i-SPiKE 2023

INTERNATIONAL EXHIBITION & SYMPOSIUM ON PRODUCTIVITY, INNOVATION, KNOWLEDGE & EDUCATION

"Optimizing Innovation in Knowledge, Education and Design"

EXTENDED ABSTRACT

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EXTENDED ABSTRACT

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Assalamualaikum warahmatullahi wabarakatuh,

First and foremost, I would like to express my gratitude to the organizing committee of i-Spike 2023 for their tremendous efforts in bringing this online competition a reality . I must extend my congratulations to the committee for successfully delivering on their promise to make i-Spike 2023 a meaningful event for academics worldwide.

The theme for this event, 'Optimizing Innovation in Knowledge, Education, and Design,' is both timely and highly relevant in today's world, especially at the tertiary level. Innovation plays a central role in our daily lives, offering new solutions for products, processes, and services By adopting a strategic approach to 'Optimizing Innovation in Knowledge, Education, and Design,' we have the potential to enhance support for learners and educators, while also expanding opportunities for learner engagement, interactivity, and access to education.

I am awed by the magnitude and multitude of participants in this competition. I am also confident that all the innovations presented have provided valuable insights into the significance of innovative and advanced teaching materials in promoting sustainable development for the betterment of teaching and learning. Hopefully, this will mark the beginning of a long series of i-Spike events in the future.

It is also my hope that you find i-Spike 2023 to be an excellent platform for learning, sharing, and collaboration. Once again, I want to thank all the committee members of i-Spike 2023 for their hard work in making this event a reality I would also like to extend my congratulations to all the winners, and I hope that each of you will successfully achieve your intended goals through your participation in this competition.

Professor Dr. Roshima Haji Said
RECTOR
UiTM KEDAH BRANCH

WELCOME MESSAGE (i-SPiKE 2023 CHAIR)

We are looking forward to welcoming you to the 3rd International Exhibition & Symposium on Productivity, Innovation, Knowledge, and Education 2023 (i-SPiKE 2023). Your presence here is a clear, crystal-clear testimony to the importance you place on the research and innovation arena. The theme of this year's Innovation is "*Optimizing Innovation in Knowledge, Education, & Design*". We believe that the presentations by the distinguished innovators will contribute immensely to a deeper understanding of the current issues in relation to the theme.

i-SPiKE 2023 offers a platform for nurturing the next generation of innovators and fostering cutting-edge innovations at the crossroads of collaboration, creativity, and enthusiasm. We enthusiastically welcome junior and young inventors from schools and universities, as well as local and foreign academicians and industry professionals, to showcase their innovative products and engage in knowledge sharing. All submissions have been rigorously evaluated by expert juries comprising professionals from both industry and academia.

On behalf of the conference organisers, I would like to extend our sincere thanks for your participation, and we hope you enjoy the event. A special note of appreciation goes out to all the committee members of i-SPiKE 2023; your dedication and hard work are greatly appreciated.

Dr. Junaida Ismail
Chair
3rd International Exhibition & Symposium Productivity, Innovation, Knowledge, and Education 2023 (i-SPiKE 2023)

BUILDING RESILIENT START-UP: A COMPREHENSIVE STRATEGIC FRAMEWORK FOR START-UP SURVIVAL

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ABSTRACT

Start-ups are an essential aspect of the Malaysian economy, as they have the ability to generate economic growth and competitiveness. Malaysian start-ups have numerous challenges regarding funding, market information, and sustainability. The difficulties may cause the start-up to be unable to continue operations. A comprehensive framework includes effective funding mechanisms, market intelligence availability, and establishing a sustainable start-up model. Potential solutions have been proposed for each component, including improved communication and collaboration between start-ups and funding institutions. Centralized databases and mentorship programs can assist start-ups in identifying funding opportunities and mentors to help them navigate the application process. Improving market intelligence entails providing start-ups with the knowledge, skills, exposure, and experience needed for effective market research. Incubator and accelerator programs can assist start-ups in developing market information, entrepreneurship skills, and network building. Creating a sustainable company strategy entails putting social and environmental responsibilities first. Start-ups can develop products or services that solve specific social or environmental requirements, use environmentally friendly materials and reduce waste. Economic benefits, better entrepreneurship skills, and entrepreneur sustainability towards a successful start-up are all expected outcomes of following this strategic

framework. Start-ups have the potential to establish a positive reputation, attract loyal customers, and contribute to a more sustainable future for all. Malaysia's start-up ecosystem has immense potential, and start-ups can continue to develop and prosper, given the correct support and resources. Malaysia can construct a solid and vibrant start-up ecosystem, promote economic growth and competitiveness, attract investment, generate jobs, and, most importantly, ensure the start-up's survival. However, more work has to be done to tackle the sustainability problems that start-ups face and fully realize their promise of moving Malaysia's economy ahead.

Keywords: start-up, funding, market intelligence, sustainable business model, sustainability

INTRODUCTION

Malaysia has emerged as a thriving hub for start-ups in Southeast Asia. With its strategic location, supportive government policies, and vibrant entrepreneurial ecosystem, Malaysia has become an attractive destination for local and foreign entrepreneurs looking to start their businesses. In recent years, the start-up scene in Malaysia has grown rapidly, driven by a young and dynamic population with a strong appetite for innovation.

Start-ups are newly established businesses that are designed to grow and scale rapidly. They are characterized by innovation, creativity, and an entrepreneurial spirit (Md Akhir et al., 2023). Start-ups are typically founded by one or more entrepreneurs who have identified a market opportunity and are seeking to develop a business model around it. These businesses are often technology-based and require significant investment and risk-taking to get off the ground (Subramaniam et al., 2023).

According to SME Corporation Malaysia, Micro SMEs are small and medium-sized enterprises with fewer than five employees and an annual turnover of less than RM300,000 (SME CORP, 2023). These businesses are often seen as the backbone of the Malaysian economy, accounting for a significant portion of the country's total economic output. Therefore, a start-up is a type of business activity, while Micro SMEs are the company size determined by the number of employees and annual turnover.

As reported, there were approximately 13,297 start-ups in Malaysia as of 2023, with most of these companies operating in the technology and e-commerce sectors (Tracxn, 2023). Regarding demographics, based on another report, the age group of Malaysian start-upfounders is 25-34, and 59% are female (Ministry of Entrepreneur Development and Corporation, 2020). They are primarily young university graduates with business and engineering backgrounds. Additionally, most start-ups are based in the Klang Valley region, including Kuala Lumpur and the surrounding areas (Bosma & Kelley, 2019).

The Malaysian government has promoted start-up entrepreneurship through various initiatives and incentives, such as the Malaysia Digital Economy Blueprint and the National Entrepreneurship Policy (Economic Planning Unit (EPU), 2021; Ministry of Entrepreneur Development and Corporation, 2020). These policies create a conducive environment for start-ups to grow and succeed by providing access to funding, mentorship, and networking opportunities. As a result, Malaysia has seen a surge in start-ups in various industries, including fintech, e-commerce, and health tech.

However, building a successful start-up has its challenges. Malaysia's start-ups face stiff competition, limited access to funding, and a need for more skilled talent. Moreover, the

COVID-19 pandemic has significantly impacted the Malaysian economy, with many start-ups struggling to survive in the face of the pandemic-induced economic downturn. Studies also reported that start-up failure rates range from 50% to 95%, especially in developing nations like Malaysia (Kee et al., 2019).

To overcome these challenges, start-ups in Malaysia must adopt a comprehensive strategic framework that emphasizes resilience, innovation, and adaptability. By focusing on these critical areas, start-up companies can build the foundation for sustainable growth and long-term success. In the following sections, we will explore some of the strategies that start-ups in Malaysia can implement to build resilience and thrive in a rapidly changing business landscape.

START-UP CHALLENGES

Despite the supportive ecosystem for start-ups in Malaysia, many new ventures fail due to a range and various challenges. In a report published by CBINSIGHTS, they analyzed.

Figure 1: The Top 12 Reasons Start-ups Fail

Over 110 start-up failure post-mortems were conducted to identify the top 12 reasons for start-up failure. They have determined why start-ups fail, from start-ups, corporations, investors, economic development professionals, academics, and journalists. Although there is rarely one reason for a single start-up's failure, they discovered a pattern among these issues. They have identified the top 12 reasons for start-up failure after going through the post-mortems. As several start-ups provided multiple reasons for their failure, the chart has shown the top issues to the lowest (CBINSIGHTS, 2021). The top 3 significant issues selected are insufficient cash flow, intense market competition and an unsustainable business model.

In contrast, outcompeted issues will not be discussed since they will be part of the subsequent effect of the failure. Researchers also support that cash flow, market competition and business model are among the top issues that lead to failure (Aminova & Marchi, 2021; Kusumaningtyas et al., 2021; Subash Sharma, 2019). The discussion item includes the three issues.

Insufficient Cash Flow

Cash flow is a critical issue for start-ups, particularly in the early stages of operation. Due to their business nature, it is very crucial to secure a business fund from the banking institutions due to their nature of business. Furthermore, start-ups in Malaysia need help to secure adequate funding (Md Akhir et al., 2023). Lack of funding can make it difficult for start-ups to invest in product development, marketing, and talent acquisition. Additionally, start-ups must manage their cash flow carefully to avoid running out of funds and risking bankruptcy.

Intense Market Competition

With the rising number of start-ups in Malaysia, competition in the market can be fierce (Júnior et al., 2022). Start-ups must compete with other local companies, established regional players, and global tech giants. Start-ups that fail to conduct thorough market research may face difficulties understanding their target customers' needs and preferences, assessing the market size, and identifying potential competitors (Danilova & Kuznetsova, 2020). The lack of knowledge can make it difficult for start-ups to gain a foothold in the market and attract customers.

Unsustainable Business Model

A weak business model can hinder a start-up's ability to generate revenue, attract investment, and achieve profitability (Slávik, 2019). Weak start-up support will lead to business sustainability. According to a report by the World Bank, the high failure rate of start-ups in Malaysia is mainly due to a lack of access to a correct business model (World Bank Group, 2022). Start-ups must contend with societal, environmental and regulatory barriers, including complex licensing requirements and compliance.

PROBLEM STATEMENT

Three significant issues start-ups face in Malaysia are funding, inadequate market research, and poor business models.

The Need for Sufficient Funding

Based on Figure 1, 38% of start-ups fail due to insufficient cash flow. One of the primary challenges for start-ups in Malaysia is accessing and securing adequate funding. Start-ups are also facing challenges in financial management knowledge. Many start-ups may have expertise in their field but need more financial skills to manage cash flow, prepare financial statements, and secure funding (Battisti et al., 2022). The lack of funding opportunities can make it difficult for start-ups to secure funding from investors or government agencies. While various funding sources are available, such as government grants, venture capital, and crowdfunding, competition for funding is intense. According to a report by SME Corp, many start-ups need more understanding of the funding landscape, knowledge and limited access to funding agencies (SME Corp., 2022).

Furthermore, many start-ups need help to secure funding due to a lack of track record, unclear business models, and insufficient market traction (Aisah Janaji et al., 2021). With enough funds, it would be easier for start-ups to invest in product development, marketing, and talent acquisition, which can ultimately impact their ability to grow and succeed. As a result, many promising start-ups fail to reach their potential or even get off the ground.

Another reason for this is related to communication barriers. Effective communicationmay lead to a lack of awareness, understanding of available funding options and accessibility to funding among start-ups (World Bank Group, 2022). Many start-ups may need to know which funding agencies or programs are available or how to access them. Another reason for communication barriers is a centralized database or platform for connecting start-ups and funders (Wasan et al., 2023). Without a central platform or database, start-ups may rely on personal connections or referrals to find potential funders. In contrast, funders may rely on traditional methods like call-for-proposals to identify start-ups that match their investment criteria.

Inadequate and unintegrated Market Intelligence

Another vital issue for start-ups in Malaysia is inadequate market intelligence. Many entrepreneurs need to conduct proper market research and understand the market, its trends, and its dynamics. Many start-ups in Malaysia need help to identify and respond to changes in the market, including shifts in consumer behaviour and emerging trends (Subramaniam et al., 2023). With this ability, they can create new products and services that align with market demand, ultimately impacting their success.

Many start-up founders may have expertise in their field but need more market research skills to understand customer needs, identify market trends, and develop effective marketing strategies (Danilova & Kuznetsova, 2020). Market intelligence is second-ranked with a 35% weightage in Figure 1 top reason a start-up fails. Another reason for the knowledge gap is that start-up founders need more relevant skills or training. For example, a technical founder may need more marketing expertise to develop an effective marketing strategy or learn how to conduct market research. Additionally, start-up founders may have yet to gain prior experience in the industry or may not have access to a strong network that can provide guidance and support. Subsequently, a lack of exposure to market intelligence tools and resources also contributes to the knowledge gap. Many start-ups need to know, use and access the various market research tools and techniques. So they can develop products or services that align with the needs and preferences of their target audience. Without this initiative to be relevant to the market, the start-up would slow adoption, low sales, and, ultimately, business failure.

Ineffective Business Model to Face Global Challenges

The third issue that many start-ups in Malaysia face is ineffective business models. Therefore, building a sustainable business model is critical for many start-ups in Malaysia. According to a report, start-ups in Malaysia need to develop and establish a sustainable business model that meets the society an environmental aspect that can support long-term growth (World Bank Group, 2022). The business model shall include developing a transparent revenue model, identifying key customer segments, and establishing effective marketing and distribution channels. Start-ups that need a clear and viable business model need help to generate revenue and achieve profitability. Many entrepreneurs focus on creating innovative products or services without considering the society and environment that will monetize them, resulting in unsustainable businesses that cannot survive long term.

To overcome these challenges, start-ups in Malaysia must focus on developing robust business plans that take into account an effective funding mechanism, market intelligence, and a sustainable business model. This effort requires strategic planning and execution and a start-up entrepreneurial mindset emphasizing innovation, creativity, and resilience.

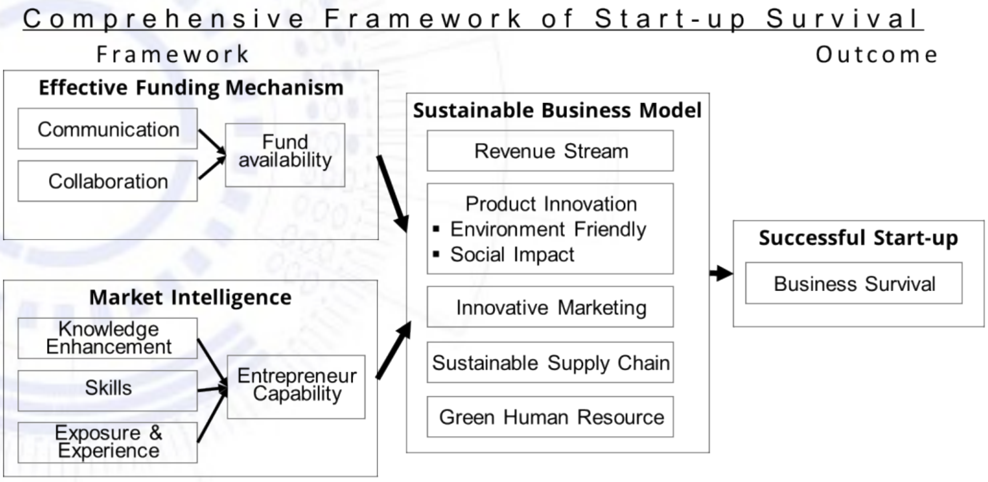

Figure 2: Comprehensive Framework of Start-up Survival

COMPREHENSIVE STRATEGIC FRAMEWORK FOR SUCCESSFUL START-UP

The development of an integrated start-up framework that places a strong emphasis on fund accessibility, market information, and the adoption of a sustainable business plan is critical for the company's success.

Effective Funding Mechanism

In relation towards an effective funding mechanism, there are some strategic ways of improving the communication and collaboration between funding agencies and start-ups in Malaysia. A centralized database or platform that provides information on available funding options, eligibility criteria, and application procedures is needed (Ministry of Science, 2021; Wasan et al., 2023). This platform could help start-ups identify funding agencies to approach and streamline the application process. Funding agencies could also use the database or platform to identify potential start-up candidates and proactively reach out to them.

Another potential solution is establishing a mentorship program that pairs start-ups with experienced mentors who can guide funding options and help navigate the application process (Takeuchi & Inaba, 2019). The mentorship programs could help start-ups build relationships with funding agencies and better understand the funding landscape.
Finally, funding agencies could consider hosting networking events or conferences that bring together start-ups, investors, and other stakeholders (Stolz, 2023). Using this initiative will improve communications directly without any resistance while facilitating connections between start-ups and funding agencies, and in-directly, it creates opportunities for collaboration and partnership directly to the ground level. A proactive solution from both funding agencies and start-ups will increase the efficiency and effectiveness of the funding mechanism, primarily by eliminating the work-in-silos barrier, thus improving the communication and collaboration between funding agencies and start-ups.

Market Intelligence

The start-up should be equipped with the knowledge enhancement, skills, exposure & experience to improve their ability to execute the market research (Battisti et al., 2022). The agencies and institutions like MRANTI, MTDC and TERAJU offer incubators and accelerator programs to facilitate this. Incubators and accelerators are programs designed to support start-ups in their early stages of development. These programs provide start-ups mentorship, training, funding, and networking opportunities (Ministry of Entrepreneur Development and Corporation, 2020). By having this, start-ups are able to improve their knowledge and skills. One key benefit of participating in an incubator or accelerator program is learning from experienced mentors and industry experts. These mentors can guide market research techniques, including identifying target customer segments, analyzing market trends, and developing effective marketing strategies. Mentors can also help start-ups refine their business plans and co-develop a good insight into market research.

Another benefit of incubator and accelerator programs is the opportunity to network with other start-ups and industry players. The exposure can help start-ups gain exposure to potential partners, customers, and investors and provide opportunities for collaboration and partnership (Hoang et al. et al., 2023).

Finally, incubator and accelerator programs can leverage and provide start-ups with good and updated resources to support their market research efforts. The initiative can include access to market research tools and databases, as well as access to conduct market surveys or focus groups. By staying current with the latest trends and innovations in their industry, start-ups can better anticipate market changes and adjust their strategies accordingly.

Sustainable Business Model

One approach to developing a sustainable business model is to create sustainable products that enable creativity and innovativeness or services that address a specific society and social and environmental need. For example, a start-up could develop a platform that connects low-income communities with affordable healthcare services or a sustainable energy solution that reduces carbon emissions.

Another approach is to incorporate environmental considerations into the design and production of products or services. The eco efforts include using eco-friendly materials, reducing waste, and implementing sustainable supply chain practices. Start-ups can also consider minimizing their carbon footprint by utilizing renewable energy sources and reducing travel-related emissions.

In addition to developing environmentally friendly products or services, start-ups can incorporate sustainability principles into their business operations. The initiative can include implementing a corporate social responsibility (CSR) policy that outlines the company's commitment to social and environmental responsibility. Start-ups can also consider partnering with non-profit organizations or community groups to support social and environmental causes. Demonstrating the society's focus and environmentally friendly business model increased customer loyalty and trust (Iqbal et al., 2023). Consumers are increasingly aware of their purchasing decisions' social and environmental impact and are more likely to support companies that prioritize sustainability. By developing environmentally friendly products and services and engaging in socially responsible practices, start-ups can build a positive reputation and attract loyal customers.

Another benefit is improved cost efficiency in the revenue stream. Sustainable business practices can help start-ups save on production, transportation, and waste management costs. The efforts to save can improve the bottom line and increase profitability over the long term.

Sustainable business practices can also lead to regulatory compliance and risk mitigation. As governments around the world enact more stringent environmental protection and social responsibility regulations, companies that prioritize sustainability will be better positioned to comply with these regulations and avoid potential legal or reputational risks.

Green human resource is another sustainability practice that involves integrating environmental sustainability into human resource management. The initiatives include promoting sustainable practices among employees, reducing waste and energy use, and incorporating sustainability into employee performance evaluations. Additionally, by incorporating green practices into human resource management, start-ups can reduce their environmental impact and improve their reputation among environmentally conscious customers.

Sustainable supply chains also play a significant role. A sustainable supply chain is about managing the entire process of sourcing materials and delivering the final product in an environmentally and socially responsible way. Start-ups can benefit from implementing sustainable supply chain practices, such as reducing waste, using eco-friendly materials, and ensuring fair labour practices throughout the supply chain. Start-ups can prioritize working with suppliers with a solid commitment to sustainability, use eco-friendly transportation methods, and implement green packaging practices. Start-ups can also seek certifications, such as Forest Stewardship Council (FSC), to demonstrate their commitment to sustainability. Finally, sustainable business practices can contribute to long-term company health and survival.

Successful Start-up

By adopting a strategic framework that emphasizes funding, market analysis, and business model sustainability, start-ups in Malaysia can increase their chances of success in a competitive and rapidly evolving business landscape. By leveraging government support, networking with industry experts, and prioritizing revenue diversification, start-ups can build a foundation for long-term growth and profitability. The Key Results Area (KRA) can contribute to economic gain, entrepreneurship skills and entrepreneur sustainability.

Economic Gain

By implementing effective funding mechanisms, improving market intelligence, and developing a sustainable business model, start-ups in Malaysia have the potential to achieve significant economic gain. According to a report by the Malaysian Venture Capital and Private Equity Association, start-ups in Malaysia raised a total of RM1.45 billion in 2019, with the potential to create thousands of jobs and contribute to economic growth. According to a report by MOSTI, start-ups are projected to contribute RM30.8 billion to Malaysia's GDP by 2030. By supporting start-ups in their early stages of development, Malaysia can build a thriving innovation ecosystem that drives economic growth and competitiveness.

Entrepreneurship Skills

Through participation in incubator and accelerator programs, start-up founders can gain access to mentorship, training, and networking opportunities that can help improve their entrepreneurship skills. The activities include learning about market research techniques, refining business plans, and developing effective marketing strategies. Malaysia can build a strong and vibrant entrepreneurial community by providing start-up founders with the skills and knowledge needed to succeed.

Entrepreneur Sustainability
By developing a sustainable business model that prioritizes social and environmental responsibility, start-ups in Malaysia can achieve long-term sustainability. The model can include developing eco-friendly products and services, implementing sustainable business practices, and supporting social causes. By prioritizing sustainability, start-ups can build a positive reputation, attract loyal customers, and contribute to a more sustainable future.

Based on the above, adopting a strategic framework emphasizing funding, market analysis, and sustainable business models is vital to increase the chances of start-up survival in Malaysia. By leveraging government support, networking with industry experts, and prioritizing revenue diversification, start-ups can build a foundation for long-term growth and profitability. In terms of economic gain, start-ups in Malaysia have the potential to contribute significantly to the economy by implementing effective funding mechanisms, improving market intelligence, and developing sustainable business models. Start-ups have the potential to create thousands of jobs and contribute to economic growth. By supporting start-ups in their early stages, Malaysiacan build a thriving innovation ecosystem that drives economic growth and competitiveness. Participation in incubator and accelerator programs can help improve entrepreneurship skills for start-up founders by providing mentorship, training, and networking opportunities. Start-ups can achieve long-term sustainability by developing a sustainable business model that prioritizes social and environmental responsibility. The initiative includes developing eco-friendly products and services, implementing sustainable business practices, and supporting social impact. Overall, by adopting a strategic framework and focusing on KRAs, start-ups in Malaysia can increase their chances of survival and contribute significantly to the economy and society.

DISCUSSION & CONCLUSION

Based on the discussions and research, the project team has highlighted the primary concerns and problems encountered by Malaysian start-ups, which include financial accessibility and availability, market intelligence, and a sustainable business model. A strategic framework has been identified to address the problem statement through an effective funding mechanism, which includes improving communication and collaboration between start-ups and funding agencies and participating in incubator and accelerator programs to improve entrepreneurship knowledge, skills, exposure, and experience in market intelligence and following that, creating a long-term business model that prioritizes social and environmental responsibility. CSR will also be incorporated into the long-term business plan.

Implementing these solutions has the potential to result in various outcomes, includingfinancial benefit, increased start-up entrepreneurship abilities, and entrepreneur sustainability in pursuing a successful start-up. Malaysia can promote economic growth and competitiveness, attract investment, and create jobs by developing a robust and thriving start-up environment.

Overall, the Malaysian start-up ecosystem is very promising, and with the correct support and resources, Malaysian start-ups may continue to expand and thrive.

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REFERENCES

Aisah Janaji, S., Teknologi Malaysia, U., Janaji, S. A., Ismail, K., & Ibrahim, F. (2021). *Start-ups and Sources of Funding Feasibility of Accounting Information Systems (AIS) implementation in SMEs View project Kamariah binti Ismail Start-ups and Sources of Funding*. https://www.researchgate.net/publication/352559631

Aminova, M., & Marchi, E. (2021). The Role of Innovation on Start-up Failure vs. Its Success. *International Journal of Business Ethics and Governance*, 41–72. https://doi.org/10.51325/ijbeg.v4i1.60

Battisti, E., Alfiero, S., Quaglia, R., & Yahiaoui, D. (2022). Financial performance and global start-ups: the impact of knowledge management practices. *Journal of International Management*, *28*(4). https://doi.org/10.1016/j.intman.2022.100938

Bosma, N., & Kelley, D. (2019). *Global Entrepreneurship Monitor Global Report*.
CBINSIGHTS. (2021). *The Top 12 Reasons Start-ups Fail*.

Danilova, N., & Kuznetsova, Y. (2020). MARKET ANALYSIS INSTRUMENTS IN THE DEVELOPMENT OF THE START-UP MARKETING STRATEGY. *European Journal of Economics and Management*, *6*(2), 150–163. https://doi.org/10.46340/eujem.2020.6.2.18

Economic Planning Unit (EPU), P. M. D. (2021). *MALAYSIA DIGITAL ECONOMY BLUEPRINT*.

Hoang Vu Dang Ha, Vo Khac Truong Thanh, & Tran Trieu Quan. (2023). Current situation of students' start-up activities at the National Economics University, Hanoi and the University of Economics, Ho Chi Minh City. *International Journal of Advanced Multidisciplinary Research and Studies*.

Iqbal, A., Syeda, D., Kazmi, Q., Anwar, A., Ramish, M. S., & Salam, A. (2023). Impact Of Green Marketing On Green Purchase Intention And Consumption Behavior: The Moderating Role Of Green Concern. *Journal of Positive School Psychology*, *2*, 975–993. http://journalppw.com

Júnior, C. R. S., Siluk, J. C. M., Júnior, A. N., Rosa, C. B., & de Freitas Michelin, C. (2022). Overview of the factors that influence the competitiveness of start-ups: a systematized literature review. *Gestao e Producao*, *29*. https://doi.org/10.1590/1806-9649-2022v29e13921

Kee, D. M. H., Yusoff, Y. M., & Khin, S. (2019). The role of support on start-up success: A pls-sem approach. *Asian Academy of Management Journal*, *pp. 24*, 43–59. https://doi.org/10.21315/AAMJ2019.24.S1.4

Kusumaningtyas, A., Bolo, E., Chua, S., Wiratama, M., & Lathifah Tirdasari, N. (2021). *Why Start-ups Fail: Cases, Challenges, and Solutions*.

Md Akhir, N. A. A., Adam, S., & Mohd Fuzi, N. (2023). Challenges Towards Performance of Start-up Companies During COVID-19: The Case of Johor Start-ups. *Advanced International Journal of Business, Entrepreneurship and SMEs*, *5*(15), 01–06. https://doi.org/10.35631/AIJBES.515001

Ministry of Entrepreneur Development and Corporation. (2020). *National Entrepreneurship Policy Malaysia: An Outstanding Entrepreneurial Nation 2030 MINISTRY OF ENTREPRENEUR DEVELOPMENT AND COOPERATIVES*.

Ministry of Science, T. and I. (MOSTI). (2021). *Malaysia Start-up Ecosystem Roadmap*.

Slávik, Š. (2019). The business model of start-up—structure and consequences. *Administrative Sciences*, *9*(3). https://doi.org/10.3390/admsci9030069

SME Corp. (2022). *Magic, now under Mosti, focuses on building start-ups and social enterprises*. https://www.smecorp.gov.my/index.php/my/news/4170-magic-now-under-mosti-focuses-on-building-startups-and-social-enterprises

SME CORP. (2023). *SME Corporation Malaysia - SME Definition*.

Stolz, L. (2023). Start-up competitions as anchor events in Entrepreneurial Ecosystems: first findings from two German regions. *Geografiska Annaler, Series B: Human Geography*, *105*(1), 38–57. https://doi.org/10.1080/04353684.2022.2052739

Subash Sharma. (2019). A Study on Why Most of the Start-ups Fail? *International Journal of Research in Engineering, Science and Management*, *2*(12).

S. Vijayan Subramaniam, Hishamuddin Ismail, Abdullah Sallehhuddin Abdullah Salim, Seethaletchumy Thambiah, & Aye Aye Khin. (2023). Entrepreneurial Competencies Factors Influencing SMEs Entrepreneurial Performance in Malaysia: A Conceptual Framework. *International Journal of Business and Technology Management*. https://doi.org/10.55057/ijbtm.2023.5.1.22

Takeuchi, A., & Inaba, Y. (2019). Entrepreneurial Mentoring. *The Journal of Social Science*.

Tracxn. (2023, April). *Start-ups in Malaysia*. Tracxn.Com: Start-ups in Malaysia.

Wasan, H., Singh, D., Reeta, K. H., & Gupta, Y. K. (2023). The landscape of Push Funding in Antibiotic Research: Current Status and Way Forward. In *Biology* (Vol. 12, Issue 1). MDPI. https://doi.org/10.3390/biology12010101

World Bank Group. (2022). *Malaysia: Assessment of the Start-up Financing Ecosystem*. http://bit.ly/WB_blogsMY

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9 789672 948568