components such as expertise, brand, reputation, and networking (Pattanasak et al., 2022). The intangible services provided by business incubator workers, such as consultation and assistance, are comparable to business support (Flanschger et al., 2023). Receiving expert knowledge-based business support can significantly contribute to the growth of early-stage companies (Jimainal et al., 2022). Business incubators can distribute their business support to early-stage companies through a range of programs, helping them effectively manage their businesses and achieve success. This has been discussed in a previous study, where a business incubator provided a diverse range of services related to business, including business tools, networking, and expert coaching. It was designed to help new small-scale enterprises to plan for their business activities (Pinto & Rua, 2023; Pena, 2004).

H1: Business support has a positive impact on the performance of the entrepreneurs in early-stage companies in Malaysia.

**Infrastructure**

The term infrastructure encompasses physical environments and tangible services offered by a business incubator including offices, secretarial services and other common facilities like canteen, reception area and meetings rooms (Hong & Lu, 2016; Robinson & Stubberud, 2014; Bergek & Norrman, 2008; McAdam & McAdam, 2008; Pena, 2004). An essential element known to have an influence on the early-stage companies' success within a business incubator is the provision of physical workplace (Monsson & Jørgensen, 2016). Based on the literature review, it can be concluded that the concept of the shared facilities among the entrepreneurs had a positive impact on the performance of the startups during their incubation period (Theodoraki et al., 2022; Robinson & Stubberud, 2014). Due to numerous commercial spaces made available by a business incubator, it is possible to spread the costs among the members, thereby reducing individual costs (Egbetokun, 2023; Schwartz & Hornych, 2010).

H2: Infrastructure has a positive impact on the performance of entrepreneurs in early-stage companies in Malaysia.

**Methodology***Research Design*

This research will use both quantitative and deductive approaches. To test the correlation between variables, this research will employ cross-sectional survey design where probability sampling would be systematic sampling. Regarding these objectives, the research will incorporate an online survey as the main method of collecting data.

**Population and Sampling**

The study sample for this research will therefore be sourced from the various states in Malaysia such as Sabah, Sarawak, Johor, Kuala Lumpur, Selangor and Penang. These states were selected because of high density of business incubators in certain regions. The participants will be selected from a group of entrepreneurs who have completed a three-year program in a public business incubator in Malaysia. The selected states will be spread across different regions in Malaysia (Sidin et al., 2004). The participants will be divided into two regions, namely the eastern and western regions of Malaysia. The Western region, located in the Northern zone, will cover the state of Penang, while the Central region will encompass Kuala Lumpur and Selangor. Additionally, the state of Johor will represent the southern areas, while Sabah and Sarawak will represent East Malaysia. These states selected based on their strategic locations and economic development (Sidin et al., 2004). Furthermore, the number of public business incubators in these states is significantly higher compared to other states in Malaysia (SME Corp. Malaysia, 2022). Therefore, respondents from these states will effectively represent the overall population in Malaysia as they collectively cover the Malaysian population from the central, southern, eastern, and northern regions.

In order to determine the necessary minimum sample size, we will utilize GPower 3.1 software package, following the approach outlined by Faul, Erdfelder, Buchner, and Lang (2009). This study will employ an effect size of 0.15 (medium), alpha ( $\alpha$ ) of 0.05, and a power of 0.95 (maximum), with two predictors, as calculated using GPower (Hair, Ringle, & Sarstedt, 2014). Based on these parameters, G\*Power analysis indicates that 89 participants will be the

optimal sample size for the study. This sample will specifically pertain to entrepreneurs who have completed their studies at the public business incubator in Malaysia three years prior.

### **Data Analysis Method**

The study shall employ use statistical analysis with the Statistical Package for Social Science version 29.0 (SPSS 29.0) and SmartPLS 4.0. SmartPLS 4.0 as the primary statistical tools used to measure the constructs in the current research. SPSS 29.0 will be used to compute the frequency of every variable to achieve the objective of this study. SmartPLS 4.0 will be used for statistical analysis through partial least square structural equation modeling or PLS-SEM. For the identification of the significant variables in this research, this study will adopt Partial Least Squares Structural Equation Modeling (PLS-SEM) as suggested by (Hair et al.,2016). This study aims at predicting the performance of the entrepreneurs in the small early-stage companies in Malaysia. The proposed research model will be conducted with the application of PLS-SEM utilizing SmartPLS 4.0 software. To avoid bias when using this measure, the study will use the two-stage method recommended by Anderson and Gerbing (1988) which include assessment of the measurement models and evaluation of the structural models. For proper reporting, Chin (2010), backs this approach.

### **Discussion**

The theoretical model proposed in this research focuses on the proper identification of Malaysian business incubators in supporting the development and sustainability of early-stage companies. In this paper, an evaluation of business support and infrastructure components assembles the precarious capability of impacting entrepreneurial performance. Furthermore, this paper aims to identify the business incubators' key components either it is the business support or the business infrastructure or both that is relevant for the performance of the early-stage companies in Malaysia.

Firstly, business support, which has been underlined and described by the provisions of prior research, plays a significant role in the development of early-stage companies as well as their achievement. Business support refers to a type of service solution that may involve coaching, mentoring, entrepreneurial training, or business development services (Robinson & Stubberud, 2014; Somsuk & Laosirihongthong, 2014; Al-Mubarak, Busler, & Aruna, 2013; Bergek & Norrman, 2008; Aerts, Matthyssens, & Vandenbempt, 2007). These services empower the entrepreneurs with knowledge and skills required in managing businesses in their operations. The research hypothesis (H1) that business support enhances performance of entrepreneurs in early-stage companies in Malaysia rests on the belief that professional advice is crucial for addressing early-stage issues. The high success rates mentioned by Al-Mubarak, Busler, & Aruna (2013) and the National Business Incubation Association (2007) may also prop this hypothesis and show that most early-stage companies receive a lot of benefits from the support systems.

Also, business incubators offer the essentials infrastructure support that are critical for an early-stage companies. These are physical resources such as office spaces for operation, secretarial services and other common use services like meeting halls and canteen services. In providing these resources, business incubators ease the financial burden on early-stage companies, as they can focus on key organisational functions. Previous works justify the

hypothesis (H2) indicates that the availability of infrastructures has a positive impact on the performance of the entrepreneurs as it offers high chances of enhancing productivity as well as business results. Furthermore, it was established that the use of the shared facilities decreases costs, and the cooperative setting encourages development.

The discussion also acknowledges hurdles in establishing parameters to measure actual early-stage companies' performance upon graduation from incubators. So, it aligns with De Oliveira Haase et al. (2024); Rogova (2014), and Bergek and Norrman (2008), locating that there is a possibility that the chosen criteria and the evaluation timeframe do not reflect the long-term business incubator impact on entrepreneurship. Despite of the improvements shown in the sample post-incubation survival rate, subsequent research should establish long-term studies of the business incubator components on business sustainability.

This study seeks to identify the essential components, either business support, infrastructure, or both, that significantly impact the performance of early-stage companies in Malaysia. Analysing both elements is vital to understanding the specific needs of these companies, enabling the development of a more tailored and focused incubator program. Such a study is crucial for various stakeholders, including entrepreneurs, policymakers, and the broader economic community. It addresses a knowledge gap regarding which business incubator components contribute most to early-stage success, thus providing valuable insights to improve Malaysia's entrepreneurial support systems. As research by Al-Mubarak, Busler, & Aruna (2013) and Nordin, Hamid, & Woon (2011) highlights, core components like mentoring, coaching, and physical resources are key factors in determining business performance, further validating the need for this study.

For incubator managers and policymakers, this research offers valuable guidance in optimising resource allocation and creating more effective support programs (Fithri et al., 2024). Identifying the components most effectively utilised by participants will allow for better-designed programs that attract government and private investments, boosting the success rates of early-stage companies and fostering broader economic growth (Bergek & Norrman, 2008; Hackett & Dilts, 2004). Furthermore, this study fills a significant research gap by exploring the long-term effects of business incubators on the sustainability of early-stage companies, offering critical insights that can help refine the goals of incubator programs and their role in promoting entrepreneurship (Rogova, 2014).

### **Conclusion**

Thus, it is important to emphasize that business incubator components should have balance of business services for the clients and infrastructure support services necessary for the business development. Such integrated support structures are highly necessary for strengthening the position and increasing the performance of Malaysian early-stage companies. The results show that despite the importance of both business support and infrastructure, the importance of some or all elements may differ depending on what is characteristic for the early-stage companies in a certain period. This would help to achieve a better understanding of how best to develop and tailor support mechanisms for early-stage companies across a range of settings. Hence, this study is useful to local policymakers and business incubator managers, given that it is set in the Malaysian context. To significantly

improve the survival and success rates of early-stage companies, it is possible to optimise the support programs to address the specific issues faced by most of the new businesses. Lastly, enhancing the outcomes for the early-stage companies will help to contribute to the lift of overall economic growth and innovation in Malaysia.

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