Strategic Approaches to Entrepreneurship Education in Malaysia: Policy and Practice

Ren Zhiyi¹, Hardy Loh Rahim² and Norazah Abdul Aziz³

¹Faculty of Education, Universiti Teknologi MARA, Selangor Darul Ehsan 42300, MALAYSIA, ²Faculty of Business and Management, Universiti Teknologi MARA, Selangor Darul Ehsan 42300, MALAYSIA, ³Faculty of Education, Universiti Teknologi MARA, Selangor Darul Ehsan 42300, MALAYSIA

Email: renzhiyimail@163.com, norazahaa@uitm.edu.my
Corresponding Author Email: hardy@uitm.edu.my

Abstract
With the onset of the fourth industrial revolution, there is an increasing need for educational institutions to equip students with entrepreneurial skills that can drive the creation of new markets and technological advancements. This paper examines Malaysia's strategic approaches to integrating entrepreneurship education (EE) within higher learning institutions (HLIs). The study utilizes a qualitative research design to analyze key policy documents. The analysis identifies essential elements and best practices that contribute to a successful EE framework. Malaysia's policies, emphasizing leadership, governance, and industry collaboration, aim to produce graduates with entrepreneurial mindsets, transforming them into job creators rather than job seekers. The findings highlight Malaysia's commitment to fostering a dynamic and supportive entrepreneurial ecosystem, setting a model for other nations, particularly in Asia. The paper concludes that these strategic approaches are crucial for national economic growth and the development of a competitive and innovative entrepreneurial landscape, thereby contributing to national economic development and reducing unemployment.

Keywords: Entrepreneurship Education, Higher Learning Institutions, Malaysia, Policy Analysis, Entrepreneurial Ecosystem.

Introduction
With the onset of the fourth industrial revolution, entrepreneurship is attracting significant attention from various stakeholders as a crucial driver of the global economy, offering a promising pathway for creating new markets through innovative products and technological advancements (Karlsson et al., 2015). There is widespread consensus that universities, as key educational institutions, should provide innovative and entrepreneurial resources to both students and society (Souitaris et al., 2007). Numerous empirical studies have demonstrated
that aspects of entrepreneurship can indeed be taught and nurtured within university settings (Kuratko, 2005; Gorman et al., 1997).

In this challenging economic environment, entrepreneurship is seen as a key driver for recovery and growth. Many countries have integrated EE into their educational systems to equip individuals with the skills needed to manage startups and succeed in an entrepreneurial landscape (Zhang et al., 2006; Cruz et al., 2009). Universities play a crucial role in fostering entrepreneurship by offering resources that promote innovative thinking (Souitaris et al., 2007). Studies show that universities can effectively teach entrepreneurship, enhancing students' knowledge and innovative capabilities (Kuratko, 2005; Gorman et al., 1997). Entrepreneurship courses boost students' motivation and confidence, contributing to personal and social development (Graevenitz et al., 2009). Overall, EE is acknowledged not only as a means to enhance skills and job creation abilities but also as a way to support communities and improve overall quality of life (Ismail & Sawang, 2020).

This paper aims to explore the strategic approaches employed in Malaysia to integrate entrepreneurship into higher education. By examining key policies and practices, this study seeks to identify the essential elements that contribute to a successful EE framework. Through this exploration, the paper aims to provide insights into how Malaysia's approach can serve as a model for other nations, particularly within the Asian context, to foster a dynamic and supportive environment for entrepreneurship education.

Literature Review

Entrepreneurship Education

The term "entrepreneur" first appeared in an 18th-century English translation, initially describing a businessman arranging forage supply. Over time, its meaning evolved to refer to individuals undertaking various activities and later embodying the entrepreneurial spirit of independent business owners. Joseph Schumpeter defined entrepreneurs as innovators introducing new products, services, or organizational forms, often disrupting existing economic structures. Other scholars, like Hamilton and Harper, emphasized risk-taking, while Thompson focused on exploiting unrecognized business opportunities. Despite varied definitions, a consensus has emerged that entrepreneurs create value and profit by seizing global opportunities, playing crucial roles in industrialization, employment creation, and reducing income inequality (Rahim et al., 2015; Lackeus, 2015).

EE develops entrepreneurial qualities like knowledge, skills, and motivation. Definitions and delivery modes vary, with terms like "entrepreneurship education," "entrepreneurial education," and "enterprise education" used interchangeably (Bacigalupo et al., 2016). EE, prevalent in North America, focuses on venture creation, while Europe prefers "enterprise education," which emphasizes personal development and skills (Mahieu, 2006). EE can be an educational program providing general knowledge or a training program preparing individuals to start or operate enterprises (Valerio et al., n.d.). Effective EE methods include lectures, industrial training, and simulated environments to cultivate entrepreneurial awareness, knowledge, and skills (Hytti & O’Gorman, 2004).

History and Development of EE in Malaysia

The Integrated Action Plan (SMEIPA) Report 2019 from the Academy of Sciences Malaysia (SME) highlights that RM13.7 billion was allocated for 153 entrepreneurship development programs, benefiting 637,808 participants (Ministry of Entrepreneur Development and Cooperatives, 2020). The Malaysian government has consistently emphasized
entrepreneurship in its development strategies, including the New Economic Policy, National Development Policy, National Vision Policy, and the New Economic Model. Entrepreneurship is also a critical component in 40 policies, master plans, action plans, and national programs across various ministries and agencies.

To foster entrepreneurship, the Ministry of Entrepreneur Development and Cooperatives and the Ministry of Higher Education Malaysia have issued key documents like the Higher Education Entrepreneurship Development Policy, Strategic Plan on Entrepreneurship Development in Higher Education, National Entrepreneurship Policy 2030, Home Guide to Entrepreneurship Integrated Education (EIE), and the Entrepreneurship Action Plan for Higher Education Institutions (EAP-HEIs) 2021-2025. These documents create a systematic and holistic framework for designing comprehensive and effective EE programs. Although EE in Malaysia doesn't have the lengthy history found in the US or Europe, its framework has matured significantly, providing a relevant benchmark for higher institutions in developing Asian countries.

Since gaining independence from Britain in 1957, Malaysia has faced challenges of racial division and economic inequality among its ethnic groups, which have led to disunity and social unrest (Leong, 2017). The government’s long-term development plans have gradually emphasized entrepreneurship to address these issues. Recently, inclusive entrepreneurship development programs and initiatives in Malaysian higher education institutions have increased, recognizing the critical importance of entrepreneurship for both individual and community development, as well as its significant contribution to national growth.

Methodology
This study employs a qualitative research design to examine EE policies in Malaysia, focusing on both national-level entrepreneurial policies and specific EE-related documents within the higher education sector. The primary data sources include the Entrepreneurship Action Plan for Higher Education Institutions (EAP-HEIs) 2021-2025 and the MOHE Guide to Entrepreneur Integration Education. These documents were selected due to their pivotal roles in shaping EE policies and practices in Malaysia. The document analysis method was used to systematically review and interpret these policy documents, following steps such as document identification and selection, content analysis, and thematic coding to extract key themes, strategies, and initiatives related to EE.

An analytical framework was developed to guide the analysis, incorporating national-level policies and higher education-specific policies. The analysis aimed to identify critical elements and best practices essential for effective EE implementation. By focusing on the strategic thrusts and implementation frameworks outlined in the selected documents, the study identified the key components necessary for a successful EE framework. This approach provides a comprehensive understanding of Malaysia’s EE policy structure, highlighting strategic approaches and essential elements that contribute to a robust and innovative entrepreneurial ecosystem in higher education. The findings offer a detailed framework for analyzing EE policies, which can be adapted to similar studies in other national contexts.

Findings and Results
General Introduction of Entrepreneurship Policies in Malaysia
Entrepreneurship's central role is further highlighted by its inclusion in 40 policies, master plans, action plans, and national programs, coordinated by various ministries and agencies, including the Ministry of Entrepreneur Development and Cooperatives.
From 1971 to 1990, Malaysia’s First Outline Perspective Plan (OPP1) introduced the New Economic Policy (NEP) to address economic disparities among ethnic groups and reduce poverty. The government and higher education institutions, like the Institute Teknologi MARA, began promoting entrepreneurial awareness and skills, especially among the Bumiputera community, transitioning them from agriculture to commercial sectors. This period marked the emergence of EE in Malaysia.

The Second Outline Perspective Plan (OPP2) (1991-2000) continued with the National Development Policy, focusing on balanced socio-economic development and national unity. The government accelerated the development of high-tech industries and established the Ministry of Entrepreneur Development and the Small-Medium Industries Development Corporation to support small and medium enterprises. This period saw the introduction of more EE programs in higher education, reflecting a commitment to building a skilled entrepreneurial workforce.

From 2001 to 2010, the Third Outline Perspective Plan (OPP3) and the National Vision Policy aimed to integrate Malaysia into the global economy, emphasizing innovation and entrepreneurship to stay competitive. This period experienced substantial economic development, and Malaysian policymakers recognized the need to cultivate a culture of innovation and entrepreneurship. The emphasis on EE by the government during this time aimed to equip Malaysians with the necessary tools and knowledge to thrive in a globalized environment.

The New Economic Model (2011-2020) further pushed for Malaysia to become a high-income nation through entrepreneurship, innovation, and risk-taking. The National Entrepreneurship Policy (NEP) 2019 set ambitious goals for entrepreneurship’s contribution to GDP and outlined strategic thrusts to foster an entrepreneurial culture, optimize the regulatory environment, and support high-growth enterprises. Regional initiatives like the Kedah State Development Corporation and national programs like 1Malaysia Entrepreneurs (1MET) underscored the government’s commitment to a robust entrepreneurial ecosystem.

The National Entrepreneurship Policy 2030 Malaysia: An Outstanding Entrepreneurial Nation 2030 (NEP2030) was introduced, aiming to establish a robust entrepreneurial ecosystem in Malaysia. The primary objective of NEP 2030 is to significantly increase the number of skilled, viable, and resilient entrepreneurs, with a particular focus on enhancing the capabilities of local entrepreneurs in the SME sector. This aligns with the Malaysian Government’s vision of shared prosperity, highlighting the critical role of entrepreneurship in driving the nation’s overall economic growth and development. NEP 2030 sets both mid-term and long-term goals to establish Malaysia as a leading entrepreneurial nation by 2030. The policy is structured around five main objectives supported by six strategic thrusts, which are further divided into 19 strategies encompassing a total of 62 initiatives. This comprehensive framework allows for a thorough assessment of the policy’s objectives, implementation strategies, achievements, challenges, and overall impact on Malaysia’s entrepreneurial landscape.

The integrated approach of NEP 2030 aims to create an environment conducive to the growth and success of startups and businesses in Malaysia. This commitment to fostering a dynamic entrepreneurial ecosystem reflects the nation’s dedication to driving economic growth, encouraging innovation, and cultivating a robust entrepreneurial landscape aligned with long-term developmental goals.

**Highlights of EE Policies in Malaysia**

To ensure sustainability of entrepreneurial programs and initiatives the government had
issued, more related policies for entrepreneur support were developed. Among these policies, Higher Education Entrepreneurship Development Policy (2010) and Strategic Plan on Entrepreneurship Development in Higher Education (2013-2015) had a great influence on the EE development. Higher Education Entrepreneurship Development Policy was launched on 13th April 2010 by the Ministry of Education (MOE), aiming: (1) to promote entrepreneurial education and the development of more structured and holistic, (2) to produce graduates that has a value, thinking and entrepreneurial attributes; (3) to increase the number of entrepreneurs among graduates from Malaysian Higher Learning Institutions (HLI) that they actually been in business as a catalyst for the achievement of economic transformation (Fauziah et al., 2012). With the policy being implemented, a growing number of students got involved in the entrepreneurial programs and activities or ready to take entrepreneurship as a career choice. However, the effectiveness of the Entrepreneurship Institute in every HEI, the plan and management of entrepreneurial education, the competency of the trainers, and the existence of a conducive ecosystem turned to be new issues and challenges in the development of EE (Shamsudin et al., 2016).

To ensure the effective implementation of entrepreneurial education and achieve the aims of the Higher Education Entrepreneurship Development Policy, Malaysia’s Ministry of Education launched another important policy, the Strategic Plan on Entrepreneurship Development in Higher Education (2013-2015) in which the six thrusts in policy 2010 were improved (as shown in Table 1) and fifteen strategies on how to conduct the EE in higher institutions were put forward. With the above policies being implemented, the entrepreneurship development centers have been set up on campus at all 20 public universities, 36 polytechnics and 104 community colleges so far. These centers provide students with entrepreneurial platforms and training programs or service which played an important role in fostering the EE development in Malaysian HEIs (MOHE, 2021).

Table 1
The Six Thrusts for 2010 and 2013

<table>
<thead>
<tr>
<th>Year 2010</th>
<th>Year 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish an Entrepreneurship Institute in every HEI.</td>
<td>Empowering Entrepreneurship Institute in every HEI.</td>
</tr>
<tr>
<td>Provide holistically and well-planned entrepreneurial education and programs</td>
<td>Provide holistically and well-planned entrepreneurial education and programs</td>
</tr>
<tr>
<td>Empowering the entrepreneurial development programs.</td>
<td>Empowering the entrepreneurial development programs.</td>
</tr>
<tr>
<td>Create an effective measuring mechanism</td>
<td>Enhance the competency of HEIs’ entrepreneurship trainers and facilitators</td>
</tr>
<tr>
<td>Provide a conducive environment and ecosystem for entrepreneurship development</td>
<td>Provide a conducive environment and ecosystem for entrepreneurship development.</td>
</tr>
<tr>
<td>Enhance the competency of entrepreneurship trainers.</td>
<td>Increase the effect of the implementation of HEIs’ entrepreneurial education and development.</td>
</tr>
</tbody>
</table>

Source: Kementerian Pengajian Tinggi Malaysia (2013)

In a subsequent development, the Malaysia Education Blueprint 2015-2025 (Higher Education) was issued, placing a high priority on Entrepreneurship. This directive required
HEIs to focus on the development of Holistic, Entrepreneurial, and Balanced Graduates. The introduction of this document marked a significant enhancement in the role and importance of EE within the Malaysian education system.

To foster an entrepreneurial mindset and produce graduates who are holistic, entrepreneurial, and balanced, the Higher Education Ministry of Malaysia introduced the Higher Education Institution Entrepreneur Action Plan 2016-2020 (EAP-HEIs 2016-2020) in April 2016. This strategic document was aimed at implementing and developing entrepreneurial education in Higher Education Institutions. The plan served as a component of the Malaysia Education Blueprint 2015-2025 (Higher Education) and was a continuation of both the HEI Entrepreneur Development Policy initiated on April 13, 2010, and the HEI Entrepreneur Strategic Plan 2013-2015. These initiatives significantly contributed to enhancing student involvement and participation in business activities, as noted by (AZIZ, 2016).

The action plan, as part of the educational blueprint, encompasses four key initiatives organized around two main strategies. These are: (1) Implementing High-Impact Educational Practices. This involves embedding entrepreneurship elements across various curriculums and fields of study to integrate entrepreneurial thinking into the broader educational experience. (2) Implementing the Job Creator Framework. This framework is designed to encourage and support students in becoming job creators, rather than just job seekers, fostering a mindset of innovation and business creation. (3) Improving the Ecosystem for Entrepreneurial Activities. The plan focuses on enhancing the environment within which students can engage in entrepreneurial activities, providing the necessary support and resources. (4) Strengthening the Competencies of Instructors and Coaches in Entrepreneurship. This initiative aims to improve the quality and effectiveness of EE by enhancing the skills and knowledge of those who teach and mentor students in this field.

Datuk Seri Idris Jusoh, the Higher Education Minister, highlighted the objectives of these initiatives: achieving 100% student involvement in entrepreneurial activities, involving 15% of HEI students in businesses during their studies, and ensuring that 5% of graduates pursue entrepreneurship by 2020. These ambitious targets, as reported by Aziz (2016), underscore the commitment to fostering a robust entrepreneurial ecosystem within HEIs.

Following the conclusion of the EAP-HEIs 2016-2020, the Entrepreneurship Action Plan - Higher Education Institutions 2021-2025 EAP-HEIs (2021-2025) was introduced to continue advancing the entrepreneurial agenda in Malaysia. This new action plan is guided by the National Entrepreneurship Policy 2030 (NEP 2030), which aims to transform Malaysia into an entrepreneurial nation by 2030. It builds upon the foundation laid by the Malaysia Education Blueprint 2015-2025 (Higher Education) and the preceding strategic and action plans, including the EAP-HEIs 2016-2020.

Higher Education Institutions (EAP-HEIs) 2021-2025
The Entrepreneurship Action Plan for Higher Education Institutions (EAP-HEIs) 2021-2025 continues and expands upon its predecessor, the EAP-HEIs 2016-2020. Both plans share the objective of cultivating well-rounded graduates with entrepreneurial mindsets, focusing on producing 'job creators' rather than 'job seekers.' This plan, developed by the Ministry of Higher Education’s Entrepreneurship Unit and contributions from prominent Malaysian universities, aligns with the National Entrepreneurship Policy 2030 (NEP, 2030). It aims to transform Malaysia into an entrepreneurial nation by 2030, addressing four of NEP 2030’s five objectives. The primary goal is to enhance the production of graduate entrepreneurs,
contributing significantly to job creation and national economic growth. The EAP-HEIs 2021-2025 framework focuses on developing entrepreneurial graduates equipped with essential attributes of successful entrepreneurs. It is structured around three strategic thrusts: creating a synergistic entrepreneurial ecosystem, fostering impactful collaborations, and integrating innovation and technology in entrepreneurship. Each thrust is supported by specific strategies and initiatives, underpinned by governance, integrity, values, and calculated risk-taking.

**Thrust 1: Synergistic Entrepreneurial Ecosystem**
This thrust emphasizes the creation of a cohesive and supportive environment for entrepreneurship within HEIs, characterized by effective interconnections among academia, industry, government, and the community. The goal is to nurture an environment where aspiring entrepreneurs can access essential resources, mentorship, and support, facilitating the transformation of innovative ideas into successful ventures. Strategies include strengthening entrepreneurship teaching, learning, and research support systems, producing students who can create jobs, and increasing the number of educators with expertise in entrepreneurship. Key initiatives involve student entrepreneurial activities, social entrepreneurship in curricula, student incubators, and industry practitioner involvement in teaching.

**Thrust 2: Impactful Collaborations**
Collaboration is crucial in fostering entrepreneurship within HEIs. This thrust advocates robust partnerships between HEIs, businesses, and relevant stakeholders, creating opportunities for joint research, internships, and idea exchanges. Such collaborations are vital for business development and funding pursuits. The primary aim is to empower stakeholders within the entrepreneurship network to develop viable business models and secure various forms of seed funding, including venture capital, crowdfunding, government grants, and angel investments. Strategies include establishing an entrepreneurial network for mentoring and coaching and enhancing funding capabilities for graduate entrepreneurs through this network.

**Thrust 3: Innovation and Technology in Entrepreneurship**
Innovation and technology are essential in today’s dynamic business environment. This thrust emphasizes their integration into entrepreneurship education, encouraging students to employ innovative thinking and leverage state-of-the-art tools. The goal is to cultivate opportunity-driven student entrepreneurs who consistently utilize innovation and technology. Strategies focus on fostering EE based on innovation and technology, promoting innovation-driven socio-economic transformation, and developing student enterprises with distinctive capabilities. Key initiatives involve innovation-driven entrepreneurship programs, commercialization of student projects, and innovation-based entrepreneurship accelerators.

In summary, the EE framework in Malaysian HEIs is strategically designed to achieve three core objectives: cultivating graduates with an entrepreneurial mindset, supporting student entrepreneurs, and nurturing competitive and sustainable graduate entrepreneurs. This comprehensive framework encompasses a diverse array of activities and programs tailored to foster entrepreneurship among students and graduates. It integrates components ranging from internal key elements executed by HEIs to external contributions from industry, government, and the community. This holistic approach ensures a nurturing environment for
entrepreneurship, fostering a robust and dynamic ecosystem within Malaysian HEIs.

MOHE Guide to Entrepreneur Integration Education
The Entrepreneurship Integrated Education (EIE) initiative aims to embed comprehensive EE within Malaysian Higher Learning Institutions (HLIs). This initiative aligns with Malaysia’s national vision of producing well-rounded, entrepreneurial, and balanced graduates. EIE promotes a holistic approach to enhancing entrepreneurship curricula and programs in HLIs, emphasizing faculty roles, curriculum development, governance, and strengthening links between HLIs and industries/agencies. The primary goal is to foster a framework that cultivates job creators through collaborative partnerships, addressing shared needs and challenges among various stakeholders.

An entrepreneurial ecosystem in Malaysian HLIs comprises five key components: leadership and governance, entrepreneurial culture, incentive and reward systems, vision and mission, and infrastructure and infrastructure. These elements collectively drive the entrepreneurial agenda of each HLI. To align with MOHE’s vision of producing holistic, entrepreneurial, and balanced graduates and support the government’s goal of making Malaysia an inclusively entrepreneurial and innovative country by 2030, the EIE serves as a guideline. It introduces two new frameworks: the Inclusive HLIs Entrepreneurship Ecosystem Framework (IEE) and the Entrepreneurship Integrated Curriculum Framework (EIC). The IEE guides the development of the EIC, which includes up-to-date, industry-relevant courses, innovative teaching methods, effective quality assessment measures, and skilled faculty members. Together, these components create a comprehensive framework for implementing EE in Malaysia.

Inclusive HLIs Entrepreneurial Ecosystem Framework
The Inclusive Entrepreneurship Ecosystem framework envisions a comprehensive approach to entrepreneurship within HLIs, resting on four pillars: Staff Engagement, Student Engagement, University Engagement, and HLIs-Industry-Community Engagement. These pillars are essential for fostering a thriving entrepreneurial environment. Supporting these pillars are five strategic objectives executed through 33 strategic initiatives, contributing to the ecosystem’s robustness and effectiveness.

Staff Engagement focuses on collaboration, networking, commercialization abilities, entrepreneurial development, business consultancy, cooperatives, faculty exchange programs, and student mentoring. Student Engagement includes student companies, case studies, accelerator programs, graduate support, product/service innovation projects, and service learning. University Engagement involves crowd-funding, solution providing, regional development, accelerators/incubators, industrial engagement, philanthropies, Entrepreneurs in Residence (EIR), and stakeholder support. HLIs-Industry-Community Engagement emphasizes award and stewardship, governance, startup/spin-off policies, government policies, measurement systems, financial assistance, information and infrastructure, flexible education, staff promotion policies, and technology-infused curricula.

Entrepreneurship Integrated Curriculum Framework
The EIC framework emphasizes the strategic amalgamation of various interrelated fields to establish a structured and impactful educational program relevant to the evolving entrepreneurship industry. Its primary objective is to blend academic disciplines, ensuring students gain both professional knowledge and specialized entrepreneurial training. EIC aims
to ignite innovation and entrepreneurship within HLIs, focusing on sparking student interest in entrepreneurship and nurturing an entrepreneurial mindset.

Within the EIC framework, four guiding principles, five thrust components, and six focus areas are outlined. The guiding principles include linking curricula to the real business world, problem-based and experiential learning, technology-infused curricula, and HLIs-industry-community linkages. The thrust components form the structural pillars of the entrepreneurship curriculum, and the focus areas deliver relevant entrepreneurship education, equipping students with essential knowledge and skills.

To ensure sustainable implementation and assess entrepreneurial sustainability, EIC proposes two assessment parameters: financial returns on business investments and social returns on investment. These metrics evaluate the financial robustness and societal impact of student enterprises.

**EIE Framework**

The EIE framework, developed by MOHE, incorporates best entrepreneurial practices from Malaysian HLIs and a clear governance structure. It acts as a conceptual blueprint, guiding the development of entrepreneurship programs, curricula, and activities within HLIs. Key drivers for establishing Inclusive Entrepreneurial Education (IEE) and creating an EIC are supported by eight exemplary entrepreneurial practices and a strong governance structure at both the MOHE and HLI levels.

The EIE guidelines assist HLIs in cultivating an inclusive entrepreneurial ecosystem, articulating the roles of higher education institutions, students, educators, industry, and communities. They advocate for robust corporate governance frameworks to ensure accurate performance monitoring and reporting. Emphasizing the integration of entrepreneurial education elements into academic programs and student development initiatives, the guidelines aim to foster an entrepreneurial mindset. Finally, they recommend adopting assessment mechanisms to evaluate the outcomes, efficacy, and long-term viability of entrepreneurial endeavors undertaken by HLIs.

**Practice of EE Policies in Malaysian Higher Educational Institutions**

Under the guidance of the Malaysian Ministry of Higher Education's entrepreneurial policies and action plans, HEIs have organized and implemented various programs and activities for students, enhancing their appreciation, knowledge, and skills in entrepreneurship. MOHE has played a crucial role in conducting these entrepreneurial programs across Malaysian colleges and universities, providing students with platforms to engage in EE.

According to surveys conducted by the Entrepreneurship Unit of the Policy Planning and Research Division of MOHE, which involved directors of Entrepreneurship Centers in Malaysian HEIs, there has been a noticeable growth in the number of entrepreneurial programs. From 55 programs in 2016, the number increased to 68 by 2019. Despite the challenges posed by the COVID-19 pandemic, which led to the closure of many HEIs and the postponement of numerous entrepreneurial programs and activities, these centers adapted by organizing programs online. In 2020, they managed to conduct 61 programs, thereby maintaining continuity in promoting the entrepreneurship agenda at their respective institutions. These centers have also continued to offer services to staff and students, ensuring ongoing support for entrepreneurship.
Among these programs, some have significantly impacted the implementation of national-level entrepreneurial policies and action plans. The details and effects of these impactful programs will be discussed in the following sections.

**Ministry of Higher Education (MOHE) Entrepreneurship Month**
Since 2017, MOHE in Malaysia has designated October as Entrepreneurship Month, observed throughout HEIs across the country. Throughout this month, a range of entrepreneurship-related activities are conducted by public HEIs at both the institutional and national levels. The events include motivational talks by prominent entrepreneurs, skill development and training workshops, showcases of student entrepreneurs, and more. These activities are designed with three key objectives: to create awareness about entrepreneurship, to cultivate interest among students, and to celebrate the successes of student entrepreneurs nationwide.

**Ministry of Higher Education Innovative Entrepreneurs Award**
The competition is organized to support Initiative 3 of EAP-HEIs 2016-2020, which focuses on enhancing ecosystems that facilitate the development of student entrepreneurs. Its primary purpose is to cultivate and nurture entrepreneurial values and attitudes among students. This competition offers a valuable platform for students to showcase their creativity and innovative ideas in developing commercializable products and services. Winners are selected based on the innovativeness, competitiveness, and marketability of their ideas, ensuring that the ideas have real-world application and potential for success in the marketplace.

**Entrepreneurial Educator Enhancement Programme (3EP)**
The program is designed to enhance the competency and effectiveness of academic and administrative staff in advising and mentoring student entrepreneurs. Organized collaboratively by Universiti Kebangsaan Malaysia, Universiti Teknologi MARA, and University College Dublin, it focuses on improving the participants' knowledge and skills in entrepreneurship. The modules of this program are specifically tailored to meet these goals. The primary objective of the program is to increase the number of qualified staff capable of effectively teaching entrepreneurship, thereby strengthening the entrepreneurial support system within educational institutions.

**Ministry of Higher Education Entrepreneurial Award (MEA)**
The program aims to improve the competency and effectiveness of academic and administrative staff in guiding and mentoring student entrepreneurs. It is a collaborative effort between Universiti Kebangsaan Malaysia, Universiti Teknologi MARA, and University College Dublin. The focus is on enhancing participants' entrepreneurship knowledge and skills through specially designed modules. The primary goal of this program is to increase the number of qualified staff who are adept at teaching entrepreneurship, thereby reinforcing the entrepreneurial support system in educational institutions.

**PolyCC Incubator Classroom (PCCIC)**
Formerly known as Community College Incubator Classroom (CCIC), the programme started in 2015. In that year, 82 businesses were established, followed by 93 in 2016, 96 in 2017, 98 in 2018 and 140 in 2019. The students conducted businesses in areas related to the field of studies at polytechnics or community colleges. The incubators are located on-campus and
provide a real business simulation that exposes students to a real-world business environment. A mentor, who is either a staff member or successful entrepreneur from the industry, is appointed to assist and train students. The objective of this programme is to groom student entrepreneurs starting from the first semester until they graduate. Once these students graduated, they continue to manage the business outside campus. Every two years, the incubator students will participate in the SME Bank 90-Day Business Challenge programme organised by Department of Polytechnic and Community College Education (JPPKK) and SME Bank to pitch their businesses and obtain funds from agencies under Ministry of Entrepreneur Development and Cooperative (MEDAC) to sustain the ventures. **University to Community: Social Entrepreneur @ Urban Community**

The social entrepreneurship program organized by Universiti Pendidikan Sultan Idris is designed to engage students in addressing social issues through entrepreneurial activities. In this program, student entrepreneurs leverage their knowledge and experience to assist the community in establishing business ventures. This contributes to creating job opportunities and boosting household incomes. By participating in fieldwork sessions as social entrepreneurs, students gain economic benefits, transform their mindset, and refine their business models in the realm of entrepreneurship. Additionally, these student entrepreneurs are encouraged to transfer their knowledge and skills to the target community. Concurrently, they are provided with opportunities to expand their own businesses within these communities.

Program Usahawan Bimbing Usahawan

Program Usahawan Bimbing Usahawan (Coaching by Industry Players) is featured as being coached by industry workers. In this program a minimum of 70% of the training modules are developed and delivered by industry players and professionals in a series of seminar, training, and coaching. In addition, the Program Pembangunan Permulaan Perniagaan (Start-Up Business Accelerator Program) is another program that targets the participation of students. This program aims to increase the number of university graduates venturing into business. Among the offered sub-programs are SUPERB Business Training and Coaching, High Potential Student Entrepreneurs, and Students Enterprise Starting Global (Shamsudin et al., 2016).

The Influences of EE Policies

The Influence on the Graduate Entrepreneurs and Student Entrepreneurs

These influential policies and implementation programs have led to significant achievements in EE at HEIs across the country. According to statistics from the Entrepreneurship Unit (Table 2), the institutions have successfully met the annual targets for the four Key Performance Indicators (KPIs). Notably, KPI 1 has shown a year-on-year increase in the number of students exposed to EE, aiming for 100% by 2020. For KPI 2, the number of graduate entrepreneurs rose from 3,756 in 2016 to 7,148 in 2019, surpassing the target of 6,270 (which is 4% of total graduates). Furthermore, the number of students engaging in business at their colleges or universities has quadrupled, from 9,998 in 2016 to 49,983 in 2019.
Table 2
The Graduate Entrepreneurs and Student Entrepreneurs at HLIs

<table>
<thead>
<tr>
<th>Key Performance Indicator</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneurship awareness among students</td>
<td>60%</td>
<td>60%</td>
<td>70%</td>
<td>75%</td>
<td>80%</td>
</tr>
</tbody>
</table>
| Target Achieved                   | 309834| 390372| 427343| 90%  | 532513|%
| Graduate entrepreneurs            | 2.5% | 2.5% | 3%   | 3.1% | 3.5% | 5% |
| Target Achieved                   | 3756 | 4840 | 6447 | 4%   | 7148 |%
| Student Business                  | 3%   | 6%   | 9%   | 7%   | 10%  | 15% |
| Target Achieved                   | 9998 | 19024| 30888| 1200 | 49983 |%
| Educators with entrepreneurship expertise | 300  | 2206 | 600  | 1260 | 900  | 1988 |
| Target Achieved                   | 2079 | 30888| 1500 | 1200 | 2079 | 1500 |

The influence on the Economy in Malaysia
Malaysia's entrepreneurial ecosystem has demonstrated remarkable achievements, driven by robust government support and a vibrant business environment. In 2021, Malaysia's total entrepreneurial activity rate reached 15.4%, surpassing the Southeast Asian average of 14.9%. The entrepreneurial intention rate in Malaysia also stood out at 43%, compared to 37% in Southeast Asia and 33% in developing nations. Additionally, the Established Business Ownership Rate (EBOR) in Malaysia was 10.7%, higher than the regional average of 10.4%. The country saw an increase in startups, with 13,000 new firms in 2021, up from 12,000 in 2020. These startups collectively raised RM1.5 billion in 2021, compared to RM1.2 billion in the previous year, indicating strong investor confidence. Key sectors driving this entrepreneurial surge include ICT, creative industries, business services, food and beverage, healthcare, and tourism (Entrepreneurship in Malaysia: Detailed Overview, n.d.). The Malaysian government’s initiatives, such as the Technology Startup Malaysia program and the National Entrepreneurship Development Policy 2030, have been pivotal in providing funding, mentorship, and a strategic framework to support these ventures. Small and medium-sized enterprises (SMEs) play a crucial role in the economy, comprising 97.4% of business establishments and contributing significantly to GDP and employment. Despite challenges like limited capital and intense competition, Malaysia's strategic location, skilled workforce, and favorable regulatory environment continue to foster a thriving entrepreneurial landscape, positioning the country as a regional hub for innovation and business growth (Entrepreneurship in Malaysia: Detailed Overview, n.d.).

The Influence on Global Entrepreneurship Index (GEI)
The Global Entrepreneurship and Development Institute (The GEDI Institute) was established to assess and monitor the dynamics of the entrepreneurship ecosystem, by scholars from George Mason University, Imperial College London, and the London School of Economics. The GEI data is not only cited by renowned media and influential organizations like The Wall Street...
Journal, The Economist, the World Bank, and the European Union, but also attracts attention from scholars, students, and policymakers.

Reviewing the data in 2019 GEI, Malaysia ranks second globally in "The Biggest Gains in GEI Score" (as shown in Table 3), with a difference of 7.3 between the 2018 and 2019 scores, surpassing China's 4.7 and Korea's 3.9. Malaysia's GEI ranking also rose to 43rd in 2019 from 58th in 2018. Despite an overall GEI score of only 32.7, Malaysia shows two areas of strength in entrepreneurship. First, the institutional score, indicating the degree of support from institutions, accounts for 74% (refer to Figure 1), ranking third in Asia and surpassing Singapore. This indicates that most institutions in Malaysia are actively embracing entrepreneurship under the guidance of NEP 2030 and other related entrepreneurial policies. Second, in the 14 pillars of the GEI, process innovation is Malaysia’s strongest area in entrepreneurship evaluation.

Table 3
The Biggest Gains in GEI Score

<table>
<thead>
<tr>
<th>Country</th>
<th>Score 2019</th>
<th>Score 2018</th>
<th>Difference in Score</th>
<th>Difference in Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hungary</td>
<td>46.2</td>
<td>36.4</td>
<td>9.8</td>
<td>17</td>
</tr>
<tr>
<td>Malaysia</td>
<td>40.1</td>
<td>32.7</td>
<td>7.3</td>
<td>15</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>48.7</td>
<td>42.1</td>
<td>6.6</td>
<td>11</td>
</tr>
<tr>
<td>Thailand</td>
<td>33.5</td>
<td>27.4</td>
<td>6.1</td>
<td>17</td>
</tr>
<tr>
<td>Denmark</td>
<td>79.3</td>
<td>74.3</td>
<td>5.0</td>
<td>2</td>
</tr>
<tr>
<td>Indonesia</td>
<td>26.0</td>
<td>21.0</td>
<td>5.0</td>
<td>19</td>
</tr>
<tr>
<td>China</td>
<td>45.9</td>
<td>41.1</td>
<td>4.7</td>
<td>9</td>
</tr>
<tr>
<td>Netherlands</td>
<td>72.3</td>
<td>68.1</td>
<td>4.2</td>
<td>3</td>
</tr>
<tr>
<td>South Korea</td>
<td>46.2</td>
<td>36.4</td>
<td>3.9</td>
<td>3</td>
</tr>
<tr>
<td>Italy</td>
<td>45.1</td>
<td>41.4</td>
<td>3.7</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: GEI 2019
According to the GEI index, the "Process Innovation" pillar reflects startups' utilization of new technologies, a country's Gross Domestic Expenditure on Research and Development (GERD), and its potential for applied research. Malaysia's strong performance in this pillar indicates the effectiveness of its policies in fostering entrepreneurship, integrating new technologies, and emphasizing research and development. The key elements—embracing new technologies, investing in R&D, and focusing on applied research—align well with the objectives of enhancing entrepreneurship and economic growth in the country. This data underscores Malaysians' strong propensity for entrepreneurship. Government support, simplified procedures, and a robust ecosystem, including incubators and accelerators, create a conducive environment for startups, highlighting the great influence of EE policies.

**Conclusion**

The study highlights Malaysia's transformative educational policies aimed at fostering a robust entrepreneurial ecosystem. The NEP 2030 targets transforming Malaysia into an entrepreneurial nation by 2030, emphasizing skilled and resilient entrepreneurs, particularly within SMEs. The EAP-HEIs 2021-2025 builds on previous initiatives to produce graduates with entrepreneurial mindsets, fostering job creators rather than job seekers. Additionally, the EIE initiative offers a comprehensive framework for embedding EE within HEIs, focusing on leadership, governance, and industry collaboration. These strategic approaches reflect Malaysia's commitment to creating a dynamic and supportive environment for entrepreneurship, expected to significantly contribute to national economic growth and a competitive, innovative entrepreneurial landscape.

Besides, the study's contributions are multifaceted. It delivers a comprehensive analysis of Malaysia's EE policies, identifying best practices and essential elements that can inform policy development in other countries. It articulates a successful EE framework emphasizing leadership, governance, and industry collaboration, and offers empirical insights into the implementation and impact of EE initiatives in Malaysia. Lastly, it provides strategic recommendations for enhancing the EE ecosystem within higher learning institutions,
underscoring the importance of a supportive entrepreneurial environment. Through these insights, Malaysia sets an exemplary model for other nations, particularly in Asia, to emulate.

Reference


