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**THE EFFECT OF STRATEGIC MANAGEMENT
IN HIGHER EDUCATION ORGANIZATIONS:
STUDY OF MALAYSIA EDUCATION
BLUEPRINT 2015-2025 (HIGHER EDUCATION)**

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MOUSSA OMAR**

**DEGREE OF MASTER SCIENCE
UNIVERSITI MALAYSIA TERENGGANU**

2025

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EDUCATION ORGANIZATIONS: STUDY OF MALAYSIA
EDUCATION BLUEPRINT 2015-2025 (HIGHER EDUCATION)**

IBRAHIM ABDELWAHAB MAHMOUD MOUSSA OMAR

**Thesis Submitted in Fulfillment of the Requirements for the Degree
of Master of Management in Faculty Maritime Studies
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DEDICATION

To my nation, and my dear country whom I miss with all my heart.

To the souls of my father and mother, may Allah have mercy on them.

To my dear wife, the one who bore the burden of separation and watched over the upbringing of our children.

To my children, whose circumstances prevented us from attending the meeting (Baraa, Youssef, BatoLL, and Yehia).

To all those whose paths stumble and deny them a reality.

To everyone who prayed for me:

I also wish to dedicate this thesis to my sisters, brothers and many friends who have supported me throughout the process.

Thank you for your love and encouragement.

I dedicate this humble work to you.

Abstract of thesis presented to the Senate of University Malaysia Terengganu in
fulfilment of the requirement for the degree of Master

ABSTRACT

**THE EFFECT OF STRATEGIC MANAGEMENT IN HIGHER EDUCATION
ORGANIZATIONS: STUDY OF MALAYSIA EDUCATION BLUEPRINT
2015-2025 (HIGHER EDUCATION)**

IBRAHIM ABD ELWAHAB MAHMOUD MOUSSA OMAR

JULY 2023

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Co-Supervisor : Loke Keng Bin, Ph.D

Co-Supervisor : N. Alia Fahada binti W Ab Rahman, Ph.D

School / Institute : Faculty of Maritime studies

Particularly in Malaysia, which is known for its quality education system comparable to that of western institutions, strategic management plays a vital role in the development of higher education. The Ministry of Education in Malaysia has set ambitious targets under the “Malaysia Education Blueprint 2015-2025 (Higher Education)” to improve global competitiveness among Malaysian universities. The primary focus of this research is to evaluate how far these targets have been achieved with regard to three main sub-shifts as indicated by the blueprint: increasing access to higher education, improving university ranking, and fostering entrepreneurship. The methodology adopted was a descriptive exploratory design using secondary data from the Ministry of Higher Education. Data was presented using tables and graphs showing attained milestones vis-à-vis the desired objectives outlined in blueprints. Moreover, relevant literature on strategic management concepts and higher education blueprints for Malaysia was reviewed as part of this study. Several theories have been proven in the study. Higher education institutions' entrepreneurship initiatives have outperformed the planned goals, as shown by a significant increase in “doing business”

activities and training participation. The QS report indicates that Malaysian universities have made remarkable global ranking improvements, where the number of ranked universities has increased from six to twenty. However, there have been fluctuations, according to U21 reports. Conversely, it has not brought about access expansion into tertiary institutions; this is because private universities experienced fluctuation numbers for international students coupled with significant declines over recent years. The primary findings include Malaysia's representation of 2% in the QS 2020 rankings. It also achieved the 27th position in the U21 rankings. Nevertheless, Malaysia witnessed an enhancement in its global ranking position.. In addition to this, more than two thousand academics were trained through entrepreneurship, but still, there are some challenges encountered when it comes to attracting them into Malaysian university settings. To sum up, what needs much attention now is higher education access, even though Malaysia has done quite well in terms of university rankings and fostering entrepreneurship at all levels. This survey will therefore be instrumental towards understanding how far has been achieved vis-à-vis the higher education blueprint while also assisting those involved in strategic planning within their respective areas of work in the country's educational system.

Abstrak tesis dibentangkan kepada Senat Universiti Malaysia Terengganu bagi
memenuhi keperluan ijazah Sarjana

ABSTRAK

**KESAN PENGURUSAN STRATEGIK DALAM ORGANISASI PENGAJIAN
TINGGI: PENGAJIAN BLUEPRINT PENDIDIKAN MALAYSIA 2015-2025
(PENDIDIKAN TINGGI)**

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Khususnya di Malaysia, yang terkenal dengan sistem pendidikan yang berkualiti setanding dengan institusi barat, pengurusan strategik memainkan peranan penting dalam pembangunan pendidikan tinggi. Kementerian Pendidikan Malaysia telah menetapkan sasaran yang tinggi “Pelan Pembangunan Pendidikan Malaysia 2015-2025 (Pendidikan Tinggi)” untuk meningkatkan daya saing global di kalangan universiti Malaysia. Fokus utama penyelidikan ini adalah untuk menilai sejauh mana sasaran ini telah dicapai berkaitan dengan tiga subobjektif utama seperti yang ditunjukkan oleh pelan tindakan: meningkatkan akses kepada pendidikan tinggi, meningkatkan kedudukan universiti dan memupuk keusahawanan. Metodologi yang digunakan ialah reka bentuk penerokaan deskriptif menggunakan data sekunder daripada Kementerian Pengajian Tinggi. Data telah dibentangkan menggunakan jadual dan graf yang menunjukkan pencapaian yang dicapai berbanding dengan objektif yang dikehendaki yang digariskan dalam pelan tindakan. Selain itu, literatur berkaitan konsep pengurusan strategik dan pelan tindakan pendidikan tinggi untuk

Malaysia telah dikaji semula sebagai sebahagian daripada kajian ini. Beberapa teori telah dibuktikan dalam kajian tersebut. Inisiatif keusahawanan institusi pengajian tinggi telah mengatasi matlamat yang dirancang, seperti yang ditunjukkan oleh peningkatan ketara dalam aktiviti “berniaga” dan penyertaan latihan. Laporan QS menunjukkan bahawa universiti-universiti Malaysia telah membuat peningkatan kedudukan global yang luar biasa, di mana bilangan universiti berperingkat telah meningkat daripada enam kepada dua puluh. Bagaimanapun, terdapat turun naik, menurut laporan U21. Sebaliknya, ia tidak membawa perluasan akses ke institusi pengajian tinggi; ini kerana universiti swasta mengalami angka turun naik bagi pelajar antarabangsa ditambah pula dengan penurunan yang ketara sejak beberapa tahun kebelakangan ini. Penemuan utama termasuk perwakilan Malaysia sebanyak 2% dalam ranking QS 2020, Ia juga mencapai kedudukan ke-27 dalam ranking U21. Namun begitu, Malaysia menyaksikan peningkatan dalam kedudukan ranking globalnya. Di samping itu, lebih daripada dua ribu ahli akademik telah dilatih melalui keusahawanan, tetapi masih terdapat beberapa cabaran yang dihadapi apabila menarik mereka ke dalam persekitaran universiti di Malaysia. Kesimpulannya, apa yang perlu diberi perhatian sekarang ialah akses pendidikan tinggi, walaupun Malaysia telah mencapai prestasi yang agak baik dari segi kedudukan universiti dan memupuk keusahawanan di semua peringkat. Oleh itu, tinjauan ini akan memainkan peranan penting ke arah memahami sejauh mana telah dicapai berbanding pelan tindakan pendidikan tinggi di samping membantu mereka yang terlibat dalam perancangan strategik dalam bidang kerja masing-masing dalam sistem pendidikan negara.

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In the name of Allah, the Most Gracious, the Most Merciful.

All Praise is due to Allah, the Lord of the worlds, and Peace and Blessings be upon our Prophet Muhammad, his Household and his Companions. I thank Him for the perfection of His kindness and the generosity of His forgiveness. I thank Him for honouring me with His guidance in order to complete this thesis. First and foremost, I would like to express my sincere appreciation and heartfelt gratitude to both my dear supervisors, Dr Mohd Saiful Izwaan Saadon Dr. Loky Keng Bin, and Dr. N Alia Fahada Binti Wab Rahman, for their continuous guidance, support, and encouragement that enabled me to complete this master's thesis.

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APPROVALS

I certify that an Examination Committee met in 27th July 2023 to conduct the final examination of Ibrahim Abdelwahab Mahmoud Moussa Omar, on his master of Philosophy thesis entitled “ **The Effect Of Strategic Management In Higher Education Organizations: Study Of Malaysia Education Blueprint 2015-2025 (Higher Education)**” in accordance with the regulations approved by the Senate of Universiti Malaysia Terengganu. The Committee recommends that the candidate be awarded the relevant degree. The members of the Examination Committee are as follows:

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DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UMT or other institutions.

Ibrahim Abdelwahab

IBRAHIM ABD ELWAHAB MAHMOUD MOUSSA OMAR

Date:31 July 2025

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LIST OF ABBREVIATIONS

HEIs	Higher Education Institutions.
MoHE	Ministry of Higher Education.
GEM	Global Entrepreneurship Monitor.
U21	Universitas 21.
QS	Quacquarelli Symonds.
MQA	Malaysian Qualification Agency.
AI	Artificial Intelligence.
VR	Virtual Reality.
AR	Augmented Reality.
KPIs	Indicators achievements for all HEIs.
KPL1	Entrepreneurship awareness among students.
KPL2	Graduate Entrepreneurs.
KPL3	Student business.
KPL4	Educators with entrepreneurship expertise.

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Briefly, after Malaya gained its independence in 1957, only an autonomous campus of a university was established in the capital city. However, To this day, the Malaysian higher education system comprises a total of 20 public universities, 53 private universities, seven branch campuses of foreign universities, 26 private university colleges, 30 public polytechnics, 80 public community colleges, and over 350 private colleges dispersed throughout all 13 states of Malaysia. The gross enrollment ratio (GER) for higher education has experienced significant growth, from a mere 4 percent in 1980, 7 percent in 1990, 25 percent in 2000, and 37 percent in 2010. It is noteworthy that during the establishment of the autonomous campus of the University of Malaya in Kuala Lumpur in 1959, only 323 students were enrolled. However, since then, the number of students enrolled has experienced a remarkable surge, with 86,330 and 189,020 students in public universities in 1985 and 1995, respectively. As of current, there are 213,599 and 71,278 students in public universities and private higher education institutions (HEIs) , In 2013, the most recent statistics indicated that there were over 500,000 students enrolled in public universities, nearly 50,000 in public polytechnics and community colleges, and more than 480,000 in private HEIs. This significant numerical growth in higher education has been financially supported by the state, with expenditure for higher education consistently exceeding 30 percent of the total spending on education in recent decades. It is noteworthy that in contrast to six decades ago, when there was no legislation governing the higher education system, there are presently nine separate pieces of legislation that directly influence the development of higher education in Malaysia, as reported by Sirat and Wan (Sirat and Wan, 2016).

Therefore, the two ministries that took charge of the different education spectra were merged to establish the Ministry of Education. The rationale was to ensure that

the entire range of education is put under the purview of a single ministry to ensure continuity in planning and to provide proper coordination throughout the whole education system from primary to secondary to tertiary and higher education. Hence, this arrangement marks the beginning of the fifth era in the development of Malaysian higher education, which is a critical point for determining the course into the future. Several critical issues in higher education are currently confronting the sector and are crucial in shaping its future development presented by Sirat and Wan (Sirat and Wan, 2016). It has become clear that the measure of progress at this time is based on what countries have in terms of human riches equipped with science and capable of producing knowledge, rather than what they have in terms of natural resources (Garad *et al.*, 2023).

1.2 Introduction

For several decades, higher education systems have undergone continuous waves of reform, driven by concerns about the changing labor needs of the economy, competition within the global-knowledge economy, and nationally competitive positioning strategies to enhance the performance of higher education systems. Despite widespread international pressures, including the emergence of an international higher education market, considerable increases in cross-border student mobility, and pressures to create world-class universities, increase research productivity and impact, and compete in global league tables, the sector's policies, politics and outcomes remain as much about hybridity as they are about similarity or convergence (Capano and Jarvis, 2020).

Universities in Malaysia, especially public-funded institutions, are facing unprecedented pressure. In some ways, the challenges Malaysia's universities face are not that different from many universities worldwide. Public funding for universities has been reduced significantly, and at the same time, competition from private and more innovative universities has increased tremendously. The legacy system that was once a pillar of strength has become overly rigid and bureaucratic and, as a result, is

unable to change and adapt to the changing higher education sector. Above all else, running public universities has become extraordinarily expensive. However, local issues make the Malaysian situation particularly challenging (Bajunid *et al.*, 2017).

By the 1990s, five public higher education institutions were serving a swelling demand for tertiary education in Malaysia. This has caused students to either seek their education overseas or enrol in private higher education institutions offering twinning programs or locally established programs of public universities (Aziz and Abdullah, 2014). In late 2000, the Malaysian government announced that technology education and high-tech industries would have leading roles in the country's economy, which would, after that, be predominantly "knowledge-based". The government would focus on education as a means to deliver the promise of empowering the individual in the twenty-first century with the implication that economy and education would aim at closing the digital divide between the rural and urban centres of population (Higher Education in Regional and City Development: State of Penang, Malaysia 2011, 2011)

For that, College presidents and leadership teams have engaged repeatedly in strategic planning processes over the past several decades with the intention that they would create a framework to achieve desired success and value propositions that form competitive advantages. However, despite decades of these initiatives, higher education remains in crisis, with tangible threats to the traditional college experience (Carpenter, 2019). In Malaysia, the term "higher education" covers all post-secondary education, leading to certificates, diplomas, and degrees (Wilkinson and Yussof, no date). The first NHEP blueprint (2007–2010) represented initiatives to assist all higher educational institutions in producing a human capital cohort with first-class attitudes. The plan had five pillars that acted as the foundation for future developments. These were governance, leadership, academic environment, teaching and learning, and research and development (Zain *et al.*, 2017).

The National Higher Education Strategic Plan 2020 has been launched, and the National Higher Education Action Plan 2007–2010 were launched in August 2007. Higher education experts were assessing whether these plans embody "a clear vision" and "appropriate action" to respond to the global challenges in international higher

education; basically, the underlying and paramount aim of these plans is to trigger higher education transformation so that Malaysia's higher education system is in sync with the transformations occurring in the global higher education landscape (Sirat, 2010). At the same context, Higher education has become a key driver for societal development, whether through the formation and development of skills among their students in order to facilitate their integration into the labour market after graduation on the one hand, or by assisting institutions, whether in the private or public sector or even civil and civil society, in strengthening their competitiveness through creativity, in addition to the enrichment and dissemination of knowledge (Garad *et al.*, 2023).

1.3 Research Problems

Service-learning is a teaching and learning approach that includes community service within an academic course with instruction and reflection, enriching students' learning experiences. This is in line with the aspiration of the Malaysian government to produce well-rounded and holistic graduates and is included in Shift 10 of the Malaysia Education Blueprint 2015-2025 (Higher Education). There are various challenges in the implementation of a service-learning program, with the involvement of many stakeholders and the local culture and nature of the specific community (Musa *et al.*, 2017)

Therefore, Higher education organizations around the world have always faced environmental changes in terms of increase in demand and technology. However, altered societal expectations, new public policies, and technological innovations have created unprecedented challenges for universities in the past decade. These challenges are represented in changing the type of demand and increasing competitiveness. Although the borders of universities have opened in new ways for their services and products, in recent years, the development of higher education is closely related to its restructuring. Changes in the structure of the education system, development of market relations in education, increased competition in the education market, and many other factors significantly impact the conditions of higher education. Significant changes have occurred in the management of the higher education system, regulation of its

state, public schools funding, and the formation of higher education's private sector. Most universities were involved in market-oriented activities based on the competition for public resources and people's money studying on a paid basis. These changes cannot be ignored; universities are forced to adopt new strategic management methods. To achieve a fundamental shift in the internal management of higher education institutions, more specifically to move from operational leadership to strategic one, therefore, it is necessary to conduct a quality planning of development, implementations, evaluation and other critical aspects of strategic management that are all interrelated, as well as to form an effective management mechanism, introduced by (Voloshina, 2014).

In the same context, and considering the utmost significance of the higher education sector and its paramount role in diverse other sectors, it becomes irrefutably evident that it is currently facing a dire need to achieve excellence to navigate through the highly competitive and dynamic environment effectively. This need arises due to the pivotal role played by the strategic leadership of educational institutions within the Malaysian context. Consequently, it is imperative for the higher education ministry, given its indispensable position, to take the necessary measures to address this pressing need and ensure the attainment of excellence.

One of the significant elements of the framework that promotes the usage and advocacy of the strategic management tools in Malaysian universities is the Malaysia Education Blueprint 2015–2025: Higher Education . This framework achieves these objectives through 10 Shifts that are devised for the purpose of promoting critical transformative changes that are needed to be implemented in the Ministry of Higher Education. In doing so, the shifts are formulated based on the major performance areas in the field of education, integration, quality, performance, and policy-shaping, among others. Therefore, while being diverse, the 10 Shifts are interrelated as they all contribute to the goal of supporting the continued performance excellence of higher education organizations, which ensure the students' diverse needs and aspirations are met . It is worth mentioning that these shifts are not isolated initiatives but rather a part of a cohesive and holistic approach towards revolutionizing the higher education landscape. The above was a justification for identifying the impact of strategic

management in higher education organizations, and the blueprint was chosen as a case to be applied to it.

1.4 Research Questions

The articulation of research questions should be considered a discipline to maintain clarity. The questions, which are necessarily stated in more general terms, should be taken more as conceptual guides than specific propositions to be tested. On the other hand, Strategic planning occurs in very high numbers at institutions worldwide. While it often begins with honourable intentions, strategic plans frequently result in a long-range planning document that either goes on a shelf or lacks a compelling strategy to overcome critical issues facing higher education. Therefore, the guiding questions for this research were:

- RQ1. Has the access rate to higher education institutions increased after completing the first and second waves regarding Malaysia Education Blueprint 2015-2025 (Higher Education)?
- RQ2. Is Malaysia's ranking improved in the U21 and QS reports after completing the first and second waves regarding Malaysia Education Blueprint 2015-2025 (Higher Education)?
- RQ3: Is student entrepreneurship increased after completing the first and second waves regarding Malaysia Education Blueprint 2015-2025 (Higher Education)?

1.5 Purpose of the Study

- 1. To explore the levels and degrees of study in Malaysian higher education institutions.
- 2. To explore Accessibility to higher education institutions in Malaysia and Compare it with performance Aspirations in Malaysia Education Blueprint 2015-2025 (Higher Education).

3. To explore Malaysia's ranking in the U21 and QS report, Comparing it with performance Aspirations in Malaysia Education Blueprint 2015-2025 (Higher Education).
4. To explore student entrepreneurship in Malaysia, And Compare it with performance Aspirations in Malaysia Education Blueprint 2015-2025 (Higher Education).

1.6 Significance of the Study

The Malaysian higher education system has undergone many reforms in the last two decades. These reforms have had radical implications for all aspects of the professional lives of university academics, particularly in their teaching and research and in their relations with institutional governance, infrastructure and facilities and remuneration (Azman *et al.*, 2014). This study driver its importance in identifying the strategic plan of the Ministry of Higher Education, what was launched in 2015 in general, and what was achieved in the first and second waves, especially in Accessing higher education institutions, Malaysia's ranking in the U21, QS report, and student entrepreneurship.

1.7 Research Limitations

Limitations are weaknesses that militate against the study, which are outside the researcher's control and are closely associated with the chosen research design(Theofanidis and Fountouki, 2018). Delimitations are the limitations consciously set by the researcher. Delimitations emphasize the definitions that the researcher decides to set as the boundaries or limits of their work so that the aims and objectives of the study do not become difficult to achieve(Theofanidis and Fountouki, 2018). Demarcating boundaries also helps the researcher to be more focused on the study with the aim of reducing the tendency to work outside the boundaries of the research.

Creating a strategy for the reformation of an educational system or even an individual university is a very big undertaking that involves the politics of weighing the interests of a broad set of stakeholders against each other. In this dissertation, as in everything, it is important to address the limitations of the research. The study's reliance on secondary data only and its inability to obtain primary data for the same axis so that this primary data is similar to what the report data (secondary data) indicates is a limitation in this study, as the majority of the data that was adopted.

Therefore, the study was issued by the same body that developed the plan, taking into account the time factor, and this of course opens up horizons for future research in taking into account the matching of these two dimensions: reality and reports.

This descriptive exploratory study explored the impact of strategic management on higher learning organizations in Malaysia. The scope of the study covers in general the ten Shifts established by the Higher Education blueprint for the period from 2015 to 2025, and in particular the Shifts that occurred in both the sustainability axis in access to higher education organization, the global ranking axis in the U21 and QS reports, and the axis of student entrepreneurship. The geographical boundaries of the study are limited to Malaysia, with a special focus on the three aforementioned axes by comparing what has been achieved with the aspirations of the blueprint.

The methodological scope of the study is firmly rooted in descriptive exploratory research analysis, using a range of secondary data. Descriptive exploratory research was chosen as the comprehensive methodological framework due to its suitability for exploring precise aspects of the research topic. This allows for a comprehensive exploration of the impact of strategic management on higher education organizations in Malaysia. This approach enables the study to delve deeper into understanding the secondary data of the study and to conclude and explore relationships and the impact of all of this on the three main axes of the study.

1.7.1 Limitations of the Study

Potential limitations that could be associated with studying the impact of strategic management on higher education organizations in Malaysia are:

- 1- Sampling Bias in Secondary Data: This study is limited by sampling bias. This is because there may not be enough information available to measure the achievements in all of the ten shifts that are contained in the Malaysian Higher Education blueprint. Consequently, this can cause inaccurate results as far as reflecting shifts being targeted at different and multiple sectors of higher education in Malaysia per se. In particular, any range of data that is available can sometimes put too much emphasis on specific developments while ignoring others thereby leading to skewed findings based on such studies. Hence, the researcher has been able to select data from different sources for each axis taking into account intervention rates concerning other shifts which he/she was unable to secure relevant data for.
- 2- Self-report bias: The secondary data that was relied upon in the study may be subject to self-bias and this idea may be due to the fact that the issuers of the plan are also issuers of its completion reports, which can generate unintentional bias in favor of plan completion. Further steps of the plan than being just inclined or meant to solve problems and barriers surrounding it. The researcher aimed at gathering field data on every axis, which was corroborated by basic information; this didn't diminish from the work in that respects and provides a way for future researches working on both axes together..
3. Ethical concerns: Privacy-related ethical considerations may restrict information usage until authorized by relevant authorities. Researcher acquired official approvals clarifying data collection, storage, and utilization methods to address these concerns effectively."

1.7.2 Delimitations of the Study

1- Geographical scope: This paper is narrowed down to the higher education sector in Malaysia. It only covers three axes of development plan for higher education institutions; hence, does not look into other sectors or educational settings outside Malaysia. In focusing this particular geographical context, this study intends to compare the aspirations of the system with actual data on the three research topics and aims to reveal some challenges and associations within Malaysian higher educational system that provide comprehensive understanding of the topic within such local setting.

2- Research approach: This study uses a research approach that combines descriptive and exploratory methods. It involves comprehensive investigation of connotations, suggestions, or situations which affect the variables being studied. Additionally, both descriptive and exploratory approaches were employed for this research to reveal complex perspectives on how the plan has affected three main facets in Malaysian higher education.

1.8 Hypotheses of the Study

Within the methodological paradigm of traditional objectivist research, hypotheses, consisting of assumptions accepted provisionally as a basis for the investigation, are stated before collecting data. These hypotheses are tested and then accepted or rejected based on the findings that arise from the study. Therefore, this research was based on Four assumptions about the nature of the subject matter. The nature of the phenomenon being studied (Bougon, Weick and Binkhorst, 1977).

Hence, there are some underlying assumptions implicit in the study

1. **Hypothesis 1:** assumes increasing Access to higher education institutions. as a result of the completion, of the first and second waves, regarding Malaysia Education Blueprint 2015-2025 (Higher Education).
2. **Hypothesis 2 :** The study assumes an improvement in Malaysia's ranking in the U21 report, QS, as a result of the completion of the first and second

waves concerning the 2015-2025 Malaysian Education Blueprint (Higher Education).

3. **Hypothesis 3:** The study assumes an increase in entrepreneurship among students due to the completion of the first and second waves in relation to the 2015-2025 Malaysian Education Blueprint (Higher Education).

1.9 Chapter Summary

Chapter 1 provides an in-depth introduction to the context, purpose, and significance of the study, along with an overview of the research questions, hypotheses, and limitations.

The chapter begins by tracing the historical development of the Malaysian higher education system since gaining independence in 1957. It highlights the significant growth in the number of institutions and student enrollments, supported by substantial government expenditure. The merger of education ministries marked a critical era, emphasizing the need for strategic planning to address evolving challenges in higher education. The introduction further explores the challenges facing Malaysian universities, including reduced public funding, increased competition, and bureaucratic rigidity. Despite strategic planning initiatives, universities struggle to adapt to changing societal expectations and compete globally. Shifts towards technology and knowledge-based economies underscore the importance of effective strategic management in higher education.

The research problems identified focus on the implementation of service-learning programs and broader challenges such as changing societal expectations and increased competition. These issues highlight the need for effective strategic management to navigate the complexities of the higher education landscape. Research questions are formulated to evaluate the outcomes of strategic management initiatives outlined in the Malaysia Education Blueprint 2015-2025 (Higher Education). These questions seek to assess changes in access rates, Malaysia's global ranking, and the growth of student entrepreneurship.

The purpose of the study is outlined, emphasizing the exploration of various aspects of Malaysian higher education, including levels of study, accessibility, global ranking, and student entrepreneurship. By comparing these with the goals outlined in the Education Blueprint, the study aims to assess the effectiveness of strategic management in achieving desired outcomes. The significance of the study lies in its contribution to understanding the impact of strategic management on Malaysian higher education. Given the significant reforms and challenges faced by the sector, the study provides valuable insights into the effectiveness of policy initiatives and informs ongoing efforts to enhance the higher education system.

Research limitations are acknowledged, including data availability, potential biases in secondary data sources, ethical considerations, and geographical scope. Despite these constraints, efforts have been made to mitigate limitations and ensure the validity and reliability of the study findings. Hypotheses are formulated to test assumptions regarding increased access to higher education, improved global ranking, and enhanced student entrepreneurship as outcomes of strategic management initiatives. These hypotheses will be tested against the empirical data collected in the study.

In summary, Chapter 1 sets the stage for the study by providing a comprehensive overview of the research context, purpose, significance, research questions, hypotheses, and limitations. It lays the foundation for the subsequent chapters, which will delve deeper into the empirical analysis of strategic management in Malaysian higher education.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

A higher education institution refers to an establishment that affords tertiary education, including universities, colleges, and vocational schools. These organizations proffer educational curricula that culminate in degrees, diplomas, or certificates, with a primary emphasis on progressive learning and scholarly research (Yokuş, 2022).

Over the course of the past six decades, the realm of higher education in Malaysia has successfully fostered the growth and development of three distinct cohorts of proficient and distinguished academicians, educators, and researchers. Notably, there has emerged a nascent passion for the exploration of indigenous knowledge traditions and the creation thereof, extending beyond a mere willingness to receive and assimilate established universal knowledge derived from foreign sources. It is worth emphasizing the exceptional participation, enrollment rates, leadership roles, and networking abilities of women across all spheres of higher education, which have demonstrated a steady and incremental progression towards the ideal of women's empowerment. Malaysian membership in the Association of South-East Asian Nations (ASEAN) creates regional benchmarks and strategic advantages for higher education in Malaysia. Private higher education brings the best of its policies and practices, international networks and benchmarks to higher education in the country. Malaysia has become the preferred choice (eighth globally) for higher education for international students (Bajunid *et al.*, 2017).

On the other hand, The National Higher Education Strategic Plan 2006–2020 is a transformation plan to enhance and strengthen the quality of higher education in Malaysia. The plan has brought about changes to the university system and governance

structure in various ways: structural (e.g., stratification of universities), bureaucratic (e.g., corporate and strategic management), demographic (e.g., increase in student numbers), economic (e.g., increase in government funding, increase in national income from international education), quantitative (e.g., key performance indicators) and qualitative (e.g., accommodation of equity and access). Terms related to new public management philosophy and approaches, such as quality, excellence, competition, efficiency, value management, restructuring and accountability, have become dominant in the university discourse. These imperatives have caused a considerable change to academic work conditions and, consequently, to the attitudes and perceptions of academics regarding their work. At the same time, the dual-core functions of knowledge creation and knowledge transmission through teaching and research are given priority in universities (Azman *et al.*, 2014).

Therefore, the Ministry of Education launched the Malaysia Education Development Plan (2013 – 2025) (pre-school to post-secondary education) in October 2011. This initiative sought to comprehensively revamp the domestic education system, drawing inspiration from global benchmarks, in order to imbue a sense of national ambition and endow pupils with a competitive advantage upon graduation (Nur Mursalina Syed Azmy, Hafizah Abdullah and Hadi Ayub, 2016). The Malaysia Higher Education Sector Blueprint 2015-2025 was unveiled in April 2015 with the aim of augmenting the technical and vocational education and training (TVET) enrolment from 250,000 to 650,000 by 2025. It is, thus, of paramount importance to comprehend the determinants that impact students' decision to pursue TVET for their tertiary education. (Buang *et al.*, 2017).

As per the Malaysia Education Blueprint of 2015-2025, specifically for Higher Education, it is mandated that institutions of higher learning (IHL) incorporate entrepreneurship education within their academic programs so as to enable the production of graduates proficient in entrepreneurial skills. The Ministry of Education wants all IHL to produce graduates who create jobs rather than just looking for job (Karim, 2016). The dedication and exertion we allocate towards education represent some of the most essential investments we can undertake in safeguarding the future prosperity of the Malaysian populace (Malaysia, 2013).

The Malaysia Higher Education Blueprint, which has recently been launched, is firmly rooted in the accomplishments of the system and proposes substantial modifications in the modus operandi of the Ministry and the system in order to achieve its objectives. In particular, the Ministry aims to foster an entrepreneurial mindset throughout Malaysia's higher education system and establish a system that produces graduates with a passion for creating job opportunities, rather than solely pursuing employment. Additionally, the Ministry seeks to develop a system that is less fixated on conventional academic paths and places equivalent importance on the much-needed technical and vocational training. The Ministry also intends to emphasize outcomes over inputs and actively pursue technologies and innovations that address the needs of students while enabling a more personalized learning experience. Furthermore, it aims to harmonize the regulation of private and public institutions and shift from the current highly-centralized governance system for Higher Learning Institutions (HLIs) to a model that is based on earned autonomy within the regulatory framework. Lastly, the Ministry is committed to ensuring the financial sustainability of the higher education system by reducing HLIs' dependence on government resources and urging all stakeholders who directly benefit from it to contribute as well (Ganapathy, 2016).

Therefore, universities should draw on diverse revenue sources to ensure their education system's long-term financial sustainability (Hussin and Abdul Rashid, 2017). It took two years for the MOE to develop the blueprint, and during that time, they collaborated with various stakeholders to develop a comprehensive plan. At its core, the blueprint outlines 10 Shifts as the main agenda to further promote excellence in the higher education sector in Malaysia (Ngah and Songip, 2016).

Therefore, the Malaysian higher education system is undergoing significant transformation. It started with the effort to corporatize public universities, followed by the democratization of higher education that saw many private universities and university colleges being established. The establishment of the Malaysian National Higher Education Fund and the formulation of the Malaysian Qualification Framework further shaped the new form of the Malaysian Higher Education system. The newly launched Malaysia Education Blueprint 2015 - 2025 (Higher Education) justifies the education sector as vital to meeting Malaysia's human resource needs.

Simultaneously, there is an increasing anticipation for public institutions of higher education to serve as the driving force behind innovative and creative endeavors (Abd Aziz and Nakanishi, 2016).

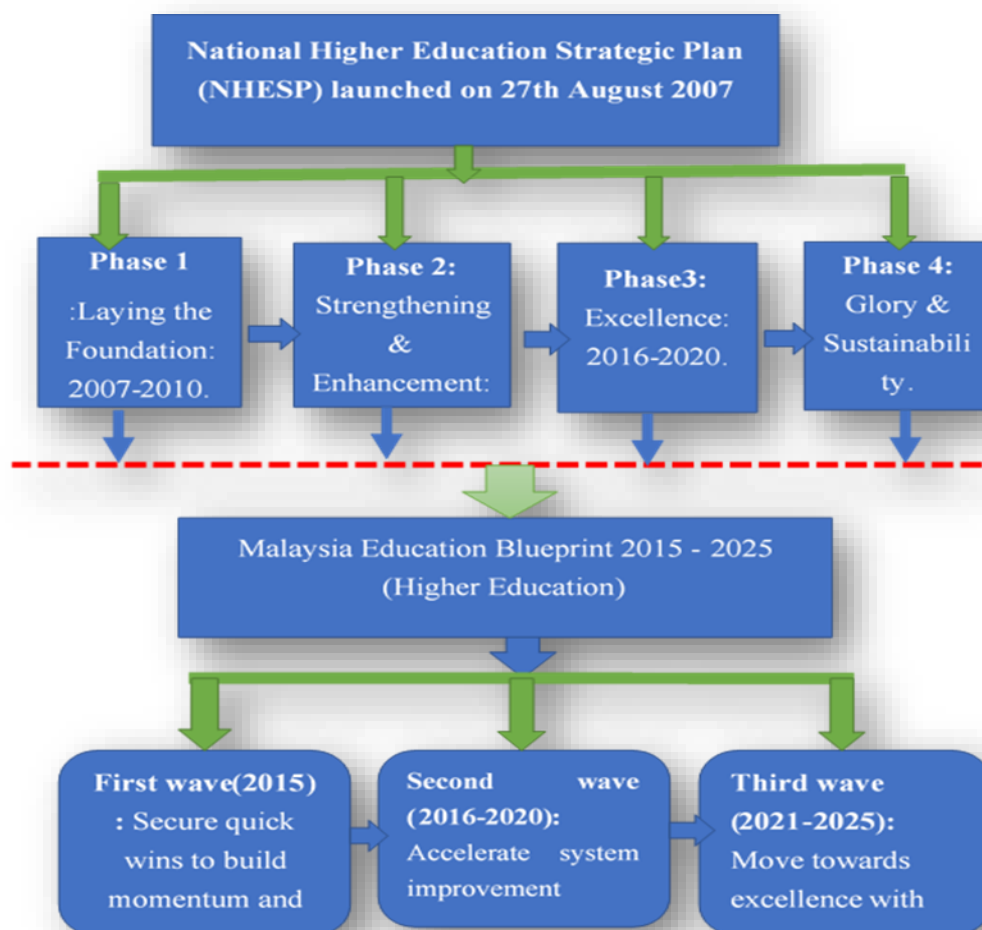


Fig 2.1: Summarizes the phases and waves of the National Higher Education Strategic Plan 2006-2020 and the Malaysian Higher Education Blueprint 2015-2025.

2.2 Strategic Management

Strategic management refers to the process of formulating and implementing strategies to achieve organizational goals and objectives. It involves analyzing the internal and external environment of an organization, identifying strengths and weaknesses, opportunities and threats, and developing plans and actions to achieve desired outcomes. Strategic management is important for organizations to adapt to

changing circumstances, stay competitive, and achieve long-term success(Siegel and Leih, 2018). Strategic management also involves making decisions about resource allocation, setting priorities, and monitoring progress towards achieving strategic goals. It is a critical function of management that helps organizations adapt to changing market conditions and stay competitive(Keding, 2021). Therefore, Strategic management pertains to the process of devising and executing an organization's strategies and plans in order to accomplish its objectives and goals. This involves scrutinizing both the internal and external environment of the organization, identifying its strengths and weaknesses, and creating strategies to leverage opportunities and overcome obstacles. Furthermore, strategic management entails monitoring and assessing the organization's performance to ascertain that it is on course to achieve its objectives(Oliveira *et al.*, 2021).

In the same context, Strategic Management originated in the business sector in the late 1950s when many organizations rapidly started adopting strategic management to plan, develop and execute processes for competitive advantage. The importance of Strategic Management by public and non-profit organizations was felt in the early 1980s in the USA when the Higher Education system faced challenges like reduced financial support, lower enrolments and resource mobilization. (Bryson 2018). definitions of strategy appear on closer examination to be statements of the uses of strategy, not the strategy itself. We, therefore, begin with a working definition of strategy as the content of decisions about how to move the organization in a particular direction. This will help us distinguish between the "what" of strategy and its development process, generally referred to as strategizing or, more narrowly, strategic planning(Presley and Leslie, 1999).

Strategic management comprises various facets, including goal setting, strategic assessment, strategy deployment, and oversight. However, these elements constitute a framework and may not manifest as distinct sequential phases within a strategic management decision-making procedure ('Strategic Management', 2012). At the same time, strategy is a coherent set of individual discrete actions supporting a system of goals, which are supported as a portfolio by a self-sustaining critical mass, or momentum of opinion in an organization'(Dyson *et al.*, 2007).

As strategic management developed as an area of academic study, interest in companies' strategic planning practices waned (Grant, 2003). So, managers should closely monitor, analyze, and assess developments in both environments and formulate an appropriate strategy (i.e., apply strategic management) so that their organization can survive and prosper (Chletsos and Saiti, 2019a). A great deal of strategic thinking must go into developing a strategic plan, and, once developed, a great deal of strategic management is required to bring its aims to fruition. However, as several authors have pointed out, the objective is to think and manage strategically, not to blindly engage in strategic planning for the sake of strategic planning (Nickols, 2016).

2.2.1 Strategic Management in Higher Education

Strategic management in higher education refers to the process of developing and implementing a strategic plan that outlines the path a Higher Education Institution (HEI) should take to achieve its desired future. The strategic plan serves as a framework for determining the quality path a HEI should chart to achieve its desired future (Mensah, 2020). Management in higher education pertains to the effective governance and coordination of universities and colleges. This encompasses the supervision of academic courses, faculty and personnel, financial resources, facilities, and student support services. The implementation of efficient management strategies is essential in securing the triumph of the institution and the academic progress of its students (Kose, Kalanee and Yildirim, 2022).

On the other hand, Development, resource development, or what is now frequently called institutional advancement, essentially mean those programs that raise financial support and understanding for a college or university as an enterprise (Darden, 2009). In the 1970s and 1980s, the internal role of the president, leading this complex organization, turned outward. The president's role increasingly interfaced the university with the outside world, including fund-raising and interaction with state and federal government. That model continues today (Astin *et al.*, 2009).

Nowadays, higher education institutions should consider multiple concepts to manage in an integrated manner, such as strategy, quality, process etc., to confront the challenges. Especially strategic and process management in higher education has recently been considered in many universities worldwide. Strategic management serves as a mechanism to provide long-term direction for higher education institutions and, at the same time, allocate resources in line with this direction. Furthermore, process management provides the necessary mechanisms to achieve the vision of the higher education institutions and disseminate the approaches throughout the whole enterprise(Kahveci and Taşkın, 2013). On the other hand, the higher education "industry" as a whole is faced with profound challenges to its mission and broad scepticism about its performance. However, how colleges and universities navigate the resulting threats and opportunities, and form strategies to position themselves to meet these challenges need to be better understood(Presley and Leslie, 1999).

Olsen and Eadie perfectly describe the need to move from strategic planning to strategic management (which incorporates implementation into strategic planning) when they say, “why are the products of so much precious human time and energy consigned so often to oblivion? The reason is relatively simple: very little time and thought are devoted to implementing plans”(Beebe Bickis, 2008). Strategy evaluation is the final stage of the strategy management process. In this process, practitioners need to evaluate and control the implementation of the strategy(Kang and Kue Na, 2020). Strategy refers to an overarching and often complex plan to achieve a goal. A strategy may employ various tactics and resources to achieve smaller, more clearly defined objectives(Watson, 2007).

Today, forces external to higher education institutions increasingly pressure institutions for solutions to alleged inefficiencies in operations that increase annual costs. However, the solutions offered do not address organizational problems of product design, technology, and unit interdependence. Instead of attacking the root causes of inefficiencies in the domain of organizational design. (Bess, 2006).

The process of formulating strategies in higher education institutions (HEIs) necessitates the establishment of a Key Performance Indicators (KPI) framework to enable effective strategic management. The developmental phases of the KPI system for HEIs encompass the following stages:

1. an articulation of the institution's mission, vision and values.
2. Conduct a SWOT analysis to determine the strengths, weaknesses, opportunities, and threats of the institution.
3. Set strategic goals and objectives based on the results of the SWOT analysis.
4. Identify KPIs that will be utilized to gauge progress towards achieving the strategic goals and objectives.
5. Develop an action plan to implement the KPI system.
6. monitoring and assessing the institution's performance using KPIs.
7. Make requisite adjustments to the strategy and KPIs based on the results of the monitoring and evaluation process.

In essence, a methodical and data-driven approach to strategy-making in HEIs is of utmost significance, which can be accomplished through the implementation of a KPI system (Kushlyk and Stepanyuk, 2020).

On the other hand, The Ministry of Higher Education set a plan to attract 100,000 international students to Malaysia by 2015 and 200,000 international students by 2020. By 2012 there were already over 100,000 international students, and they contributed an estimated RM4 billion annually toward the Malaysian economy (Bajunid and Wong, 2016).

2.2.2 Strategic Management Tools and Techniques

The predominant notion of the modern epoch is encapsulated by the term "Strategy." This notion has superseded erstwhile managerial operations such as "Administration" or "Planification." The etymology of the term strategy can be traced back to the military domain and stems from the Greek word "strategos," which

connotes a general. (Fuertes *et al.*, 2020). There are many techniques, tools and methods, models, frameworks, such as, the Balanced Scorecard (BSC) is a strategic management tool that can be used to align organizational strategies, measure performance, and evaluate the effectiveness of corporate communication practices(Oliveira *et al.*, 2021).

Approaches and methodologies, available to support strategic managers in decision-making. The tools have been developed and designed with the aim of providing assistance to managers throughout all stages of the strategic management process, with the ultimate objective of achieving enhanced performance. The mastery of these tools can be attained through the acquisition of knowledge in management schools. However, it is imperative to view their implementation within the context of practical application in organizations.(Berisha Qehaja, Kutllovci and Shiroka Pula, 2017).

Most researchers accept that strategy deals with circumstances of great importance to an organization. More minor matters in the organization will only be considered strategically crucial if they, for one reason or another, influence the organization significantly or if they constitute a new phenomenon that catches management's attention. The dividing line between what is strategic and what is not is thus a more or less subjective judgment of what is essential and what is not deemed necessary. Consequently, the concept of “strategic” becomes critical(Ivang, 2014).

The question remains: Does the strategy explain future actions, or does it evolve from previously undertaken, present individual and organizational actions? The answer varies depending on the person being asked and the context in which the strategy is to practice (Mintzberg and McHugh, 1985). Strategic management involves integrating an organization's vision, goals, policies, and tactics into a unified whole. Once the strategic vision and central policies have been identified, tools for implementation must be determined, which are necessary for managing the organization effectively. Organizations need to select the appropriate tools, which upon implementation, will cohesively integrate the strategic and operational initiatives(Serdar Asan and Tanyaş, 2007). We can see the Definition of the institution is a group of people with a shared

purpose or set of goals, a standard technology or way of doing things, and a social structure that enables them to relate to each other and outsiders in pursuit of their organizational goals (Scott and Davis, 2015).

2.2.3 Challenges of Strategic Management

The domain of strategic management is fraught with several challenges that require careful consideration and adept handling. These challenges encompass a wide range of issues, including the formulation and execution of effective strategies, the efficient management of change, the navigation of uncertainty and risk, and the synchronization of organizational goals with available resources and capabilities. (Musakuro and de Klerk, 2021).

The allocation of adequate resources is an essential part of strategy implementation. It is difficult, if not impossible, to implement planned strategic activities without sufficient resources. Anand and Merrifield (Heide, Grønhaug and Johannessen, 2002). A formulated strategy must be implemented before it can be of specific value to an organization. Nevertheless, it is recognized among practitioners and academicians that various barriers—i.e. obstructions to the successful implementation of the strategy—can arise, thus representing a particular challenge to management (Heide, Grønhaug and Johannessen, 2002).

On the other hand, an analysis of the empirical findings on strategy implementation shows that communication is pervasive in every aspect of strategy implementation, and it is related in a complex way to organizing processes, organizational context and implementation objectives which, in turn, have an impact on the implementation process. Communicating is not organizing, as organizing involves structure arrangements, resource allocation, and many other activities beyond the capacity of communication. However, communication is embedded in the organizing processes, affecting the effectiveness and efficiency of these processes and, in turn, strategy implementation. In other words, effective communication is a primary

requirement of practical implementation, but it does not guarantee the effectiveness of implementation (Peng and Litteljohn, 2001).

Although the implementation of strategy is considered to be a crucial component of the strategic management process, limited attention has been given to its study and research. The majority of existing literature has focused on the long-term planning process and the actual content of the formulated strategy. The significance of strategy implementation has been largely overlooked, resulting in significant challenges during the implementation phase following the formulation of a comprehensive strategy or a single strategic decision. It is not surprising that such difficulties arise (Alexander, 1985). This kind of organizational change is not the same as "planned change" or Organization Development (OD). Adaptation focuses on changes motivated by the external environment; OD focuses on changes within the organization. OD is generally oriented toward changes in individual attitudes and behaviours and in the organization's culture; adaptation is more concerned with organization-level change (Cameron, 1984). A change in 'organizational culture is required to implement the strategy successfully. Although cultural change is difficult, it is often essential in moving the system toward realizing its strategy. Organizational culture is the organization's consciousness that guides the behaviour of individuals; it may be founded on shared purpose, value, and behavioural norms (Speziale, 2015).

Vague mission statement and vision development Regarding public and private sectors, most strategic planning theorists believe in having a clear mission statement to provide a sense of an organization's purpose and a justification for its existence. Some theorists distinguish between vision and mission. For example, Bryson and Roering indicate that a successful vision should include: 1) mission, 2) basic philosophy, 3) goals, 4) basic strategies, 5) performance criteria, 6) essential decision rules, and 7) ethical standards expected of all employees (Bryson and Roering, 1988).

Danae Fard et al. (Danae Fard *et al.*, 2011) have shown the obstacles to strategic management in public organizations can be presented as follows:

- Vague mission statement and vision development a barrier to strategic management in public organizations.

- The inability to continuously monitor environmental assessment is a barrier to strategic management in public organizations.
- Unclear goals in the public sector barrier to strategic management in public organizations? = Is lack of top managerial commitment to strategic planning a barrier to public organizations?
- Lack of awareness and knowledge of strategic planning and implementation is a barrier to strategic management in public organizations.
- An organizational culture that does not support strategic management is a barrier to strategic management in public organizations.
- An inappropriate organizational structure for strategic management is a barrier to strategic management in public organizations.
- The high turnover of managers and political influence constitute a barrier to strategic management in public organizations.
- The inappropriate allocation of resources is a barrier to strategic management.
- The inability to specify performance measurements is a barrier to strategic management in public organizations.
- The lack of strategic planning evaluation systems is a barrier to strategic management in public organizations.

In order to surmount these difficulties, proficient planners, implementers, monitors, assessors, and other pertinent stakeholders ought to engage in cooperation and pledge their dedication to effectively executing the strategic blueprint(Austin, 2020).

2.2.4 The Strategic Management Types

In public administration, one may discern four overarching classifications of strategists. These categories include the reactor, characterized by low aspirations and capabilities, the dreamer, marked by high aspirations but low capabilities, the underachiever, distinguished by low aspirations but high capabilities, and the savvy strategist, exemplifying both high aspirations and capabilities. It should be noted that these typologies pertain to individuals, teams, organizations, and collaborations that

undertake strategic management(Bryson and George, 2020). In the same context, The process of strategic management pertaining to the environmental dimension is a crucial area of focus. It illuminates four primary perspectives through which the critical success factors of environmental strategy may be analyzed, namely: the drivers of environmental strategy, the levels of strategy, the activity sector, and the strategic horizon of environmental actions. In order to support the process of strategic management within the aforementioned domain, approaches have been developed that facilitate strategy formulation, implementation, as well as the assessment of environmental outcomes that have been achieved(Capurro and Capurro, 2021).

There exist four distinct categories of strategic management, namely:

- 1- Corporate-level strategy: This category is concerned with the overarching direction and extent of the organization, including decisions on market entry or exit, acquisition or divestment of businesses, and allocation of resources across various business units.
- 2- Business-level strategy: This category is centred on how to effectively compete within a specific market or industry by means of product or service differentiation, cost leadership pursuit, or targeting a specific customer segment.
- 3- Functional-level strategy: This category pertains to how individual organizational functions, such as marketing, operations, or human resources, can contribute towards achieving the overall strategic objectives.
- 4- International strategy: This category deals with the expansion of business operations and competition in global markets by adapting to local cultures and regulations or leveraging economies of scale across multiple countries. It is noteworthy that these strategic management categories are not mutually exclusive and can overlap in actual practice(Chletsos and Saiti, 2019b).

Strategy and its place in university management in understanding how and why organizations are created and run, the management literature has tended to stratify their control and direction, segregating the operational activity of the organization –policy or tactics – from the direction and control of its purposes –strategy.¹ Thus, strategy is associated with how the organization’s activities are selected to be consistent with its objectives and purposes. The implementation of a "higher-level" strategic management

approach enables an organization to effectively circumvent infeasible management tasks, such as evaluating all potential activities with its available resources. It also permits the organization to identify the resources appropriate to desired strategies without testing their suitability against all feasible actions (Buckland, 2009).

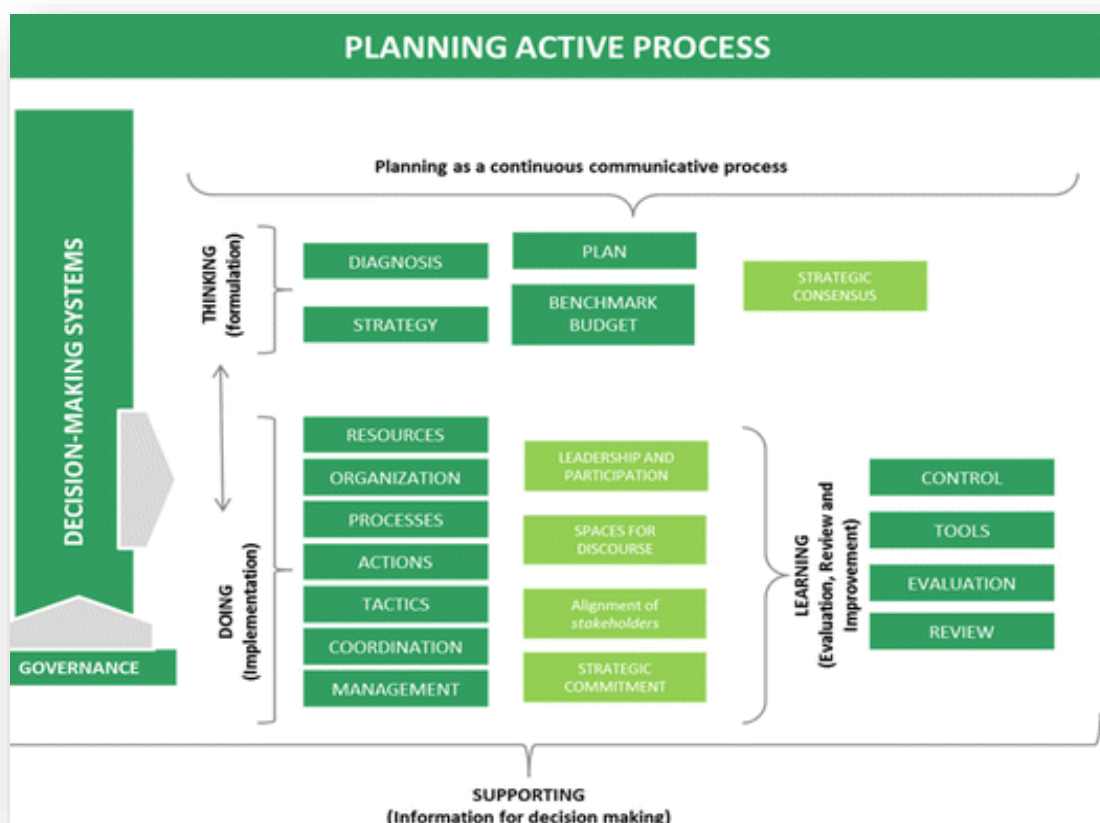
Recent management research agendas draw attention to the theoretical and practical insights from studying organizations in pluralistic contexts.¹ Pluralistic organizations are typically shaped by the divergent goals and interests of different groups, each having sufficient power bases to ensure that their goals are legitimate to the organization's strategy. For instance, the strategies of regulated firms are subject to the influence of regulators who can impose demands on the firms to moderate their competitive position and ensure a fair playing field. Additionally, these strategies may be shaped by the interests of shareholders who expect the maximization of shareholder value. Given that both demands are valid, the firm cannot pursue a singular strategy but must establish strategizing processes that enable the enactment of two conflicting strategic objectives (Jarzabkowski and Fenton, 2006).

2.2.5 Conceptual Framework for Strategic Management

A conceptual framework for strategic management entails a compendium of theoretical concepts and principles that provide direction for the generation, creation, and assessment of strategies within an organization. This framework encompasses various categories of strategies that can be employed, the different organizational structures that can be instituted, as well as the procedures involved in the formulation and evaluation of strategies. Additionally, the framework takes into account the effects of strategic management on organizational performance and the necessity for modifications and adjustments to guarantee triumph (Fuertes *et al.*, 2020).

Based on this particular model, as illustrated in **Figure 2.1**, the practice of strategic management operates within the realm of governance and a system of decision-making. This system functions within an active planning system that is established as an ongoing communicative process. This system enables or facilitates the implementation and continuous improvement by applying a mixed formula and

creating compatibility between the rigour and agility of the process and between leadership and the involvement of a significant number of people. These elements are associated with the following actions: thinking–doing–learning–supporting concepts, which are closely linked to the main components of strategic management(Gomez and Giroto, 2015b).



Source:(Gomez and Giroto, 2015a)

Fig 2. 2: The conceptual framework for undertaking strategic management processes in universities.

The conceptual framework that is a benchmark for addressing strategic management processes is built around the main components involved in an active planning process, as shown in **Fig 2.2**. Support is an underlying component of all model elements within this active process. This is because the process ensures that the other elements are based on the use of information so that they are not subjective and enable both decisive decision-making and the process of evaluation and review for continuous improvement. Likewise, as an ongoing process, communication is also a

transverse component. The model encompasses a broad conception of evaluation, defined as activities carried out systematically to ascertain the institution's performance at different levels (strategic, tactical, architectural) to take the necessary actions and learn from the evaluation outcome. These concepts require the learning to be continuous. Thus it is not only about obtaining a product (a plan) but actually about maintaining a system of dialogue, reflection and permanent monitoring to adapt to changes and glitches in the process (Gomez and Giroto, 2015b).

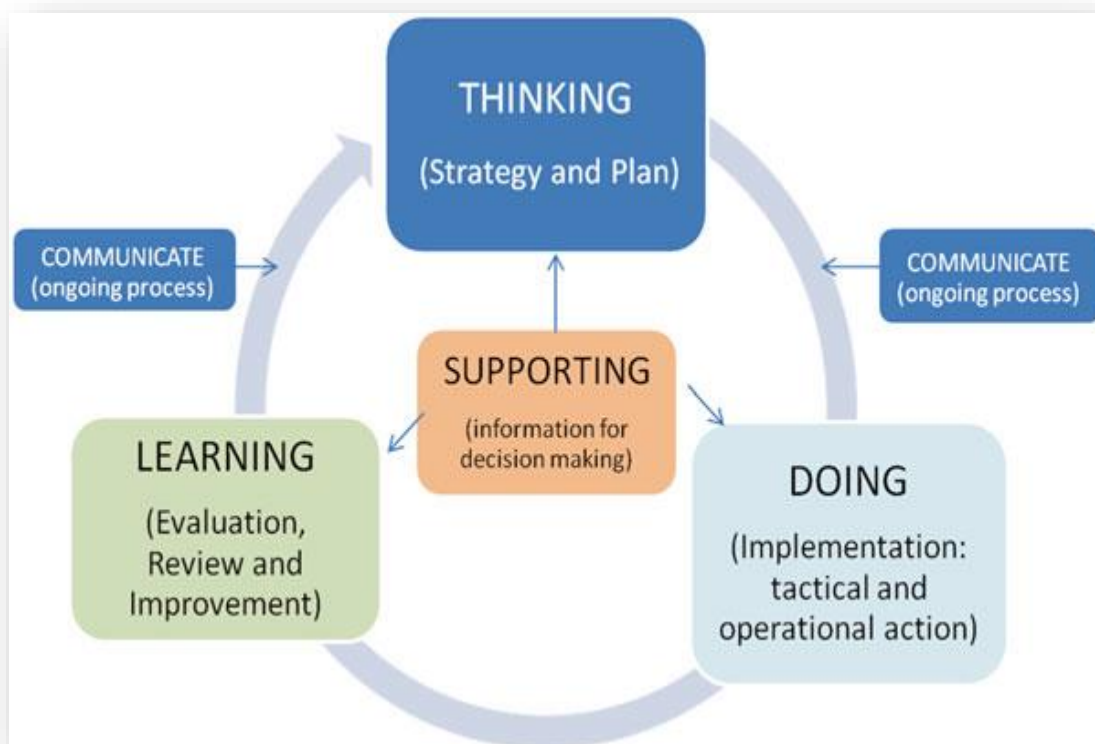


Fig 2.3: Main components of strategic management

Source: (Gomez and Giroto, 2015b)

The various tasks of strategic management can be broadly classified into strategic planning, strategic implementation and control. They are discussed below in detail, as shown in **Fig 2.3**. The process by which strategies are produced is called strategic planning. Strategic planning is run independently of the day-to-day business. Still, it determines how the day-to-day business is to be run - done by the other two tasks, strategic implementation and strategic control process. Hence strategic planning forms the basis for the other two tasks. Therefore, producing a successful strategy is the core of strategic management (Levi, 2007).

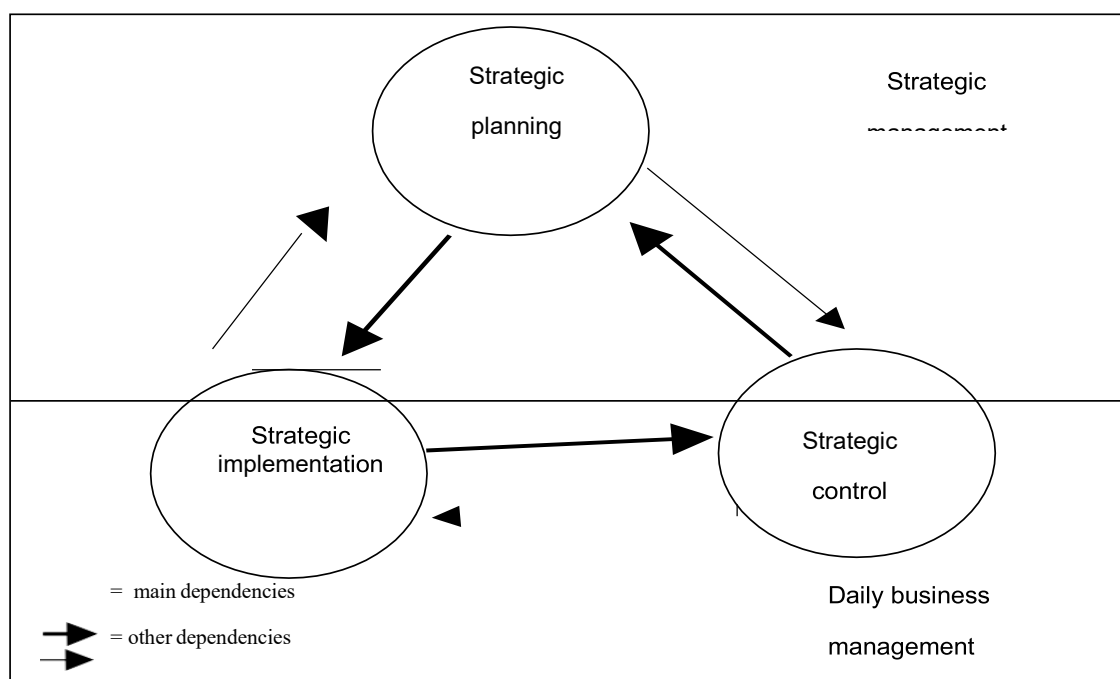


Fig 2.4: The three main tasks of strategic management.

Source:(Levi, 2007)

In this context, issues such as university rankings and the systems for quality, reputation, and excellence accreditation have become critical factors for institutional success. They may influence the way HEIs are managed. As such, it must adapt all its services to meet the new demands of society, including those of the market, without losing sight of its social commitment. Thus, to meet the growing demands of society at large, strategic management with its respective tools has become increasingly more central to university administration(Gomez and Giroto, 2015b).

2.2.6 Management and Organizational Structures at HEIs

Management and organizational structures at Higher Education Institutions (HEIs) vary across institutions and countries. External pressures such as political, economic, and technological factors, as well as competition in labour and education markets have challenged HEIs to reconsider their organizational structures and internal management approach to provide better quality education, attract more potential stakeholders, and sustain their positions in local and global markets(Gulden *et al.*,

2020). There are studies examining cross-cultural perspectives of gender and management in HEIs(Özkanlı *et al.*, 2009). Other research focuses on quality management of higher education and the application of institutionalism as an innovative approach to effective internal management in HEIs(Gulden *et al.*, 2020)

Higher education is considered the lifeline of any nation's development. These institutions are engaged in disseminating knowledge and shaping human capital for today's knowledge-based economy(Haider, Aamir and Naheed, 2019). the dynamic nature of today's environment, increased population and demand, and budget cuts have created a lot of pressure on HEIs worldwide. Hence, the need for effective human resources capable of providing advanced policies for the efficiency and sustainability of these institutions(Ibrahim, Mahmood and Bakar, 2018). To meet these growing challenges and the requirements of a whole-institution approach, the role of management is becoming increasingly important for the professionalization and control of organizational activities(Roos *et al.*, 2020).

Hardy and Fachin (Hardy 2017) described models of university administration that are patterned after those applied in complex organizations:

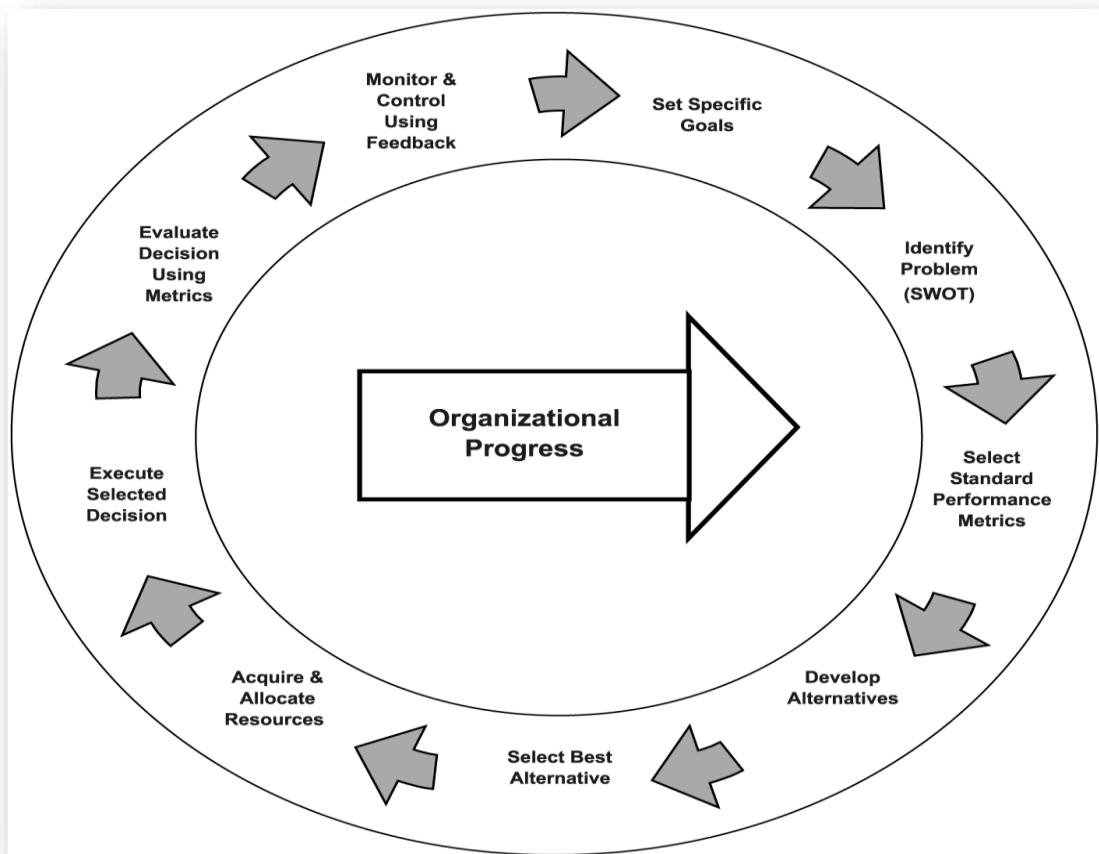
- Academic bureaucracy: Derived from the bureaucratic model of Max Weber and adapted by Henry Mintzberg for professional organizations. One example of this model at universities in the management of peripheral services (e.g., cafeterias, libraries, dormitories) and administrative management (recruitment, accounting, registration, financial decisions, etc.).
- Colleges: the structural model based on community participation is most used by academic organizations worldwide. Examples include the committees and boards of directors present at most traditional universities, particularly in the public realm, where participants are the faculty, students, administrators, and community members.
- Political: The university is a political system where stakeholders exert power for personal gain. A good example is drafting the university budget, which often results in the lion's share of funding being allocated to the most powerful instead of the most relevant in terms of size or reputation.
- Organized anarchy: This is where there is little coordination and control, where each individual is involved in independent decision-making processes. One example would

be the decisions departments make regarding issues such as partnerships with companies and the reallocation of faculty and research decisions. In this model, top management does not exert any control.

The proposed strategic managerial decision-making process, as shown in **Figure 2.5**, has evolved from the seven-step managerial decision-making process delineated by Harrison (1975) into a nine-step strategic managerial decision-making process. Step one includes setting specific, measurable goals that align with the organization's mission. Step two calls for identifying organizational problems or issues based on synthesizing data from SWOT, statistical, and gap analyses. An organizational problem or issue exists with a gap between current and desired performance. The utilization of basic diagnostic instruments, including check sheets, histograms, cause-and-effect diagrams, Pareto diagrams, and scatter diagrams, is necessary to expedite the examination of inadequacies, predicaments, or quandaries in performance. In the third step of the strategic managerial decision-making process, it is imperative to establish selection criteria and standardize performance accountability and evaluation metrics. Step four involves developing alternative decisions or strategies for closing the gap between current and desired performance. The fifth step compares, evaluates, and selects the best decision to correct a specific gap. The present study posits that the rectification of different lacunae in organizational decision-making will undoubtedly necessitate diverse determinations. The sixth step involves procuring and allotting the requisite resources to effectuate the chosen decision. The seventh step entails the actual implementation of the elected course of action.

Fig 2.5: Strategic managerial decision-making process

Subsequently, the eighth step evaluates the executed decision predicated on performance metrics (Step 3) and initiates corrective measures as deemed necessary. The ninth and culminating step demands incessant feedback, namely, consistent monitoring throughout the process. This proposed nine-step continuous, dynamic, and interrelated strategic decision-making process furnishes a cohesive framework to make the appropriate decisions indispensable for resolving identified organizational predicaments or issues (Schwarber, 2005).



2.2.7 Phases of Strategy Management

There are four phases in the historical evolution of strategic management. The initial stage of budgeting and control, which coincided with the onset of what is commonly referred to as the scientific management era, was characterized by the belief that historical patterns would repeat themselves. The subsequent phase of long-range planning emerged in the 1950s, premised on the assumption that past trends would typically persist. This period is often identified as the genesis of strategic management, with some tracing its roots back to 1954. A third phase started in the 1960s and continued for some 20 years. During this time, strategic management was viewed as a linear, sequential process, and, as a result, the emphasis in business was on strategic planning. This third phase was characterized by the feeling that the future can be predicted to the required degree and that the environment (i.e., trends and forces) is

predictable or controllable. The fourth and latest period—strategic management—began in the mid-1980s in response to a belief that the traditional planning cycles are incompatible with rapid and unpredictable changes (Koteen, 1997).

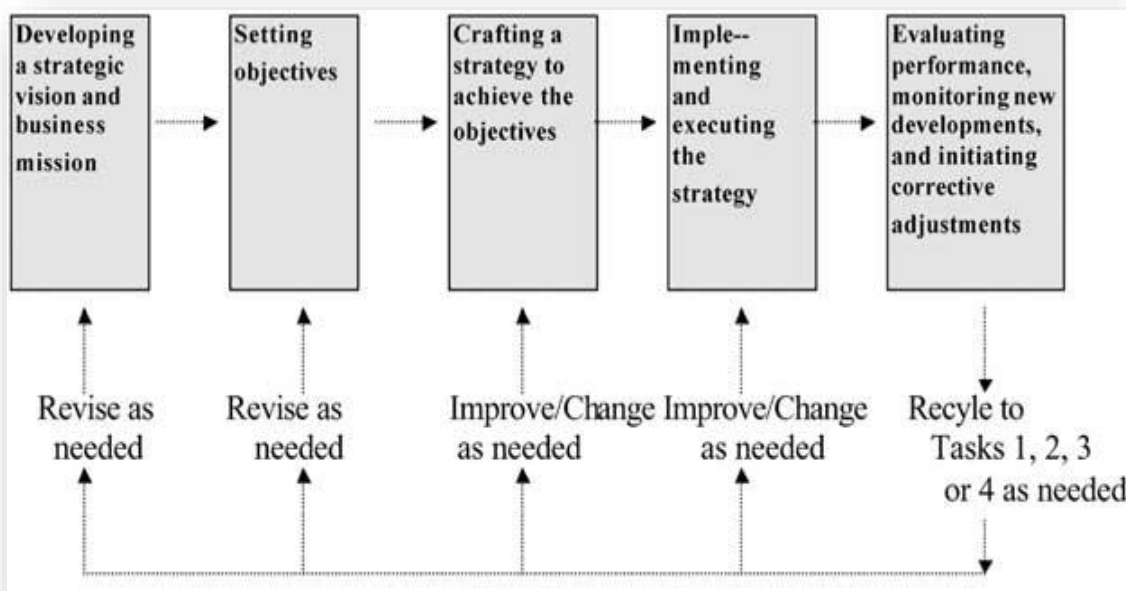


Fig 2. 6: The five tasks of strategic management.

Source: (Thompson Jr and Strickland III, 1999)

Useful ‘diagnostic tools’ in developing and understanding international university strategies and the management processes which guide them are provided in the strategic management frameworks of Thompson and Strickland (1999). In particular, their five-task strategic management model, shown in Figure 2.5, provides a sound starting point for developing a general understanding of strategy processes. In contrast, models which answer the question of “what to look for” in understanding an organization’s strategy and how it is implemented are potentially relevant in informing this research. The latter model is significant for its attention to the need for ‘strategic fits’ between strategies and institutional rewards, communications, administrative, and operational systems if the potential benefits flowing from strategies are to be optimized (Thompson Jr and Strickland III, 1999).

2.3 Higher Education System in Malaysia

The realm of higher education encompasses a diverse range of institutions, comprising both publicly-funded and privately-endowed universities. The implementation of the New Economic Policy (NEP) has furnished each program offered in public universities nationwide with an ethnic quota, stipulating a 55:45 ratio in favour of Bumiputera and non-Bumiputera students, respectively. The official language of Malaysia, Bahasa Malaysia, is employed in conjunction with English in all public and private universities (Nasir *et al.*, 2021).

The establishment of the Ministry of Higher Education (MoHE) in 2004, the Public Higher Education Act 1996 (Act 555), the establishment of the Malaysian Qualifications Agency, and the subsequent amendments to the UCCA 1997 marked the commencement of active state involvement in regulating the quality and diversity of higher education provision in the Malaysian higher education system. It is noteworthy that while the state has a dominant role in the public higher education system, there have been instances where it has contemplated the notion of "steering from a distance" in its association with public universities. The introduction of the National Higher Education Strategic Plan 2020 and the National Higher Education Action Plan 2007 in 2007 brought forth several exciting developments. The categorization of public universities into several distinct groups, based on their ascribed mission and vision, indicated the intended development of institutions and the system. University Sains Malaysia was selected as the sole university within the Accelerated Programme for Excellence (APEX) to initiate transformations in the Malaysian higher education system by sharing best practices and innovative (and creative) ideas. Scholars at this APEX university are expected to be transformative leaders and agents within the higher education system. The research universities are listed below this APEX status university (incidentally, APEX status USM is also a research university). University Malaya, University Putra Malaysia, University Kebangsaan Malaysia, and University Teknologi Malaysia were deemed relevant and critical research universities in Malaysia's endeavor to achieve world-class ambitions in research and publications. The next level below research universities comprises 11 comprehensive/focus universities that primarily undertake teaching functions.

However, this does not mean that academics in these universities do not undertake serious and intense research activities. The hierarchical foundation of Malaysia's public higher education system is predicated upon the establishment of four technical universities whose primary objective is the provision of a technically adept workforce to meet the nation's demands. (Azman *et al.*, 2014).

On the contrary, there has been a significant increase in the quantity of public and private universities in Malaysia throughout the last 20 years. The current count as of 2015 indicates the presence of 20 public and 65 private universities in Malaysia. Furthermore, the number of academic personnel employed in the twenty public universities in Malaysia has surpassed 32,000, with non-Malaysian and female academics accounting for 9% and 51% of the total, respectively. Additionally, 37% of teaching staff members possess doctoral degrees while 52% hold master's degrees. The student population in Malaysia's public universities has also seen a rise, with the figures escalating from 189,020 in 1995 to 304,628 in 2001, 508,256 in 2011, and 560,359 in 2014. This rapid expansion of the higher education sector has resulted in a considerably increased workload for academics in Malaysian universities, with the current staff-to-student ratio estimated to be approximately 1:16.47 (Abdulrab *et al.*, 2017).

The objective of the Malaysian government is to enhance its position as a global higher education hub and has set a target of increasing the number of international students to 250,000 by 2025. Malaysia has identified several strengths of TNHE, such as its status as a regional education hub, its ability to attract a vast number of international students, its cost advantage, and its potential for education tourism. Furthermore, Malaysia has granted self-accreditation status to TNHEs and takes advantage of the Malaysian Qualifications Framework (MQF) to augment its position (Subramaniam, Majid and Rashad, 2020).

2.3.1 Malaysia Education Blueprint 2015- 2025 (Higher Education)

Within this context, it is unquestionable that higher education has gained importance on national agendas, as it generates both economic and non-economic benefits for societies and individuals. Therefore, in an increasingly knowledge-based

economy and society, higher education plays a decisive role in creating and disseminating high-level knowledge and using it for society's benefit (Giroto, Llinàs-Audet and Cipolla, 2015). Thomas and Harney assert the need for a conversion in undergraduate education, which would entail incorporating the liberal arts within the conventional management curriculum. This approach would harmoniously amalgamate technical and analytical expertise with creativity, critical reasoning, and ethical sagacity (Thomas and Harney, 2020).

In a similar vein, Malaysia must augment its internationalization tactics in order to establish itself as a globally renowned hub for education and the spread of knowledge, and to attain heightened worldwide acclaim in the sphere of higher education. Therefore, a new approach to international engagement and cooperation is needed for Malaysian higher education in the face of current complexities and challenges. Several international, intergovernmental and interregional organizations such as the World Bank (WB), the Association of Southeast Asian Nations (ASEAN), the Asia-Europe Meeting (ASEM) and the Asia-Pacific Economic Cooperation (APEC) are dynamically involved in higher education internationalization activities (Munusamy and Hashim, 2020).

In order to accomplish the ten strategic shifts, it is postulated that there must be a transition from the traditional university paradigm to a novel paradigm of higher education. The current academic landscape must shift its focus to the subsequent areas: from job seekers to job creators; from academic university education to academic and TVET pathways, which are viewed as equally important and nurtured; from inputs to outcomes; from a highly centralized approach to a model of earned autonomy for institutions; from reliance on government resources to shared accountability for resources among all stakeholders; from a mass production delivery model to a technology-enabled one (Bajunid and Wong, 2016).

The 2015 Malaysia Higher Education Blueprint established a multitude of quantifiable objectives to be attained by 2025. These objectives encompass augmenting tertiary enrollment percentages from 36% to 53%, elevating international student numbers by over 100% to 250,000 and installing two universities among the

Top 100 in the Quacquarelli Symonds (QS) World University Rankings (currently, none of the universities is ranked at this level) The Blueprint also set in motion the plan to grant more autonomy to public universities. However, public universities must begin to raise their funding and not rely entirely on government funding. (Bajunid *et al.*, 2017).

The introduction of the much-anticipated Malaysia Education Blueprint (Higher Education) 2015–2025 marks another significant milestone for higher education development in Malaysia. In a way, this initiative has highlighted the shift from policy to politics, driven by the need to have a continuous “blueprint” on education under one ministry, the newly launched blueprint was intended to replace the NHESP. However, it remains to be seen to what extent the NHESP and the blueprint can be linked in that much infrastructure has been put in place in the universities to implement the NHESP. Can the blueprint potentially introduce another stratum to the already overstrained and densifying framework in Higher Education Institutions (HEIs)? Furthermore, the efficacy of the blueprint is strongly contingent on the endorsement and participation of stakeholders and universities (Sirat and Wan, 2016). This confirms that Higher education is paramount for economic and social development, yet it is in crisis worldwide. Industrial and developing countries grapple with improving higher education as they face shrinking budgets (Bank, 1994).

2.3.2 The 10 Shifts

The MEB (HE) outlines 10 Shifts that will spur continued excellence in higher education to achieve these systems and student aspirations. All 10 Shifts address critical performance issues in the system, particularly quality and efficiency and global trends disrupting the higher education landscape (Ganapathy, 2016). In the HE sectors, internationalization has increased the policy agenda and become a priority for governments and institutions. This stems from the sense of a global market for HE, competition with global commercial providers, in-house programs in multinational companies, and the development of massive open online courses (MOOCs) (Turcan, Reilly and Bugaian, 2016).

An enterprise's organization has to be designed to make it possible to respond to changed circumstances, and increased global competition. Changes are a catalyst for progress (Einarsson and Óladóttir, 2021). The Ministry of Education and Culture has presented a plan called the MEB which outlines ten shifts, as displayed in Figure 1, that are intended to promote excellent performance in the higher education system. These shifts will be implemented in three phases, starting in 2015, continuing through 2016-2020, and concluding in 2021-2025. The initial four shifts are designed to yield outcomes from the primary stakeholders in the higher education system, while the remaining six shifts focus on various enablers in the higher education ecosystem, including financial stability, empowered government, innovation ecosystem, global prominence, globalized online learning, and transformed higher education delivery. While the transformation expected by the Higher Education Ministry is anticipated to be achieved over the long term, the impact and changes will be apparent in the short term, laying the groundwork for future excellence (Kamaruddin, 2021).

The Ministry is committed to 10 Shifts that will spur continued excellence in higher education and help Malaysia achieve its aspirations for the system and each

Source: (Education, 2015)



Fig 2.7: The ten Shifts as Strategies in Achieving Students' and System Aspirations

student. These 10 Shifts apply to all institutions in the higher education system- both, both public and private. All 10 Shifts are anchored in desired outcomes of the higher education system for Malaysia and were identified based on three perspectives:

- Performance issues in Malaysian higher education include ensuring a better and more consistent education for students and improving returns on investment.
- Best practices of successful higher education systems include attracting quality participants (academic staff, students' researchers) and creating a healthy ecosystem that supports them.
- Global trends were disrupting the higher education landscape, such as unprecedented internationalization and new digital technologies (Education, 2015).

First: Holistic, Entrepreneurial and Balanced Graduates.

- It enhances the student learning experience.
- Devising an integrated cumulative grade point average (CGPA) system.
- It creates opportunities for students and academic staff to acquire entrepreneurial skills and pursue their enterprises through sabbaticals, industry secondments, business incubators, and green lane policies that support student-owned businesses.

Second : Talent Excellence.

- They are positioning HLIs according to their recognized areas of institutional excellence.
- They are enabling HLIs to develop multi-track career pathways.
- They are providing best practice guidelines.

Third: Nation of Lifelong Learners.

- We are creating a framework for recognizing prior learning.
- They are launching a stakeholder engagement programme.
- We are continuing to provide financial support.

Fourth: Quality Technical and Vocational Education and Training (TVET) Graduates.

- It is enabling the industry to lead curriculum design and delivery.

- We are enhancing coordination across the Ministry's various TVET providers.
- We are coordinating with other ministries and agencies.

Fifth: Financial Sustainability.

- We are improving the funding formulae for public HLIs.
- Incentivizing the creation of endowment and *waqf* funds,
- Enhancing PTPTN performance and sustainability.

Sixth: Empowered Governance:

- Defining five-year (3+2) outcome-based performance contracts.
- Strengthening quality assurance in the private sector.
- Moving decision rights from the Ministry to the leadership of public universities.

Seventh: Innovation Ecosystem.

- While research output is improving - Malaysia ranked 23rd for publications in 2013, up 11 places from 34th in 2009 - more can still be done. For example, Malaysia ranks 43rd out of 110 countries on several patents, and engagement levels with industry and community are still not as intensive or widespread as desired.

Eight: Global Prominence:

- Collaborating with other ministries and agencies.
- Increasing the proportion of postgraduate international students.
- Strengthening the promotion and marketing.

Ninth: Globalized Online Learning:

- Internet penetration in Malaysia currently stands at 67% — the seventh-highest penetration rate across Asia.
- We are launching MOOCs in subjects of distinctiveness for Malaysia, such as Islamic banking and finance, in partnership with high-profile international MOOC consortiums like EdX and Coursera to build Malaysia's global brand.

- I was making online learning an integral component of higher education and lifelong learning, starting with converting standard undergraduate courses into MOOCs, and requiring up to 70% of programmers to use blended learning models.
- **We are establishing the required cyberinfrastructure** (physical network infrastructure, info structure, platform, devices and equipment) and strengthening the capabilities of the academic community to deliver online learning at scale.

Ten: Transformed Higher Education Delivery: The initiation of the University Transformation Programme has been announced. This programme shall work in close collaboration with pilot Higher Learning Institutions (HLIs). It shall involve the identification, codification, piloting of best practices and tools, and dissemination of "playbooks" to all HLIs on critical improvement areas. The aim is to create greater consistency in performance standards and regulations across both public and private HLIs. This shall be achieved by enhancing the Malaysian Qualifications Agency (MQA) processes and quality assurance frameworks, and eliminating unnecessary bureaucratic procedures.

- It is launching the University Transformation Programme by working closely with pilot HLIs.
- Restructuring the Ministry organization to focus on core functions creates more robust links between HLIs and the community.

Create greater consistency in performance standards a regulation across public and private HLIs, by enhancing MQA processes and quality assurance frameworks and eliminating unnecessary red tape, as shown in **Figure 2.7**.

Therefore, Higher Education Entrepreneurship Development Policy is the current entrepreneurship education policy launched on 13 April 2010 by the Ministry of Education (MOE). The introduction of this policy shows the government's emphasis on integrating entrepreneurial values and cultures among Higher Education Institutions (HEIs) graduates. This policy aims to boost the development of more holistic and well-organized entrepreneurship programs. Specifically, the

implementation of the policy aims to produce graduates from institutions of higher education with thinking and entrepreneurial attributes as well as to increase the number of entrepreneurs among graduates who are engaged in businesses as a catalyst for the achievement of economic transformation in the country from a middle to a high-income economy while producing academics with values, skills, thoughts, and entrepreneurship qualities at the same time (Shamsudin *et al.*, 2015).

Talents Excellence is considered a new approach to improve the quality of students in preparing for their careers. According to the Gallup theory, the four elements of talent are the talent of relating, the talent of impacting, the talent of striving and the talent of thinking; applying the combined four elements empowers students eligible for a career. These four elements can be harnessed to engineer education programmes, which may be utilized to guide students in seeking meaningful employment soon. The use of these elements helps students have a reference point and be more efficient in facing future job prospects. Therefore, students are more disciplined, motivated, and cooperative by learning these elements and can think maturely when entering the real working world (Sanusi and Puteh, 2017).

The introduction of the Blueprint on Enculturation of Lifelong Learning for Malaysia (2011-2020) in November 2011 exemplified Malaysia's pledge to incorporate lifelong learning as an indispensable element of the nation's education agenda. Despite the passage of three years, the Blueprint's implementation remains an ongoing process that would benefit significantly from increased involvement from all Malaysian citizens. It is imperative, at this point, to stimulate lifelong learning by employing a comprehensive array of strategies to ensure the Blueprint's triumph and lasting effect. This will necessitate the active participation and contribution of all education stakeholders, particularly the Government, higher education institutions, and diverse training providers (Fadzil, 2014).

The development of technical and vocational education (TVET) was becoming popular in both international and national policy and in developed and developing countries. This is because it is market-driven and, most importantly, supports the emergence of industry 4.0. As has been recognized, industry 4.0, also known as the

‘internet of things, will create intelligent manufacturing related to automated machining in the production process where skills are regarded as the core component for industry employment. Teachers or instructors play a significant role in ensuring that the students they produce are marketable and face technical challenges to support the new government blueprint on National Transformation 2050, TN50. We produce students who should be ready to serve our nation concerning domestic economy, prosperity and innovation(Rahman *et al.*, 2017). Malaysia is currently enhancing its policy guidance and regulatory frameworks concerning technical and vocational education and training (TVET), while simultaneously improving its governance and program implementation to support economic transformation and sustainable development. This transformation necessitates that TVET educators are adequately equipped to confront the challenges posed by globalization, thereby enabling Malaysian educators to stand resolute and dedicated in their support of an education system capable of fulfilling a nation's aspirations and needs (Ismail *et al.*, 2018).

Public higher education institutions (HEIs) in Malaysia and worldwide face massive financial challenges from reduced public funding and budgetary cuts. There is a critical need for public HEIs to generate income from non-governmental sources, diversify income sources and manage operating costs. The purpose of this study is two-fold: to examine the financial management practices of public HEIs in Malaysia. This covers revenue diversification and cost management practices in Malaysia's public HEIs (Ahmada, Ismailb and Sirajc, 2016). There exists a highly exigent requisite for Malaysian tertiary education to transition away from a framework overseen by the Ministry towards a model wherein the Ministry functions as a policymaker and regulator, thereby endowing universities with the authority to direct their own developmental trajectory. Furthermore, the Malaysian administration's agenda for the years 2016 to 2020 encompasses the enhancement of public universities' governance, signifying that said institutions will be entrusted with the prerogative to make determinations instead of the Ministry (Abdulrab *et al.*, 2017).

Introducing innovation in Malaysia's existing education systems is a way to cope with local and global environmental changes. It is imperative to renew the operation of the country's education system, which is lagging. According to OECD,

in the 21st century, innovation is essential in education to improve learning outcomes, improve the quality of educational provision, ensure equity and equality, reduce educational costs, and maximize revenues from the educational budget. Therefore, our education can remain relevant, along with the rapid changes in society and the economy (Fuad, Musa and Hashim, 2020).

Global Prominence (eighth shift), comprising internationalization and education mobility, is considered one of the supreme key result areas (KRAs) in the Malaysian Education Blueprint 2015-2025 goals (bin Mohd Ali, 2018). Among the ten shifts identified by the Malaysia Ministry of Higher education is Globalized Online Learning. Malaysia Ministry of Higher Education aims to implement a blended learning model in higher education integrating technology, MOOC and current face-to-face models. Thus, this makes MOOC design studies essential to ensure the model fits nicely and has high (Taib, Chuah and Abd Aziz, 2017).

The knowledge revolution of the late 20th and early 21st centuries has demanded that universities change and transform themselves to be relevant and cope with the changing scenarios. Many issues concerning the higher education sector, including funds for research, curriculum relevance, students' marketability, and rankings, have dominated discussions amongst the various stakeholders (Terengganu et al., 2016).

2.3.3 Access to higher education intuitions

Access to higher education institutions refers to the opportunity and ability of people to enroll and complete tertiary education programs. According to a report by UNESCO IESALC (Daniele Vieira, 2020). In the identical context, the global access to tertiary education has experienced a significant increase from 19% to 38% during the previous two decades. However, despite this achievement, there are still lingering socioeconomic and regional inequalities that need to be addressed. The report suggests that the formulation of policies and strategies is necessary to ensure the integration and retention of the most vulnerable groups, including but not limited to the impoverished,

the female population, ethnic minorities, and individuals with disabilities.(Daniele Vieira, 2020).

Over the course of the last forty years, higher education has experienced an exponential expansion in Malaysia. This growth has been marked by significant improvements in access to both public and private higher education institutions (HEIs). The primary factors contributing to this increase in accessibility include a rise in secondary enrolment and completion rates, which has been facilitated by the democratization and universalization of the system. Additionally, this growth has been further supported by a diversification of institutional patterns that has led to the emergence of public universities, polytechnics, community colleges, public colleges, private universities, and foreign branch campuses. Finally, a policy environment that has encouraged private sector participation and internationalization has also played a key role in this expansion (Mukherjee, Singh, Jasbir S. Fernandez-Chung and Marimuthu, 2018). The Malaysian higher education system has garnered favorable ratings and a number of its universities have achieved high rankings in the Asian region. However, it is imperative for the system and its institutions to adopt an inclusive approach to education that transcends mere institutional slogans. It can be contended that Malaysia has the potential to assume a prominent position in the region by promoting flexible learning pathways that prioritize the needs of disadvantaged and marginalized groups (Morshidi Sirat, 2021).

2.3.3.1 Previous performance

As illustrated in **Figure 2.8**, there has been a substantial increase in accessibility to higher education. In 2012, Malaysia achieved a gross higher education enrolment rate of 48%, indicating a significant rise in enrolment by 70% over the last ten years. This resulted in a total of 1.2 million students enrolled in public and private Higher Learning Institutions (HLIs), consisting of public universities, polytechnics, community colleges, private universities, and private colleges. Between 1990 and 2010, there has been a noteworthy increase of six times in Bachelor's degree enrolment and ten times in Master's and PhD enrolment. Malaysia now holds the third position

among ASEAN countries in Master's and PhD enrolment, following Singapore and Thailand.(Ministry of Education, 2015).

2.3.3.2 Aspirations

The Ministry aims to enhance accessibility and enrolment in higher education by 2025. The successful enhancement of tertiary enrolment rates from 36% to 53% and higher education enrolment from 48% to 70% would result in Malaysia achieving the same enrolment levels as the highest in ASEAN. To achieve this growth scenario, an additional 1.1 million places will be required by 2025, primarily through the expansion of technical and vocational education and training (TVET), private higher learning institutions (HLIs), and online learning.(Ministry of Education, 2015).

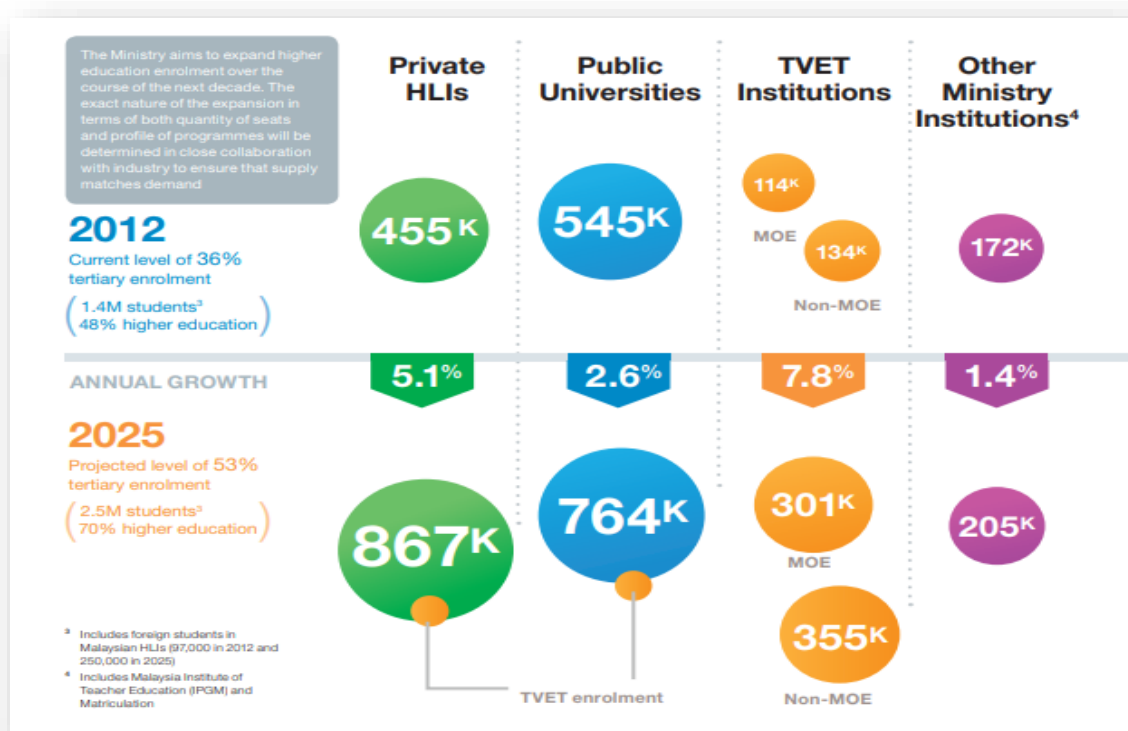


Fig 2. 8: What would it take for higher education enrolment to be among the highest in ASEAN?

Source:(Ministry of Education, 2015)

2.3.4 Quality

University education is experiencing a surge of interest locally, regionally, and internationally in serious efforts to develop and improve it, as interest in educational

service quality has become a global phenomenon that governments and institutions of higher education are focusing on in order to achieve the best and brightest. This interest has resulted in the establishment of some international formulas and mechanisms to ensure quality in higher education, such as accreditation systems for institutions and programmes, which have improved the quality of teaching and learning in many countries around the world (Mohd Ali and Zulkipli, 2019). Four metrics are used to assess quality in higher education. Graduate employability assesses the effectiveness of education in preparing students to enter the labour force and meet the needs of the economy. Measures of research output are significant indices of knowledge generation and innovation. Malaysia's capacity to attract overseas students demonstrates the country's international standing as a higher education hub. Finally, university rankings provide an indication of the overall quality and subject area strengths of Malaysia's HLIs (Malaysia, 2015).

2.3.4.1 Aspirations

The Ministry's aspiration covers three aspects: the quality of graduates, the quality of institutions, and the overall system. as shown in **Figure 2.9**.

- On the quality of graduates, the Ministry aspires to increase the current 75% graduate employability rate to more than 80% in 2025.
- Only one of Malaysia's universities is currently in the Top 200 QS global rankings on the quality of institutions. By 2025, the Ministry aims to place one university in Asia's Top 25, two in the Global Top 100, and four in the Global Top 200.
- On the quality of the overall system, the Ministry aspires to raise its U21 ranking for research output from 36th out of 50 countries to the top 25 and to increase the number of international students in HLIs from 108,000 today to 250,000 students in HLIs and schools by 2025.
- Malaysia also aspires to rise from 44th out of the 50 countries in the U21 output ranking that covers research, enrolment, and employability to be in the top 25 by 2025 (Ministry of Education, 2015).

2.3.4.2 Universitas 21

The Universitas 21 (U21) Report assesses higher education in 50 countries across four dimensions: resources, environment, and connectivity; it serves as a benchmark for governments, education institutions and individuals. It also highlights the importance of creating a healthy environment that enables HLIs to contribute to economic and cultural development, provide a high-quality experience for students, and compete with overseas applicants (Melbourne institute, 2014).

2.3.5 Entrepreneurship

As ESP-HEIs 2013-2015 ended, another action plan known as Entrepreneurship Action Plan - Higher Education Institutions 2016-2020 (EAP-HEIs 2016-2020) was established to resume the entrepreneurship agenda. The latter plan is guided by two strategies from Malaysia Education Blueprint 2015-2025 (Higher Education). The

focus of these strategies is to develop an entrepreneurship curriculum as well as to enhance the entrepreneurship teaching and learning ecosystem at HEIs (M. of H.



Figure 2. 9: the system's aspirations in access and quality.

Education, 2020). In the same context, the Malaysian Education Blueprint 2015-2025 has been formulated by the esteemed Ministry of Education in Malaysia with the objective of enhancing the nation's education system. The blueprint encompasses a comprehensive strategy consisting of 10 Key Focus Areas, including the cultivation of well-rounded, enterprising, and symmetrical graduates. The incorporation of Entrepreneurship Education (EE) has been delineated as a constituent of this plan, aimed at empowering the country towards achieving the status of a high-income developed nation(Din *et al.*, 2020).

EAP-HEIs 2021-2025 was built on the Malaysia Education Blueprint 2015-2025 (Higher Education) foundation and previous entrepreneurship strategic and action plans. In EAP-HEIs 2016-2020, the Job Creator Framework (JCF) was developed to provide a roadmap for entrepreneurship education at HEIs. The JCF consisted of three (3) primary themes. The first is the Acculturation of Entrepreneurship to teach entrepreneurship attributes during the early part of the student's study. The second theme is establishing programmes for strengthening entrepreneurship and providing students with opportunities for entrepreneurship learning and skills. The third theme is to enhance entrepreneurship support programmes and support systems for student businesses on campus(M. of H. Education, 2020)

Shift 1 in Malaysia Education Blueprint 2015 - 2025 (Higher Education) say Holistic, Entrepreneurial and Balanced Graduates. Thus, entrepreneurship is part of the plan's first transformation, indicating its importance.

2.3.5.1 Previous Performance

Global Entrepreneurship Monitor (GEM)⁹ report shows that only 41.8% of Malaysians view entrepreneurship as a good career choice compared with 11 Asia pacific and south Asia counters; Malaysia ranked lowest in ascribing high social status to successful entrepreneurship and highest in fear of failure. This explains why Malaysia lags in entrepreneurship, particularly nascent and early-stage entrepreneurship. The GEM report indicates that Malaysia's nascent entrepreneurship

rate is the lowest among the 11 Asia Pacific and South Asia countries surveyed. Its Total Early-stage Entrepreneurial Activity (TEA)¹¹ is the second lowest among the countries surveyed (Ministry of Education, 2015).

2.3.5.2 The Strategy: Enhancing the Learning Support System

To implement this strategy, the plan proposed three waves as follows:

First Wave 1 (2015):

- 1- initiate the development of the Job Creator framework in consultation with HLIs and entrepreneurs.
- 2- Review existing policies and guidelines to encourage and facilitate excellence in service and entrepreneurial learning.
- 3- Review and develop guidelines for supporting student activities (e.g. green lane policy for student-owned businesses).

Second Wave 2 (2016-2020):

- 1- launch the Job-Creator framework across public and private HLIs to support students in creating and growing businesses.
- 2- Develop Unity Index or indicators and roll them out across HLIs.
- 3- Introduce rewards and incentives for excellence in service and entrepreneurial learning.

Third Wave 3 (2021-2025):

- 1- Refine and improve Job-Creator Framework for HLIs.
- 2- Review the effectiveness of the Unity Index and improve ongoing tracking.
- 1- Enhance recognition and best practice sharing of instructional excellence by individuals and institutions (Ministry of Education, 2015).

2.4. Research Gaps:

There are many studies that have examined the impact of strategic management in higher education organizations in Malaysia. (Wan-Hamdan, Hamid

and Mohd-Radzuan, 2011),(Lim and Chuah, 2022)(Abdullah and Rahman, 2011)(Hafit *et al.*, 2015)(Munusamy and Hashim, 2019).

The research gap here lies in the fact that there are no studies that have addressed it Malaysian Blueprint 2015-2025 (Higher Education) To compare the system's ambitions in this blueprint, and what actually happened in reality, by focusing on three shifts out of the 10 covered in the plan.

As an attempt to bridge this contextual gap. In addition, this study is useful to strategic decision makers in the fields of Malaysian higher education organizations. Figure shows the research gaps that need to be filled in this study. This study examines the gap between the aspirations contained in the Malaysian Higher Education Blueprint (2015-2025) and the actual achievements in the reality of Malaysian higher education organizations.

The framework will analyze three variables of the blueprint, namely (sustainable access to higher education organizations - ranking among universities - entrepreneurship) after the completion of the first and second waves. This comparative approach will evaluate the extent to which the plan's objectives for the higher education system are achieved.

The main components of the framework are expected to include:

- 1- Objectives of the Malaysian Higher Education Plan: This section will detail the specific ambitions and objectives contained in the plan to improve the higher education system in the three aforementioned axes.
- 2- Characteristics of the system before the planned implementation: The Malaysian Plan for Higher Education addressed its characteristics before launching the plan.
- 3- Post-Wave 1 and Post-Wave 2 System Characteristics: This section will examine the state of the system with respect to the aforementioned third axes after the first and second waves of plan implementation, respectively.
- 4- Gap analysis: This section will compare the plan's objectives with the results achieved, especially after the end of the second wave

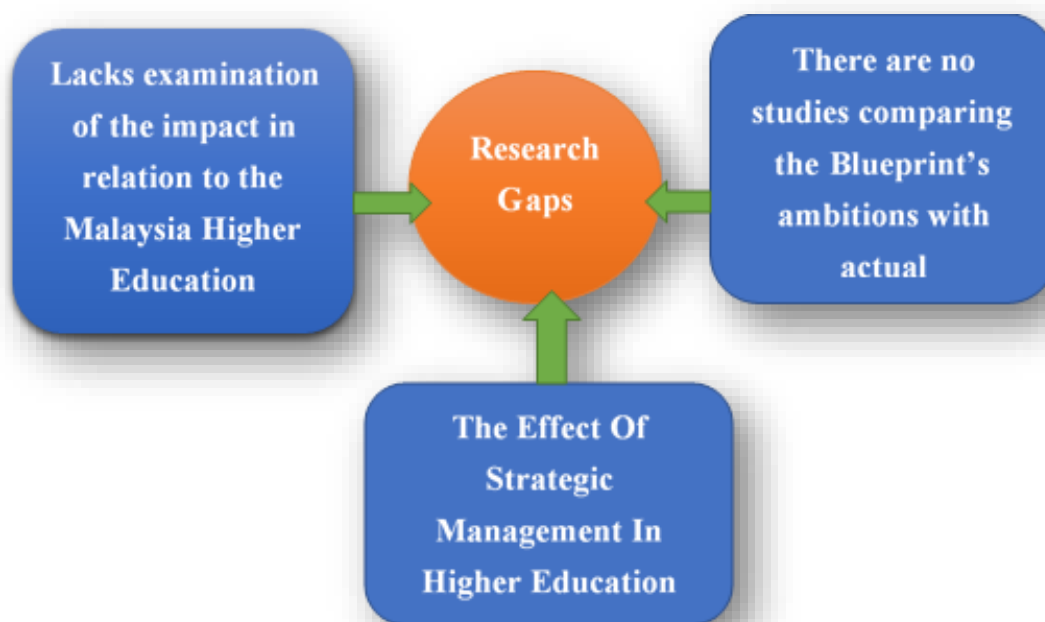


Figure 2. 10: Research gabs.

This study aims to fill this gap in **Figure 2. 10** by analyzing the aspirations of the planner in the three selected Shifts and comparing them with the actual outcomes in Malaysian higher education institutions.

2.5. Chapter Summary

Malaysia will not continue to be the preferred choice (8th in the world) for higher education for international students until it realizes the extent and importance of my strategic management approach to the implementation of Malaysia Education Blueprint 2015-2025 (Higher Education). which suggests essential changes in how the ministry and the system work to achieve this goal. Of which:

To instill an entrepreneurial mindset throughout Malaysia's higher education system and foster a culture that nurtures graduates with an innate drive to create employment opportunities, as opposed to solely seeking out existing ones, represents a critical imperative. Such a transition necessitates moving away from the present

model of highly-centralized governance for Higher Learning Institutions (HLIs), toward a model centered on earned autonomy within the regulatory framework.

This chapter explores the strategic management of higher education organizations in light of the Malaysia Education Blueprint 2015-2025 (Higher Education). The discussion encompasses an analysis of previous plans and the current Blueprint, which was launched in 2015. The objective of the Blueprint is to implement 10 Shifts in the policies of the Ministry of Higher Education, universities, colleges, and educational organizations, culminating in 2025 via three successive waves. In addition, the chapter delves into the strategic management process, which includes concepts, tools, stages, challenges, types, and construction. Furthermore, the current Blueprint is scrutinized in terms of presenting the 10 Shifts changes, with a particular focus on access to higher education, quality, Entrepreneurship.

Therefore, this study contributed to the literature by examining the current Blueprint for Malaysian higher education. Get to know the recent performance of higher education organizations before the first wave of the blueprint through the so-called current performance and the aspirations of the scheme in the ten years following the launch year, in only three axes: increasing access to organizations' Higher education, ranking of Malaysian universities at the Asian and global levels, and entrepreneurial. Finally, based on the literature reviewed and exposed, the theoretical framework for the study was drawn, and hypotheses were developed for testing in the coming chapters.

CHAPTER 3

METHODS AND METHODOLOGY

The methodology is the study of the methods that are employed in research(Bryman, 2008); the term “methods” generally refers to the techniques used in the research process to assist acquisition, recording, and interpretation of data which are relevant and insightful as to yielding usefulness to answer the research questions(Read, 2003).

3.1 Introduction

This chapter presents the rationale for choosing the study methodology, whether quantitative or descriptive. Secondary data issued by the Ministry of Higher Education and some Malaysian universities will be collected to achieve the study's objectives. The study's primary goal is to enable strategic management tools in higher education institutions in Malaysia. This study follows the descriptive and exploratory approach, which involves collecting secondary data from published and unpublished sources. The data collection process follows the statistical analysis process, as the study will depend on data analysis on ratios, repetitions and comparisons.

3.2 Nature of this Research

Different kinds of research require different kinds of methods and methodologies. In research design, the types of research questions and answers sought are essential indicators of the nature of the research and hence determinants for selecting a set of suitable research methods. In general, when the question under investigation has not been addressed by existing studies, or what has been done is

inadequate with partial or potentially unsound conclusions, it will be convincing for the researcher to choose a qualitative research approach(Read, 2003) .Exploratory research is a study that seeks to answer a question or address a phenomenon. The nature of the entity being studied does not allow a variable to be manipulated by the researcher, it cannot be completed in a controlled environment, or, most likely, the researcher can't determine all the influences on the entity; therefore, a more exploratory look at the topic is more beneficial(Singh, 2021). Therefore, this study tends in nature to two types of studies: the first type is descriptive studies, and the second type is exploratory studies.

3.3 Research Design

Research design can be defined as the fundamental framework that guides the execution of research projects. It is the foundation upon which data collection, measurement, and analysis are based. The design provides an overarching plan that outlines the researcher's intended actions, from the formulation of the hypothesis and its operational implications to the ultimate stages of data analysis (Bhatta, 2013). On the other hand, a research design is a basic framework that provides specific details regarding the process to be followed in conducting the research(Sreejesh, Mohapatra and Anusree, 2014). Aqualitative design was used for this research. This approach was chosen because it allows rich data from multiple sources, including interviews with various individuals within the studied institutions. A more specific description of this method is phenomenological data analysis, which includes the process of data reduction, the analysis of particular statements and themes and a search for all possible meanings (Creswell, 1998).

3.4 The Study Variables

The study includes three main variables, which are as follows:

- a) Substantial Increase in access to higher education Institutions.
- b) Performance on global rankings in Asia, globally (QS- U21).
- c) Student Entrepreneurship.

Increasing access to higher education institutions includes many sub-variables, for example, the degree of access to private and public universities. And also, the degree of access is based on the scientific degree (Bachelor - Master - PhD) and so on. Regards to the performance variable at the international level and the Asian level, the study relied on two measures only (QS - U21). As for entrepreneurship, four indicators were relied upon, which are as follows (KPL2, KPL1, KPL4, and KPL1).

3.5 The Sample

Sampling means collecting data from a smaller number than the whole list of units. The answers drive the need for a sample instead of a census of several questions. Does one have the time to collect information from all the branches? Does one have the resources to collect information from all the units? Moreover, most importantly, is it necessary to collect information from all the branches for what one wants to learn from the data? (Miller, 1998).

When one only collects data from a subset or sample of the complete list, the question arises whether or to what extent the sample looks like the whole universe. The difference between probability and nonprobability samples is the ability to answer this question. Probability samples are randomly chosen from the universe without the researcher having any role in determining which units are sampled and which are not. Non-probability samples are samples in which the researcher does play a role in choosing which branches from the complete list or universe end up in the sample for data collection (Miller, 1998).

This study relies on secondary data issued by The Malaysian Ministry of Higher Education and Malaysian universities related to the Malaysia Education Blueprint 2015–2025 (Higher Education). Therefore, the study will only analyze the secondary data for each of the following variables:

Substantial Increase in access to higher education Institutions, Universities Performance on global rankings in Asia, and globally (QS- U21), and Student Entrepreneurship.

The study will entirely concentrate on examining secondary data related to the following variables:

Substantial Increase in Access to Higher Education Institutions: The variable intends to assess the extent of progress towards improving access to higher education that has been achieved by Malaysia since end of two waves of the blueprint. The study will analyze figures from Malaysian Ministry of Higher Education and Malaysian universities so as to comprehend how much has access increased over time.

Performance on global rankings in Asia and globally (QS-U21): This variable seeks to evaluate how Malaysian universities are performing in global rankings particularly in Asian and global contexts. The study will be relying on the rankings from the Malaysian Ministry of Higher Education among other sources, as a way of analyzing trends or any improvements made between 2015 and 2020.

Student Entrepreneurship: With this variable, we explore whether there is engagement in entrepreneurial activities by Malaysian students. To determine levels of student involvement with entrepreneurship as well as assessing any advancements made in this field, the research will employ analyzed datasets.

Therefor, The study will solely rely on secondary data from the Malaysian Ministry of Higher Education and Malaysian universities to analyze the variables of substantial increase in access to higher education institutions, performance on global rankings in Asia and globally (QS-U21), and student entrepreneurship.

3.5.1.Strengths and Weaknesses of Secondary Data.

a) Strengths:

1. Government reports as well as university numbers: The use of official data from the Ministry of Higher Education and universities enhances reliability, credibility, and ensuring that it is based on HE's official position and statistics in Malaysia.
2. Secondary data: Although secondary data analysis does not require direct collection of samples, it allows for access to extensive datasets that would otherwise be impossible to obtain directly thus providing a general perspective on selected variables by Malaysian Blueprint for higher education.

a) Weaknesses:

1. Representativeness: However, the generalizability of these results may be limited because the data only reflects higher education in Malaysia as per three variables used in this study. Nevertheless, this can be applied to other transformations proposed by the plan and different contexts.
2. Potential bias: However, while reliable, government reports and university data may still contain underlying biases or selective reporting. The study should analyze any possible drivers or limitations of the data collection and reporting processes.
3. Depth of analysis: However, secondary data analysis allows for examining trends and patterns it might lack depth and nuance that primary research has, where qualitative insights were understood by researchers through direct engagement with issues under investigation.

Quantitative data will undergo stringent statistical scrutiny to establish how far progress has been made with respect to access to higher education, global rankings shifting, and student entrepreneurship development. Hypothesis testing would be premised on a comparative analysis between the targeted goals outlined in the Malaysia Education Blueprint and the actual performance across these axes.

3.5.2. Validation and Reliability

Accordingly, cross-referencing and triangulation from multiple reputable sources to ensure the accuracy and reliability of the findings. Any disparities or inconsistencies will be dealt with in a careful examination and validation process. The collected data would enable a holistic assessment of the improvement in these critical areas, as well as identify whether planned targets match actual outcomes leading to accepting or rejecting hypotheses made by this study.

3.6 Data Collection

Secondary data analysis is the use of data collected for research by someone other than the investigator. Data can be collected from individuals, groups, or social artefacts. Individuals are human beings, whether adult citizens or employees in city hall. Groups represent collectivizes, such as cities, counties, countries, or departments. Suppose one wants to know how an employee feels about a different work schedule or how a citizen evaluates the delivery of city services. In that case, the data are collected from each individual. Thus, the individual is the unit of analysis. If one wants to know a city's population or the hospital's mortality rate, the data are collected from each city or hospital. In these cases, the unit of analysis is the group and not the individual because only a group can have a population or a mortality rate. To determine whether data collection should be focused on the individual or group, one asks what variables one wants to collect data. If the variables are characteristics of individual people, then

the unit is individuals; and if the variables are characteristics of groups of people, then the unit groups (Miller, 1998).

Suggested that the strategic planning document is the critical document that initiates the realignment and integration of the planning, management and decision-making processes that campus leaders should use to formulate missions and goals; the policies and strategies to achieve them; and the methods to ensure that these strategies are used to achieve the goals. Of the institutions that were willing to share their strategic management documents, the study can then identify which ones have engaged in strategic management and which ones have not. According to Dooris and Lozier, (1989), strategic management did not occur at all institutions. According to Clough, ((2001), "If strategic management is present it may occur at several levels and in several different places throughout the institution".

The primary objective of this study is to assess progress and performance across three key areas: access to higher education institutions, global rankings in Asia and globally (QS-U21), and student entrepreneurship in Malaysia. The study relies on the analysis of secondary data sourced from the Ministry of Higher Education in Malaysia and various complementary sources.

3.6.1. Data Sources

a) Ministry of Higher Education Malaysia:

The main source of data is official publications, reports and statistical records issued by the Ministry of Higher Education Malaysia. These documents are rich in wide variety of indicators on higher education access, enrollment rate, graduations statistics and institutional growth.

b) Malaysia Education Blueprint 2015-2025 Higher Education):

This comprehensive blueprint serves as a key source that presents strategic objectives, goals and relevant performance indicators set forth by the Malaysian government for its higher education sector. Information extracted from this blueprint allows comparing desired objectives against achieved targets about highlighted fields of study.

Additional Secondary Sources: Complementary sources encapsulate different kinds of reports, scholarly articles, databases and publications from credible institutions such as governments, colleges and research providers. The topic covers higher learning, the whole world and Malaysian entrepreneurship. These customize surfaces are added to the data from the Ministry of Higher Education and the Education Blueprint to verify and support the research findings.

3.7. Data Collection Process

The data collection process involves the systematic retrieval and compilation of relevant information from the aforementioned sources. It includes the extraction of quantitative data points such as enrollment rates, access metrics, ranking positions, and entrepreneurial indices. Additionally, qualitative insights related to policy changes, initiatives, and contextual factors influencing these metrics will be considered.

Therefore, we used different sources to get the Malaysia Education Blueprint 2015-2025 (Higher Education) information, as shown in Table No. (3.1) to obtain the data that enables the study to compare the target performance in the three axes study and the actual performance, Thus, the study hypotheses are accepted or rejected.

Table 3. 1: Secondary Data Sources for the Study.

Sources	Year
https://www.mohe.gov.my/perkhidmatan	2021
https://www.umt.edu.my	2021

3.8. Data Analysis

Data analysis is the processing and interpreting of primary data to extract useful information. It also refers to understanding the relationship between interpreted information and the actual status or phenomenon and evaluating the situation (Bhatta, 2013). For proper quantitative analysis, the notification must be expressed in numerical formats. For numbers to be the essential components of the data set in quantitative analysis, all attributes of the variables must be converted into numbers. This process is called coding, where numbers are assigned to each attribute of a variable (Jung, 2018). To understand and solve business problems, we must have a firm grasp of the characteristics of the data in question. How do we collect data? What kinds of data exist? Where is it coming from? Before analyzing data, analysts must know how to answer these questions. In doing so, we build the base upon which the rest of our examination follows (Voleti, 2019).

Once we obtained the secondary data for the study, we conducted statistical analyses, implemented graphs, and sometimes created tables in proportion to the nature of the data to achieve the study's objectives and test its research hypotheses. In most cases, the analysis process relied on ratios, repetitions, comparisons between different groups, and comparisons between what was achieved and system aspirations for each study variable. A comparison will do between the target aspirations for each of the three variables of the study according to the Malaysia Education Blueprint 2015-2025 (Higher Education) and actual performance, Based on the period from 2015 to 2020, After the end of the first and second waves of the blueprint.

A structured approach was followed by the study in conducting the data analysis comparing target aspirations outlined in the Malaysia Education Blueprint 2015–2025 for higher education with actual performance from 2015–2020 using statistical methods, graphs, and tables. This is a step-by-step guide:

Step 1: Data Collection and Preparation:

Collecting secondary data related to the three variables identified in the Malaysia Education Blueprint. Ensure data consistency, reliability, and relevance to the study's objectives.

Step 2: Comparative Analysis:

Compare actual performance data with the target aspirations specified in the Malaysia Education Blueprint. The set aspirations for each variable will be quantified using ratios, percentages or indices to indicate how far these have been met.

Step 3: Statistical Testing: Perform statistical tests (e.g., averages, ratios) to determine significant differences between the achieved results and blueprint aspirations. Identify any trends or patterns over the period between first and second waves of blueprint.

Step 4: Graphical Representation: Generated graphs such as line graphs bar charts among others that were utilized by this Thesis will represent visually how target aspirations compare with actual performance for each variable over time.

Step 5: Displaying and Visual Aids: The study will construct tables that provide detailed figures, comparisons between targets and the actual realization for each variable within different periods of time.

Step 6: Interpretation and Conclusion:

The findings will be reviewed, comparing significant differences, trends, or patterns observed between the set aspirations and achieved performance .

3.9. Chapter Summary

This chapter focuses on explaining the methods used in this research. The study design was descriptive and exploratory, using statistics tailored to the inherent characteristics of the data to test the hypotheses of the study. Throughout this chapter, there is a lot of emphasis on taking a descriptive and exploratory approach. This strategic choice was made due to the complexity associated with Malaysia's blueprint for higher education (2015–2025),

Besides, this chapter described the method of Data collection and study variables that were limited to only three variables representing a sample size due to inability to get all elements data of blueprint . This chapter also presents sources of data collection which are largely secondary sources as well as statistical method applied. Accordingly, it was found out through an exploration together with an examination that some variables from these blueprint are difficult to measure because there is not enough data about them. Consequently, they were excluded and limited only to those variables having met requirements for validity of published information concerning such ones.

CHAPTER 4

RESULTS

4.1 Introduction

The previous chapter explained how to conduct an exploratory and descriptive study. Based on the secondary data obtained from its sources and analyzed, this chapter presents the results of the data analysis. This study first deals with the levels and degrees of study in Malaysian higher education institutions. And some of the performance indicators contained in the Malaysian Education Plan issued in 2015 compare the performance of these variables at the time of the report's issuance and their status after five years (2020). For example, the variable of the ability to access higher education institutions with different specializations. And also, the variable ranking Malaysian universities among the world's top 500 universities versus the global average, according to the QS report. Malaysia's ranking in the U21 report. And the student entrepreneurship variable.

Specifically, this study improved some indicators after comparing its three variables (access - ranking - entrepreneurship) to examine those relationships and make the required comparisons according to the study's hypotheses mentioned in the first chapter. All of this is done in the following steps in this chapter.

4.2 Level and Degrees of Study in Malaysian Higher Education Institutions:

The study's first purpose is to identify the levels and degrees of study in Malaysian higher education institutions. The Ministry of Higher Education has classified the degree of enrollment of students in universities into ten levels, as can be seen from **fig.4.1**. Based on two types of foundations as follows:

I.First: Based on the academic degree awarded to students:

1. PhD.
2. Master.

3. Postgraduate Diploma.
4. Bachelor Degree.
5. Advanced Diploma.
6. 6-Diploma.
7. Certificate.
8. Professional
9. Matriculation & Foundation.
10. Others.

II. According to the type of institution in which the student studies:

1. Public universities.
2. Private HEIs.
3. Polytechnics.
4. Community Colleges.

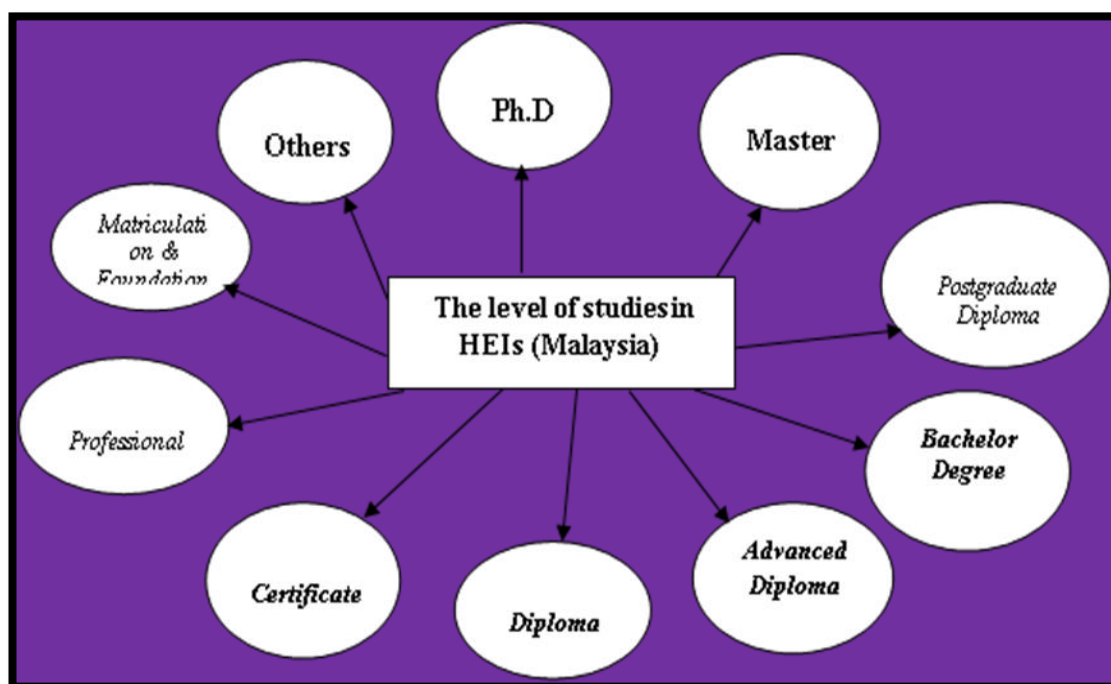


Fig 4. 1: The level and degrees of studies in higher education institutions in Malaysia, the researcher created it.

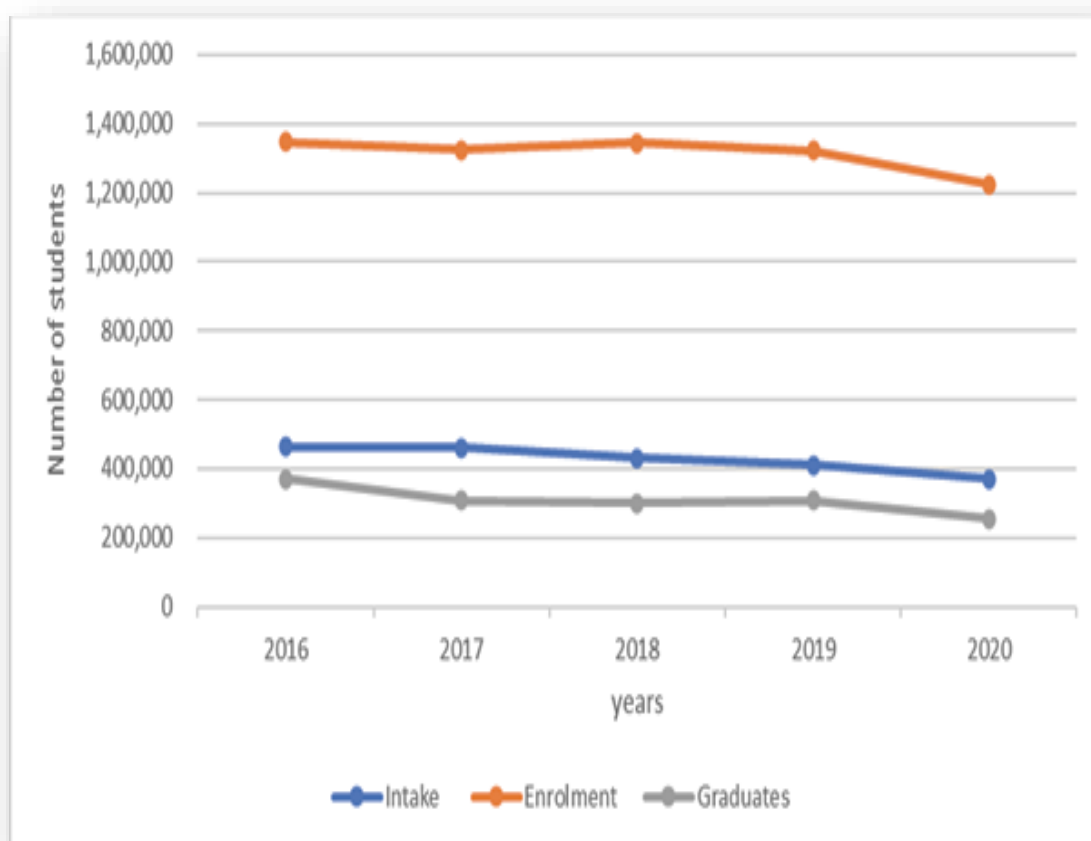
4.3 Increase in Access to Higher Education Institutions

For the second purpose, the data have been analyzed for the period (20016-2020) in all HEIs categories. Data included Public universities, Private HEIs, Polytechnics, and Community Colleges, and all levels of Studies, which are

(Bachelor's Degrees, Master, PhD Postgraduate Diploma, Advanced Diploma, Diploma, Certificates, Professional, Matriculation & Foundation, Others) for the total number of Students' Intake, Enrolment, and Graduates. As for the second goal, the data has been analyzed in three levels only (Bachelor, Master, and PhD); and three categories (public, privets, and Polytechnic) at all periods the total number of Students Intake, Enrolment, and Graduates.

4.3.1: The Total Number of Students' Intake, Enrolment and Graduation by Level of Studies

The bottom graph shows access distribution in higher education institutions in Malaysia, divided into three categories, see **Graph4.1**. Intake, Enrolment, and graduation in five years from 2016 to 2020. The number of students in all categories dropped slightly with each year. However, the data for the year 2020 shows fell steady Percentage of 10% - 8.1 % - 21% of students for Intake, Enrolment, and Graduates, respectively, of student participation in HEIs in Malaysia. And by comparison that decrease with the previous years, this significant decrease in that year might be due to Covid-19. Therefore, the widespread epidemic worldwide caused internal and external transportation to stop. Hence, the students cannot access both international and local universities. The epidemic has caused many people to lose their jobs, thus, unable to pay university fees.



Graph 4.1: The total Number of Students' Intake, Enrolment, and Graduates by Level of Studies in HEIs, 2016- 2020.

4.3.2 The Second Part of the First Purpose

The data has been analyzed for the number of students Intake, Enrolled, and Graduates; who participated in Bachelor, Master, and PhD degree programs only in HEIs (Malaysia) during the same period.

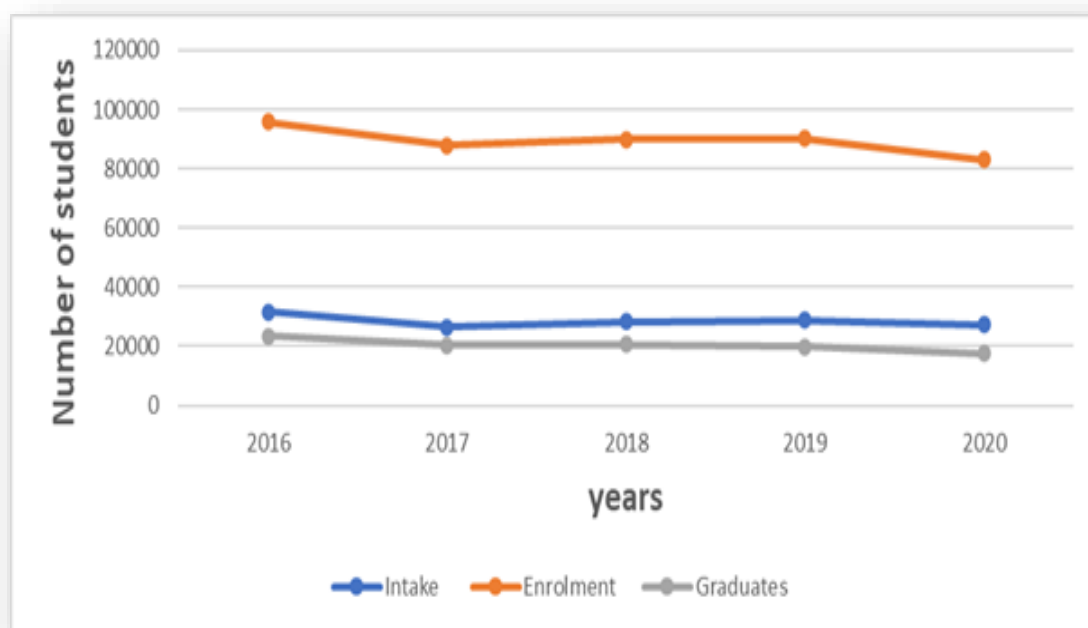
4.3.2.1 The Number of Students who Participated in the Bachelor Program:

The graph 4.2 shows the variation of the number of students enrolled in bachelor programs for the last five years in Malaysian higher education institutions. Here's a breakdown of the key points:

Peak Enrollment in 2016: This chart depicts the highest number of undergraduates was observed in the year 2016, with up to 696,899 students enrollment. The obvious implications are that there was a greater number of students joining bachelor degree programs that particular year. **Sharp Decline in 2017:** After a record breaking enrollment of undergraduate students in the 2016 with a count of 220,128 the enrollment nosedives to 2017 hitting a low of 148,771. There is proportional retrenchment in the enrolment of Bachelor candidates this year compared to the previous years.

Stable Graduation Figures in 2016: The statistics suggest the variations in the number of graduates since the data indicates an increase in the number of enrolled students to 190,326, only to fall later in 2017 as illustrated by a drop to 180,158. This implies that while fewer students enrolled in 2017, a similar number still successfully completed their degrees. **Fluctuation Over Five Years:** Overall, this chart illustrates a difference of five consecutive years with peaks in each case and then troughs in between. The reasons of this instability are found outside the organization, and they involve the above mentioned factors, including the changes of government policies or economy conditions, and the shifts in the student demographics and their preferences.

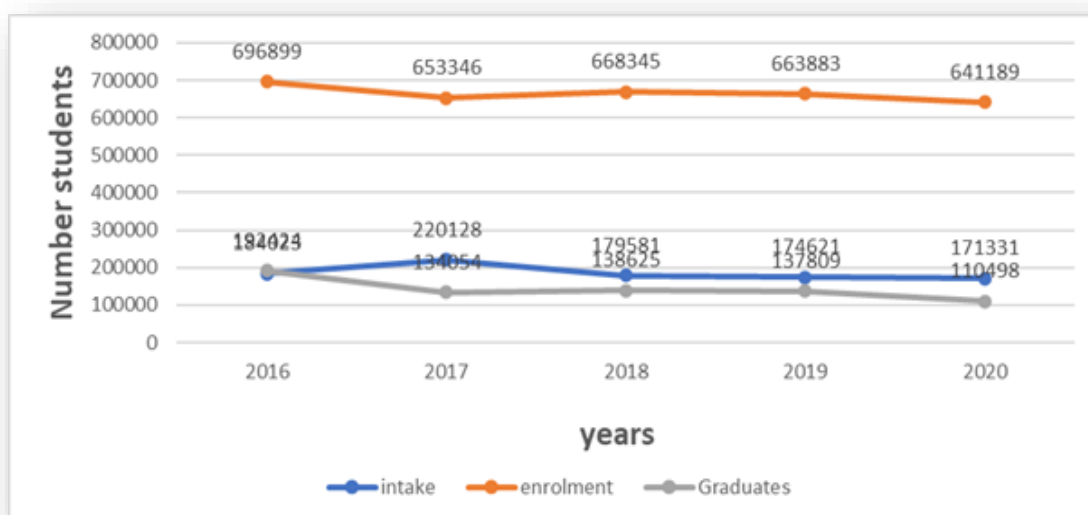
Potential for Further Analysis: Though the graph offers a vivid diagram of ups and down in the undergraduate enrollment, it is important that one looks at the real reason why these fluctuation exists. Such studies would provide insights into the variables that contribute to these fluctuations. The knowledge garnered from this analysis could then be applied to enhancing the policies and strategies which would assist in the management of student intake and retention in the higher educational institutions in Malaysia.



Graph 4.2: The Number of Students Intake, Enrolment, and Graduates by Bachelor's degree in HEIs from 2016- 2020.

4.3.2.2 The Number of Students who Participated in the Master Program.

spread of the Coronavirus significantly impacted the economic situation and the ability to join the university.

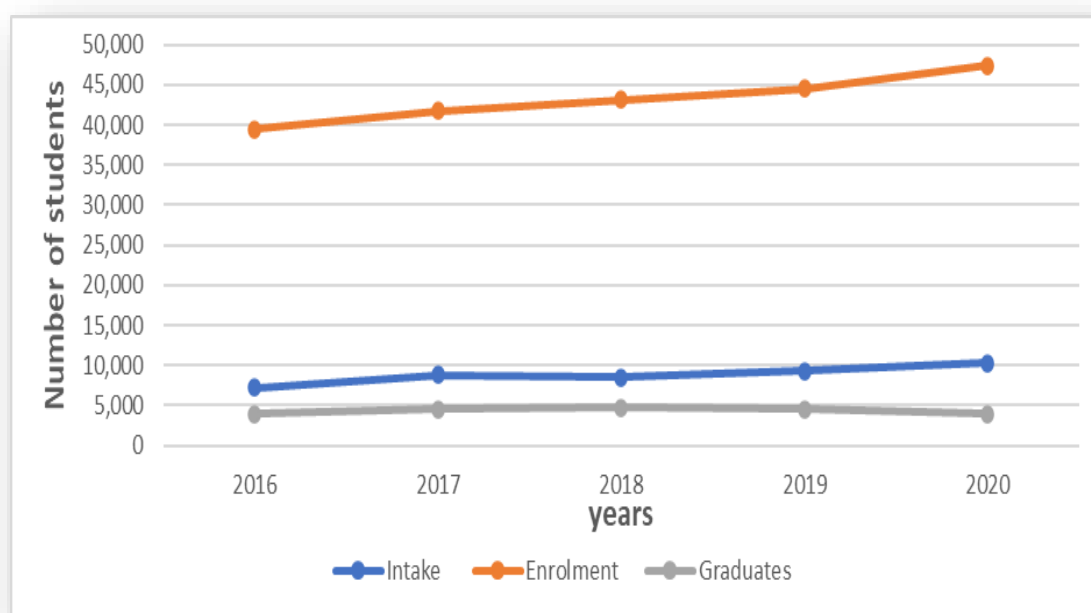


Graph 4.3: The Number of Students Intake, Enrolment, and Graduates by Master's degree in HEIs (2016- 2020).

Graph 4.3 shows, there are slight fluctuations in the number of master's students in Intake, Enrolment, and graduation, starting from 2016 to 2019. However, in 2020, the decline in the number of master's students was more significant than in the previous years. Last year, the percentage decline was 14%, 13.5%, and 25% in Intake, Enrolment, and graduation, respectively. Therefore, the pandemic's spread has caused many problems in all sectors.

4.3.2.3 The Number of Students who Participated in the PhD Program:

The vital part of objective three is knowing the number of students participating in PhD degree programs in HEIs. Based on the secondary data provided on the Ministry of higher education website.



Graph 4.4: the number of Students' Intake, enrollment, and Graduates by PhD in HEIs, 2016- 2020.

The **Graph 4.4** has been drawn; the diagram shows that the number of students intakes into PhD programs in higher education institutions has gradually increased. The number of students in 2016 was 7,190, rising to 10,328 in 2020. Furthermore, there is an increase of approximately 45% in five years. The number of students

enrolled in PhDs at higher education institutions has gradually increased, from 39,474 students in 2016 to 47,424 students in 2020, increasing nearly 20%.

As for the number of students who graduated from doctoral programs at higher education institutions, there was a slight increase in the first three years, and then in the last two years, it decreased slightly. Whereas in 2016, the number of PhD students was 4,003, in 2020, it was 3,976. Through this above, it is clear that the number of Students' Intake and Enrolment has increased with each passing year, but the number of graduate students in the last two years has decreased. Accordingly, the number of postgraduate students from doctoral programs in higher education institutions will increase in the coming years; because of the increase in intake and Enrolment and the decrease in graduates in the past five years.

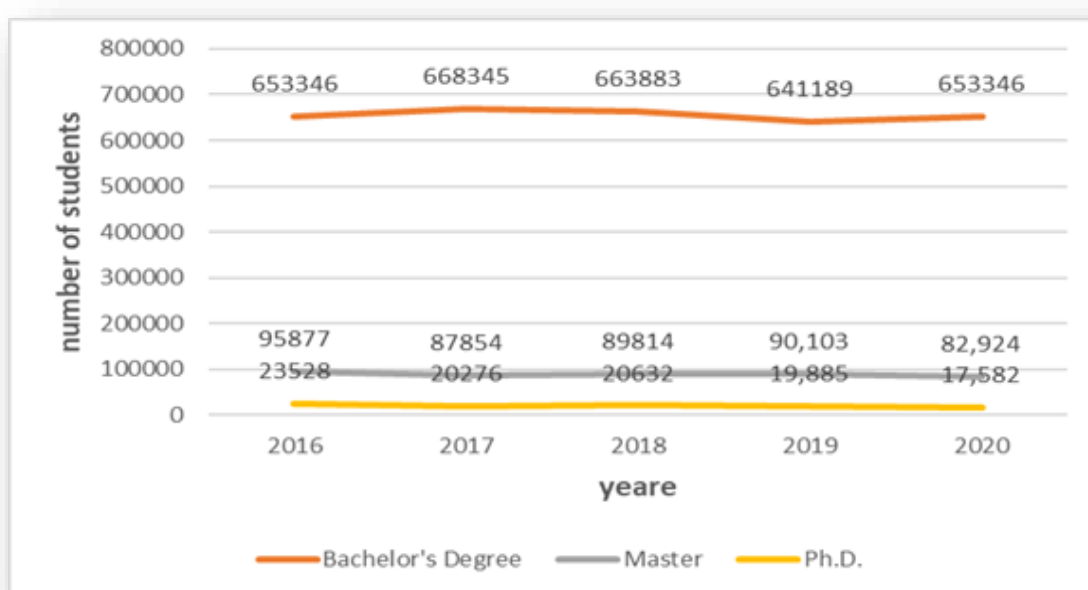
4.3.2.4 The Student's Enrollment Number in Bachelor, Master and PhD Programs.

Data shown in graph 4.5 shows noticeable patterns with respect to the number of students pursuing bachelor's, master's, and PhD degrees over time. There are discernable patterns despite minor fluctuations.

Firstly, let's look at the variations between bachelors' graduates and those with masters' degrees. However these figures show some oscillations the general numbers appear fairly stable through the years with some periods recording increases while others show decrease. This further implies that demand for bachelor's or master's education tends to remain fairly consistent but it is influenced by factors such as economic conditions, job market trends and changes in educational policies.

PhD students' data shows that their numbers have been consistently decreasing over the years, with a notable trend post-2018. This drop is due to various reasons. Among them is the probability of changes in funding or scholarship offers for PhD programs. This could be one explanation as to why fewer students would venture into this advanced research degree path. Moreover, it could imply some changes in academic priorities or career preferences among prospective students. The implication

that previous years were marked by epidemics is important. The COVID-19 pandemic which took place globally had an immense effect on higher education systems worldwide. Campus shutdowns, travel limitations and transitions to e-learning may have influenced enrollment trends at all three levels of degrees across the globe. The consistency of undergraduate enrolment numbers between 2016 and 2020 despite the pandemic indicates that there is a steady demand for undergraduate education. Yet, a fall-off in master's and PhD students during this period could reflect difficulties encountered while accessing advanced or research-oriented programs amidst disruptions brought about by the pandemic.



Graph 4.5: Number of Students' Enrolment by Bachelor, Master, and PhD in HEIs, 2016- 2020.

4.3.3 The Third Part of the First Purpose

The data has been analyzed for the number of enrolled international students, local Students' enrollment by Gender, a ratio of local and international students' Enrolment, Ratio of Academic Staff to students.

4.3.3.1: The Number of International Students Enrolled in Institutions of Higher Education.

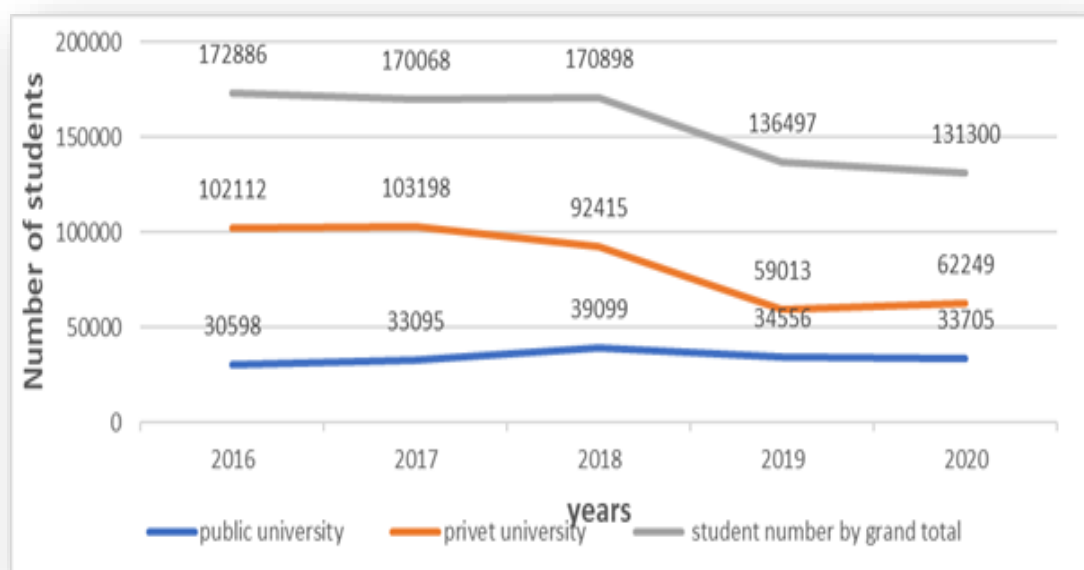
The data presented on **graph 4.6** are a reflection of the number of students from

abroad who enroll different educational institutions over time. Several notes and comments on these trends can be made:

Public University fluctuation: From the beginning to end of this study period, which is from 2018 through 2022, it appears like international students in public universities have been moving up and down with maybe between fifty thousand to sixty thousand students per year for instance. These oscillations may indicate various factors influencing the registration of foreign students into these colleges. Fluctuation as well as decrease in Private Universities: For example, student numbers have shown fluctuations ranging between twenty and thirty thousand each year over a three-year period starting in 2018 until 2020. However, in the past two years (2021-2022), there has been a noticeable drop to around fifteen or twenty thousand annual figures.

Enrollment patterns: When considering all types of institutions such as public/private universities, polytechnics, schools, language centers and so forth; there has been slight variation in total enrolment during first three years (2018-2020) where full enrolment could be estimated at around one hundred to one hundred twenty thousand per annum.

Anyways, however (2021-2022)'s been a notable slump in the last two years as total enrolment has dropped to 80,000 to 90,000 students per year. While these numbers are only meant for purposes of illustration, they go a long way in helping one understand the trends that have been depicted by this information. The fluctuations and decreases in international student enrollments across different types of institutions raise important questions regarding what is driving this change and what it may mean for education policies and institutions.



Graph 4.6: A number of international students in Malaysia by institutions, 2016-2020.

4.3.3.2 Students' Enrollment by Gender.

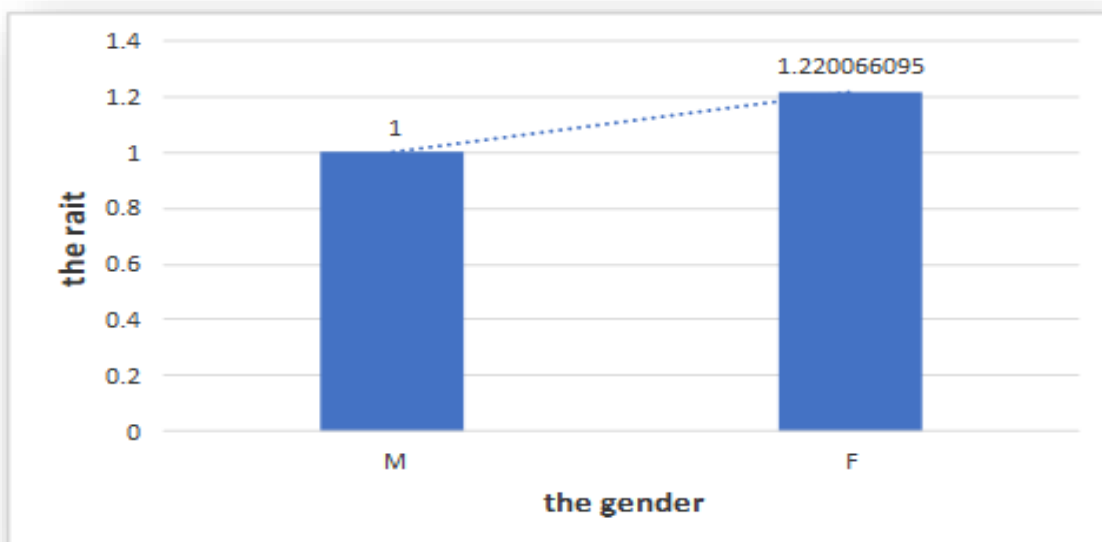
Table 4. 1: The number and Ratio of Student enrollment by Gender in HEIs, 2016- 2020.

Years	2016		2017		2018		2019		2020	
Gender & ratio.	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
S. N	609,087	737,771	617,811	707,888	607,727	736,103	585,909	737,540	536,105	687,993
S. R.M. F. 1	1	1.21	1	1.15	1	1.21	1	1.26	1	1.28
S.R.M.F.5	M		1		F		1.22			

S. N= Student numbers. S. R.M. F. 1= Students Ratio Male to Female in each year. S.R.M.F.5= Students Ratios Male to Female in five years.

Secondary data are presented which obtained from the Ministry of higher education website (**Table 4.1.** and **Graph 4.7**). Compares the ratio of the number of students' Enrolment to higher education institutions in Malaysia through five years by Gender. The table shows that the number of female students and their percentages exceeded the number of males every five years with similar rates. In another way, we

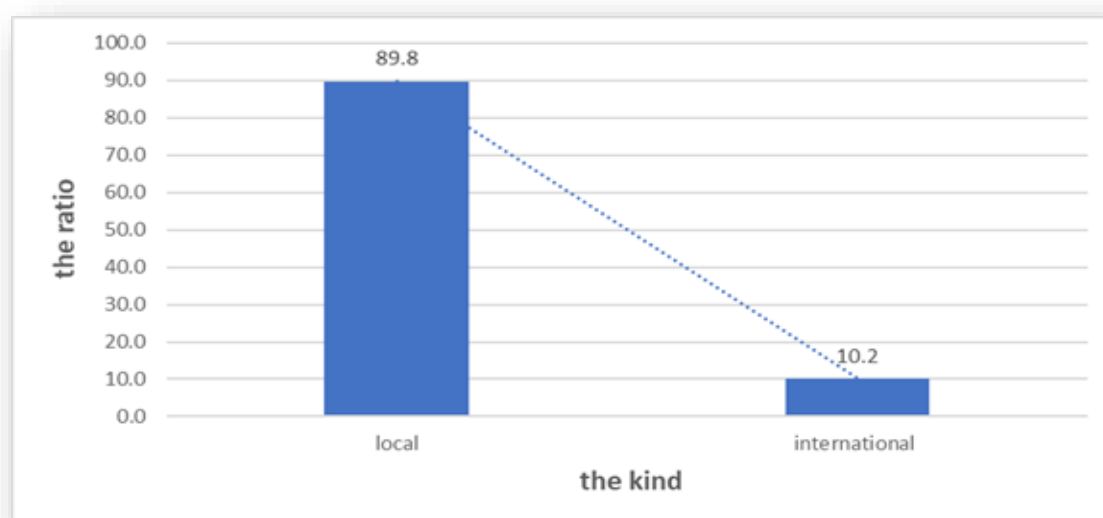
can be seen this in the graph (See Fig.9). The diagram shows, on average, the general ratio of females exceeded the average of the available percentage of males in the five years. The ratio of 1 male to 1.22 females is approximate.



Graph 4.7: The Ratio of Students Enrolment by Gender in HELs

4.3.3.3 The Ratio of Local and International Student Enrollment:

Thus, the analysis for secondary data is displayed about the number and ratio of local and international students in HLEs (**Table 4.2 and Graph 4.8.**). In 2016, it ranked first in the number of enrolled students, whether international or local, while in 2020, it was ranked last. Therefore, with this significant decrease in the last year, especially in international students, many HEIs campuses are closed due to the Malaysian Government enforced Movement Control Order (MCO). Many programs and activities for 2020 were scaled down and postponed in Malaysia and worldwide. In another way, we can see this in the graph in Figure 10, showing that the ratio between domestic and international students was approximately 9:1. Thus, there is one international student for every nine local students, with an average of five years.



Graph 4.8: The ratio between local and international students.

Table 4. 2: The number and ratio of local and international students' Enrolment in HEIs, 2016- 2020

Years	2016	2017	2018	2019	2020	Total
N. L. S	1,346,858	1,325,699	1,343,830	1,323,449	1,224,098	6,563,934
N. I. S	172,886	170,068	170898	136497	95955	746,304
B. I. S %	88.6	88.6	88.7	90.7	92.7	89.8
B. I. S %	11.4	11.4	11.3	9.3	7.3	10.2
R	local	89.8		International	10.2	

N. L. S= A number of local students. N. I. S= Number of international students. B. I. S = Percentage of local students. B. I. S= Percentage of international students. R= ration

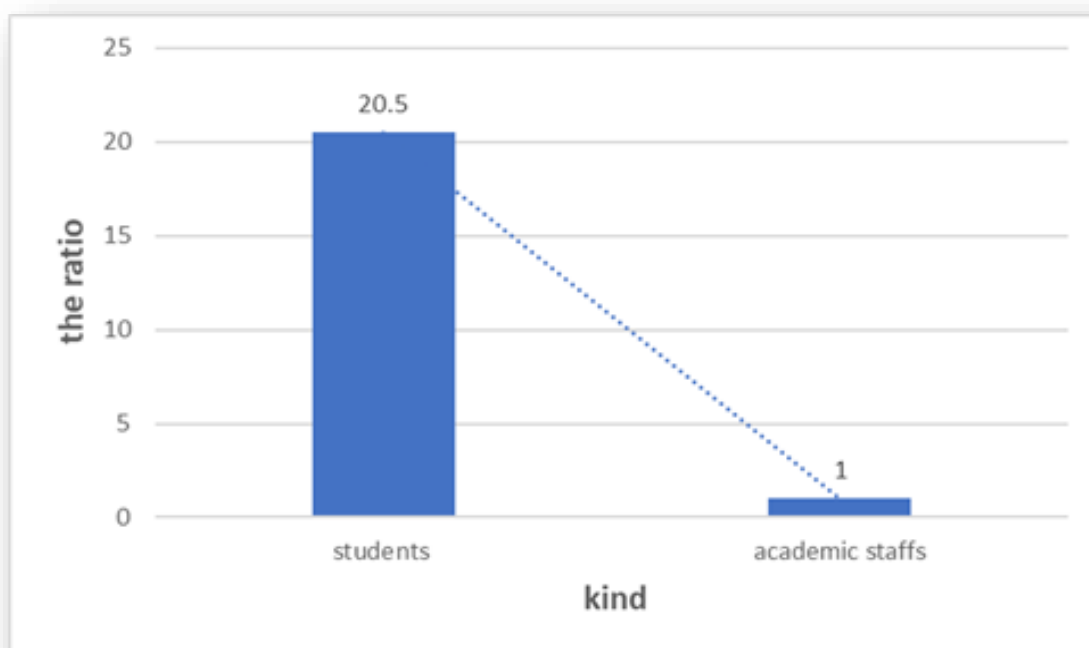
4.3.3.4 The Ratio of Academic Staff to Students in General:

Table 4. 3: The number and ratio of students and Academic Staff in HEIs, 2016- 2020.

Years and numbers.	2016	2017	2018	2019	2020	Total
N. L. I. S	1,519,744	1,495,767	1,514,728	1,459,946	1,320,053	7,310,238
N. A. S	70,269	87,759	64,551	67,616	66,388	356,583
R	students	20.50		Academic staffs	1	

N. L. I. S= number of local and international students. N. A. S= number of academic staff. R= ration
Source: HELs (2016-2020).

As illustrated in **Table 4.3** and **Graph 4.9**, it what found that the most significant number of academic staff was in the year 2017, and the lowest number of academic staff was in the year 2020. Also, the most important student number was Enrolment in his, which was in 2016, and the lowest student number enrolment in HLIs was in the year 2020. Table 3 shows that. The graphs in Figure 11 show that the ratio between the number of faculty and the number of students, averaged over the five years, was 20:1. Hence, for every twenty students, there is one academic staff.



Graph 4.9: The ratio of students per academic staff in HEIs (2016-2020).

4.4. Performance on Global Rankings

In this part, we will present the achievements of Malaysian higher education institutions in raising their rank at the Asian level and the scientific level, according to two types of classifications, namely, QS classification and U21, which reflects the success of the Ministry of Higher Education in supporting the implementation of the (Malaysian Education Plan 2015-2025 (Higher Education)). Regarding the ranking among universities in Asia and at the scientific level. This proves or negates the third hypothesis of the study, which says: There is an improvement in Malaysia's ranking in the U21 report, QS, as a result of the completion of the first and second waves concerning the 2015-2025 Malaysian Education Blueprint (Higher Education).

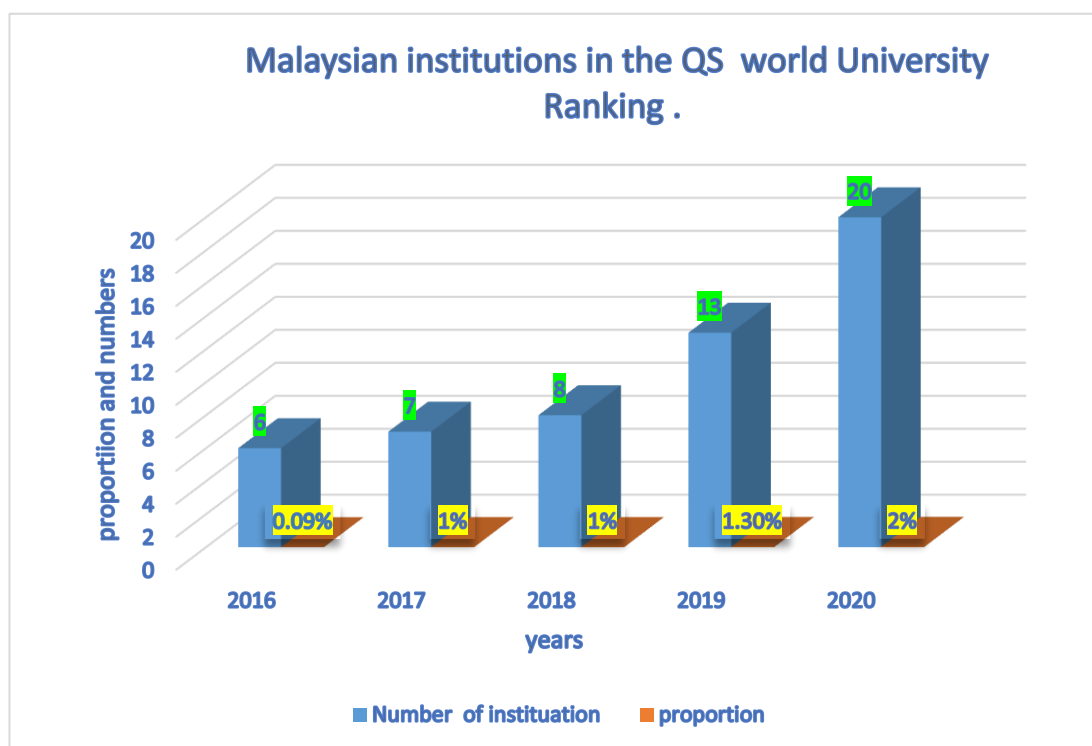
4.4.1 QS Global Ranking

The QS World University Rankings (WUR) have become a significant part of the higher education landscape, both globally and locally. Such rankings now play a significant role in shaping current and possible students, parents, bosses, and government opinions about the quality of higher education institutions. The QS WUR methodology combines Academic Reputation (40%), Employer Reputation (10%), Faculty-Student Ratio (20%), Citations per Faculty (20%), International Faculty (5%), and International Students (5%) to evaluate the performance of each university. Reputation accounts for 50% of the index, drawing upon the responses from the annual QS Academic and QS Employer surveys. The QS WUR has been expanding their coverage over time, and the 2020 edition included more than 1,000 institutions from over 80 countries (M. of Education, 2020).

4.4.2 Malaysian institutions in the QS World University

As shown in **Graph.4.10**, the number of Malaysian universities in the QS ranking increased from 6 universities in 2016 to 20 universities in 2020, representing 2% of the universities included in the QS World University Rankings 2020. In the

same context, this ratio has one in the top 100 (University Malaya), four in the top 200, and seven in the top 500.



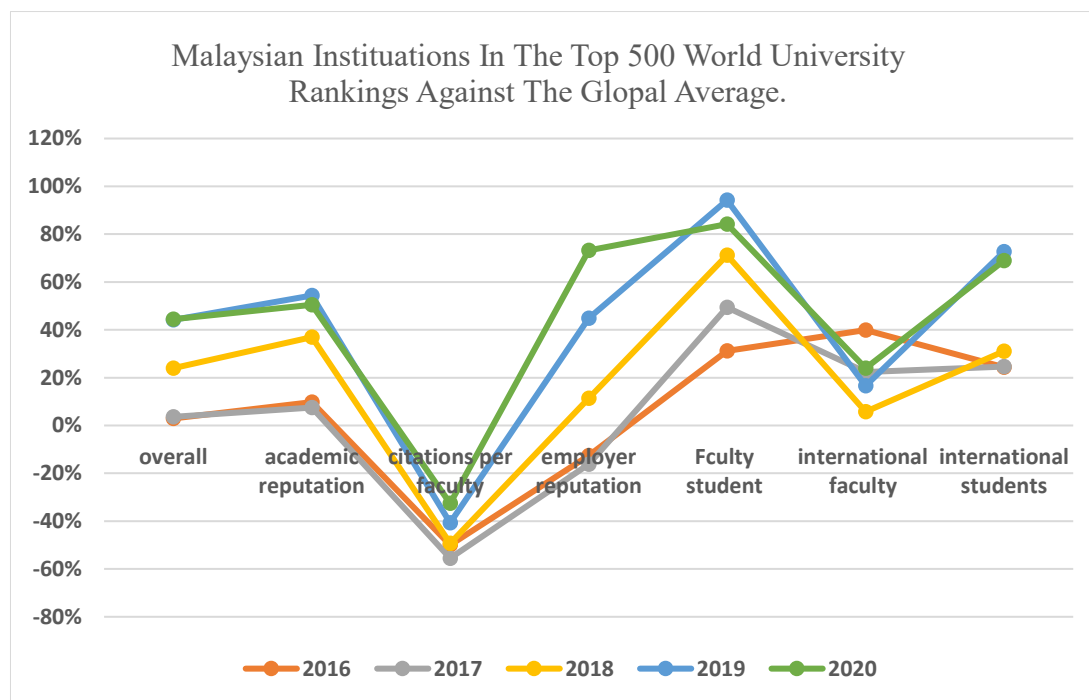
Graph 4.10: proportion and numbers of Malaysian institutions in the QS World University Rankings, 2016-2020.

4.4.3 Malaysian Institutions in the Top 500 QS World University Rankings against the Global Average:

It can see in **Graph 4. 11** that the overall increase significantly from +3% in 2016 to +44% in 2020. This significant increase can be shown in the following details of the six indicators used in this scale.

Academic reputation increased from +10% to +50% above the global average, while the ratio of faculty to students increased from +31% to +85% above the global average; in the same context, the percentage of international students increased from +24% to +69% above the worldwide average. In another context, the international faculty members remain above the world average for this period, but it is noted that

there are some fluctuations. In contrast, employer reputation has increased significantly from below the global average by -13% to above it by +73%). In



Graph 4.11: Performance of Malaysian institutions in the top 500 QS World University Rankings against the global average 2016-2020.

comparison, Citations per faculty is the only degree that remains below the world average for the entire period.

This signifies a praiseworthy upward direction for Malaysian institutions in the QS World University Rankings with considerable improvements across various indicators compared to global average. It is very noticeable how academic reputation had improved slightly, student-to-faculty ratio also rose by some percentage points and the number of international students increased which means the growing recognition of Malaysian universities for their high quality education, academic excellence and globalization efforts. These factors are important in improving the overall image of Malaysia's higher education system on the world educational arena.

Moreover, it has been shown that employer reputation has gone up remarkably; a move suggestive of a closer tie between academia and industry. This indicates that graduates from Malaysia have been more than ready to go into career

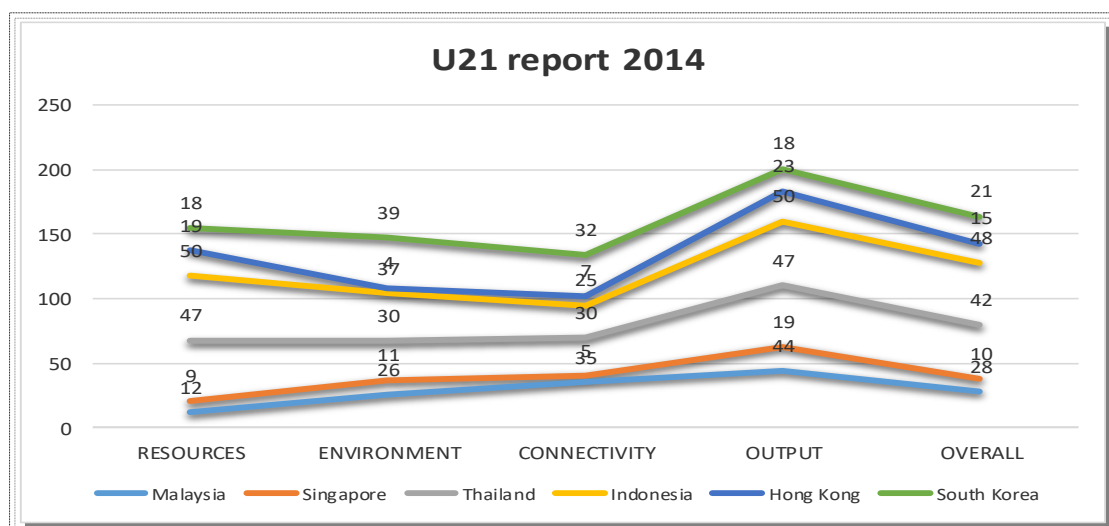
sectors and employers have now regained confidence on the type of education given by these universities. Nevertheless, this continuing challenge is related to citations per faculty which are below global average calling for further improvement. By increasing research output, partnering with researchers from different parts of the world and investing more on research infrastructure and support will help Malaysian institutions improve their citation rates while boosting their standing as excellent research centers at international level.

Overall, these results reflect significant progress and potential for Malaysian higher education, but continued efforts and strategic investments will be essential to sustain and further enhance this positive momentum in the future.

4.4.4 Malaysia's Ranking in the U21 Report

4.4.4.1 Malaysia's Overall Ranking in the U21 Report 2014

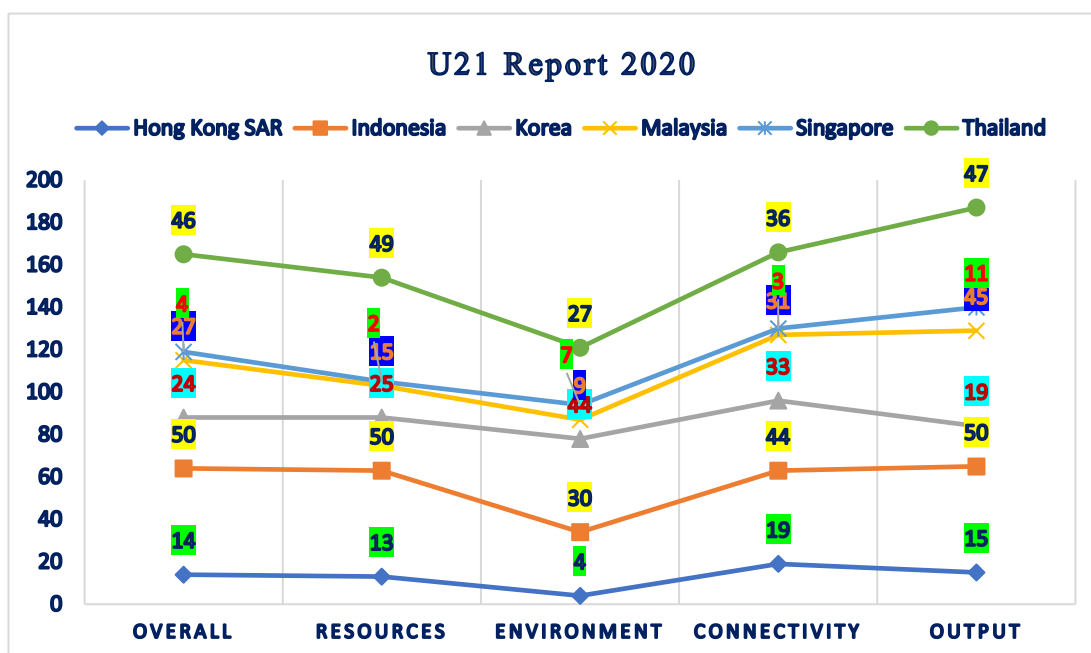
As shown in **Graph 4.12** Malaysia ranks 28th out of 50th place; in resources, Malaysia ranked 12th, reflecting the depth of Government commitment to higher education. When adjusted for income level, Malaysia has the highest resource obligation of any state in the U21 report. In contrast, Malaysia ranks 44th in output, which includes research Outputs, institutional ratings, graduate recruitment, and enrollment. Therefore, the challenge for Malaysia is raising the production level to match the allocated resources.



Graph 4.12 : Malaysia's Overall ranking in the U21 report 2014.

4.4.4.2 Malaysia's Ranking in the U21 Report 2020

As shown in **Graph 4. 13**, Malaysia ranks 27th out of the 50 countries covered in the report and third out of five in Southeast Asia. In the environment, Malaysia ranked 9, which reflects the significant development that has taken place in the educational environment in the state of Malaysia, according to the U21 report. On the other hand, Malaysia ranks 45th in output, reflecting that there is still a great challenge that the education process must overcome.



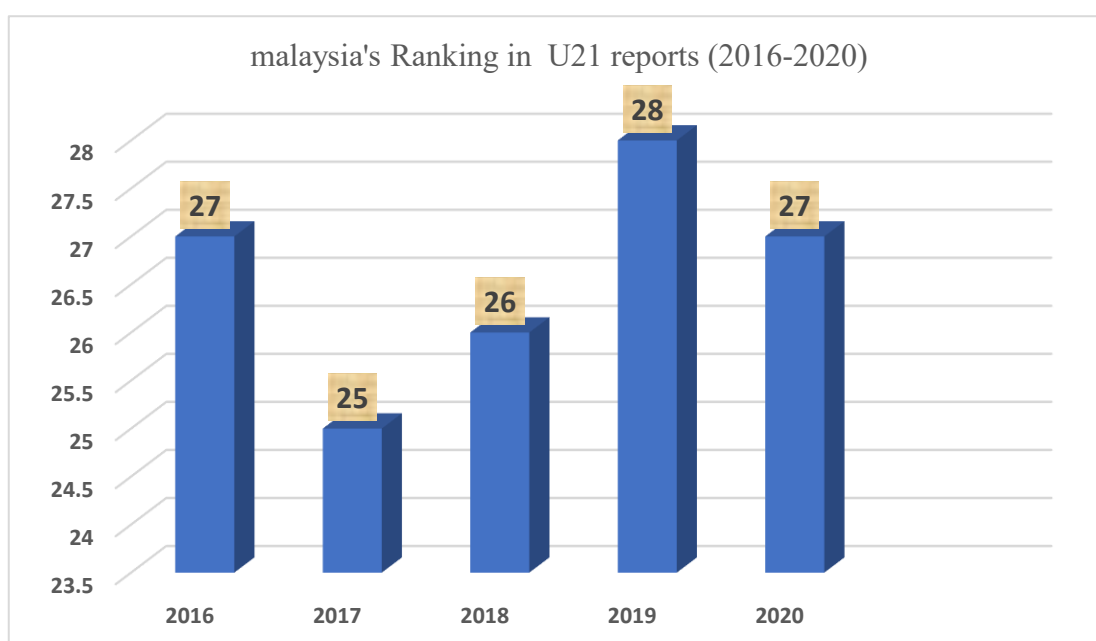
Graph 4.13: Malaysia's Overall ranking in the U21 report 2020.

4.4.4. Malaysia's Overall Ranking in the U21 Report (2016-2020)

The **Graph 4. 14** of the report had shown that Malaysia came 28th among the fifty countries in 2019 and 27th in 2016 and 2020. These demonstrates convergence in the contribution ratios of five components as per the report during these years. However, this is not so with Malaysia ranked at position twenty five in 2017 which shows improvement on one or more of the five factors that will be explained by this study later.

Malaysia's consistent positioning within the global education landscape between 27th and 28th over the years among countries covered by report indicates a stable stance. This demonstrates similarity between country's educational policies, practices and outcomes across time. This means that its rankings for Malaysia in the year were balanced from each other as well as it may also reflect their weighting based upon these five elements scores being evaluated subsequently for all three years indicated above. This implies that U21 has given Malaysia's a pass mark on various aspects thus having no ups and downs.

However, there was a little bit progress from Malaysia's ranking to position twenty-five within one year only (2017) suggesting some improvements on any of those five elements where appropriate actions were taken during this year alone like targetted initiatives, reforms or investments that aim at enhancing particular aspects of an education system. In general, the U21 report on Malaysia's rankings reveals areas of stability in the education sector as well as other aspects that can be improved. These findings may provide an opportunity for further evaluation and strategic planning to secure Malaysia's global competitiveness and deal with any weaknesses or opportunities spotted.



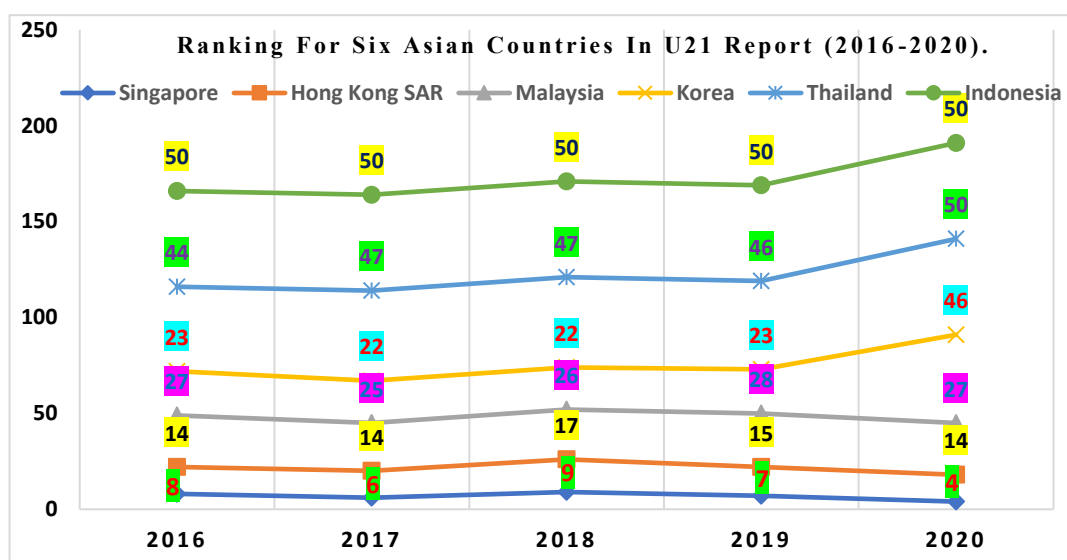
Graph 4.14: Malaysia's Overall ranking in the U21 report (2016 - 2020).

4.4.4.4 Ranking for Some ASEAN Countries in the U21 Report (2016-2020)

As shown in **Graph 4. 15**, the six countries were chosen based on the Malaysian educational plan's selection for them in its last report of 2015 entitled as Asian Neighboring Countries. Singapore is among the first six countries and in both years it ranked fourth and sixth globally respectively. Malaysia's position as number three among ASEAN countries and globally placed twenty-eight in 2019 shows that it stands strong within this region while making great strides at the world level . This implies that there are efficient policies and investments in education which have

therefore led to the country's competitiveness worldwide. Nevertheless, Thailand ranks fourth among the six countries whereas Indonesia comes last among the six countries and also ranks fiftieth on global scale.

In essence, this ranking is a snapshot of how the ASAEN region performs compared to other regions globally. Policymakers, educators and stakeholders can rely on such metrics to understand what they are doing right or wrong and establish ways forward as well as areas that need partnerships for growth in education across these nations.



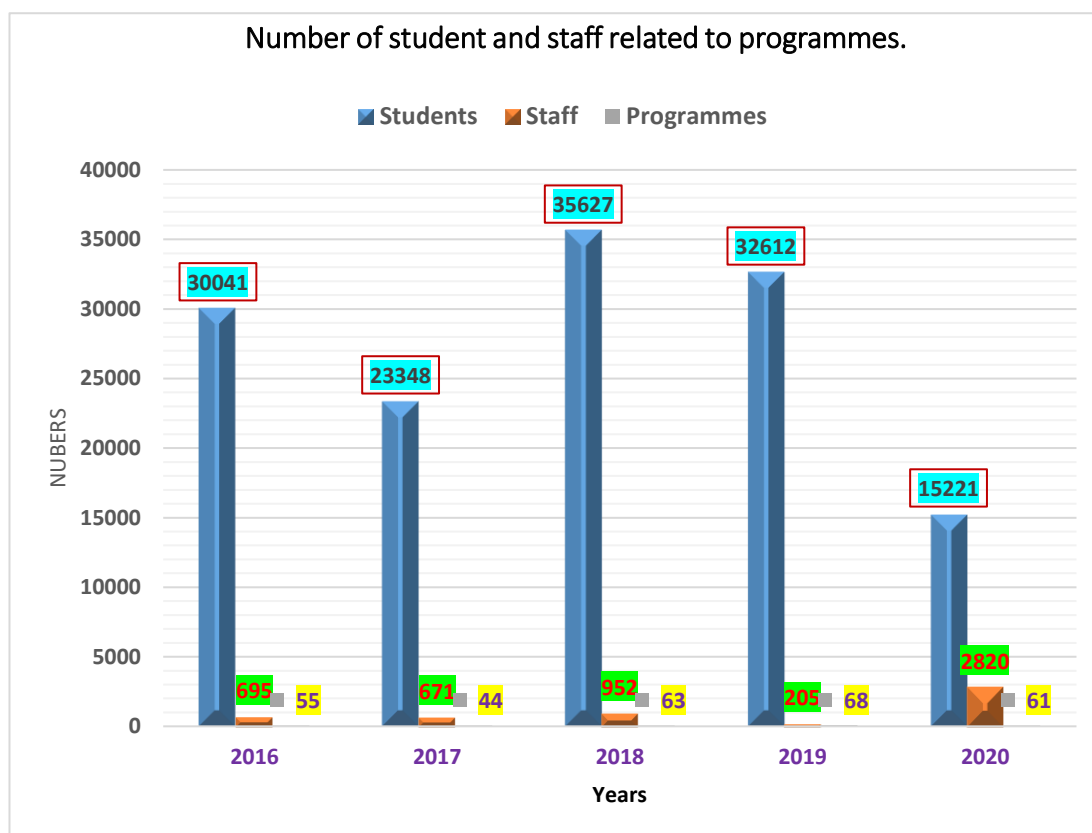
Graph 4.15: Ranking for Some ASAEN countries in the U21 report (2016-2020).

4.5 Entrepreneurship

4.5.1 Number of Programs and Participants

Graph 4.16 shows, there is a fluctuation in the number of students and staff in MOHE-related programmes at HEIs, During the five years. For instance, the student numbers in 2016 had 30041 students, while their number decreased significantly in 2020, reaching 15,221. As for the number of staff in 2019 was 205, While their number increased significantly in 2020, reaching 2820. In the same context, there was

a slight fluctuation in the number of programs offered. The 2017 ranking was the last, with (44) programs, while the number of programs offered in 2019 was the first, with (68) programs.



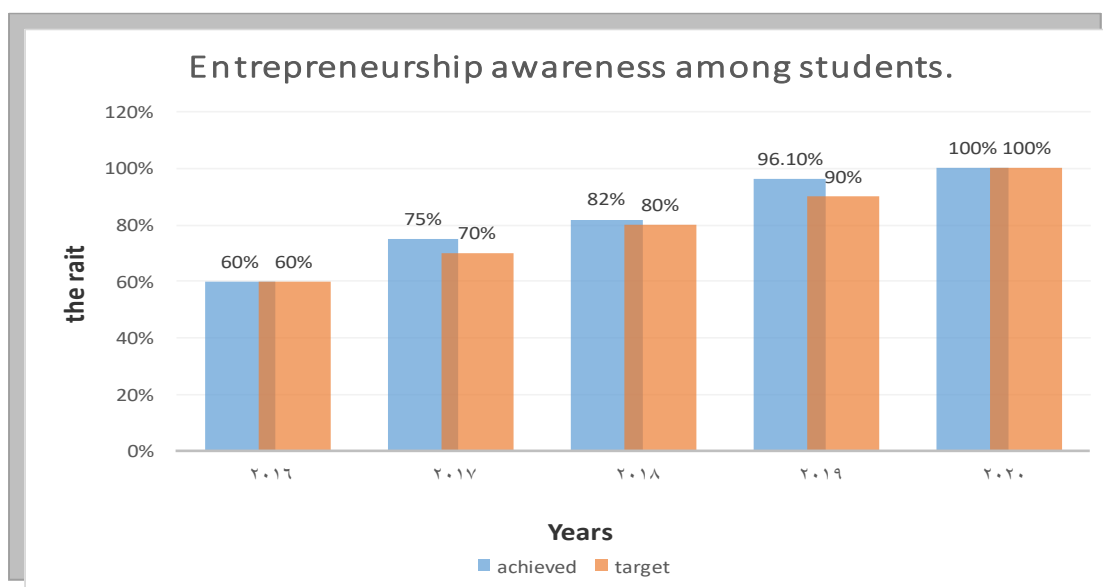
Graph 4.16: Number of students and staff in MOHE-related programmes at HEIs from 2016 to 2020.

4.5.2 Indicators (KPIs) Achievements for all HEIs until 2019.

In this part, we will present the achievements of four key performance indicators for all higher education institutions in the field of entrepreneurship from 2016 to 2019. This reflects the success of the Ministry of Higher Education in supporting the implementation of (Malaysia Education Blueprint 2015-2025 (Higher Education)), in particular, the first shift It has regarding entrepreneurship through entrepreneurship programs that conducted in higher education institutions at the national level, **which proves or negates the third hypothesis of the study, which says: There is an increase in entrepreneurship among students, as a result of the completion of the first and second waves in the Malaysian Education Blueprint 2015-2025 (Higher Education).**

The Ministry of Higher Education is guided by two strategies from the 2015-2025 Malaysian Education Outline (Higher Education). These strategies focus on developing the entrepreneurship curriculum and enhancing higher education institutions' teaching and learning environment. Four types of indicators emerge from these two strategies, which are as follows:

4.5.2.1 Entrepreneurship Awareness among Students (KPL1)

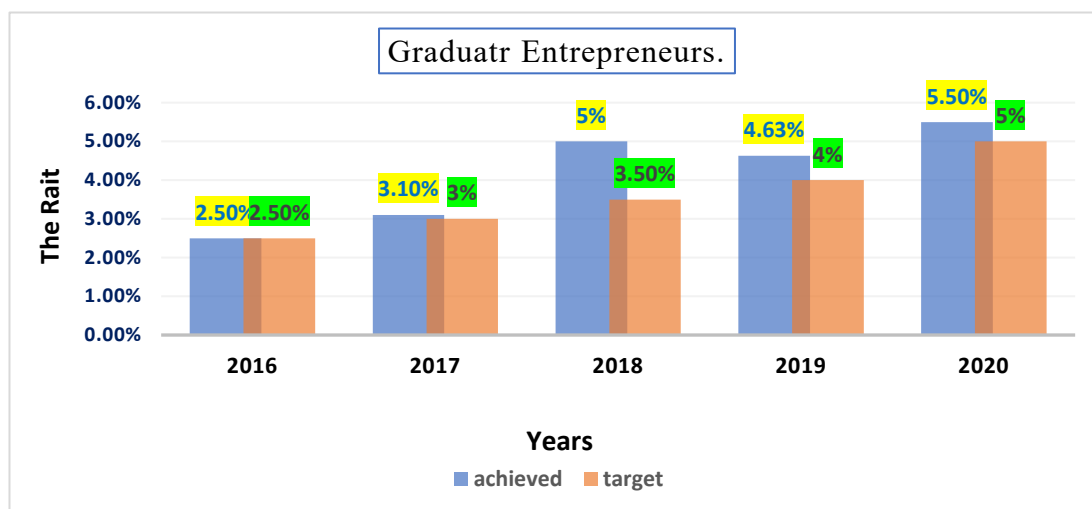


Graph 4.17: Percentage of awareness of entrepreneurship among students targeted in HIEs from 2016 to 2020.

among students from 60% in 2016 to 96.2% in 2019, surpassing the targets in the last three years. This may be due to the number of students exposed to entrepreneurship having increased over the years. Because all HEIs have made essential entrepreneurship a mandatory subject for all students across their studied programmes. This achievement is evident in this indicator.

4.5.2.2 Graduate Entrepreneurs (KPL2)

Graph 4.18 shows , The number of graduate entrepreneurs has risen from 2.5%, which is equivalent to 3,756 in 2016, to 4.68%, which is equal to 7,148 students in 2019, which surpasses the target of 6,270 (4% of total graduates in this year). Therefore, the percentage of Graduate Entrepreneurs exceeds the yearly target and has risen yearly until 2019.



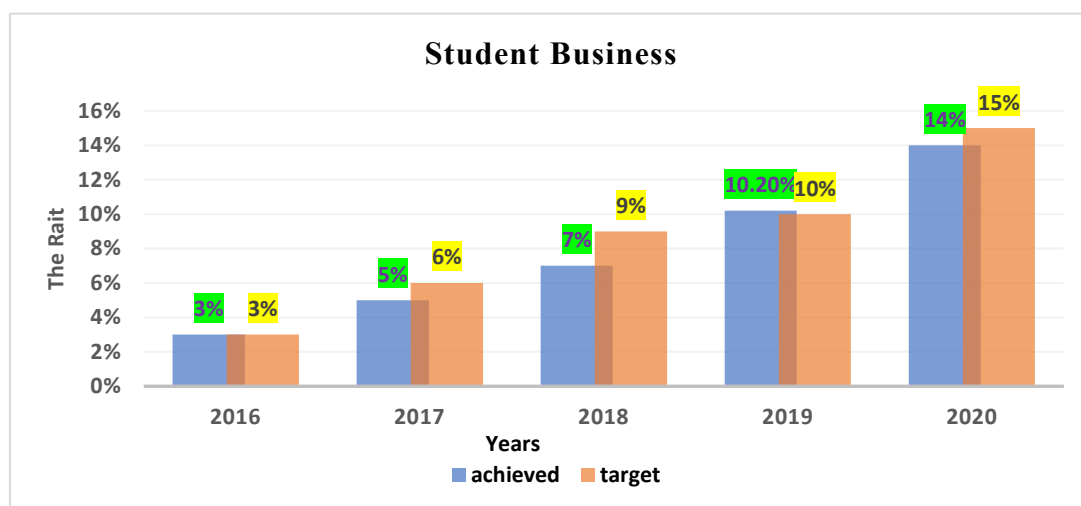
Graph 4.18: Percentage of graduate businessmen achieved to targeted in HIEs from 2016 to 2020.

4.5.2.3 Students Business (KPL3)

The **Graph 4.19** depicts a notable trend in the proportion of students engaging in business activities while studying from 2016 to 2019.

Firstly, there was a significant rise from 3% in 2016 to 10.20% in 2019, indicating a substantial increase in students involved in business ventures over this period. This sharp increase suggests a growing interest among students in combining their studies with entrepreneurial pursuits. Moreover, the graph shows a steady upward trajectory in the percentage of student businesses throughout the years. This consistent growth demonstrates a sustained trend rather than a temporary surge, reflecting a shifting mindset among students towards entrepreneurship.

Additionally, it's worth noting that while the percentage achieved the targets set for 2016 and 2019, it slightly fell below the targets for 2017 and 2018. This indicates some variability in meeting the goals but still portrays an overall positive trend over the years.



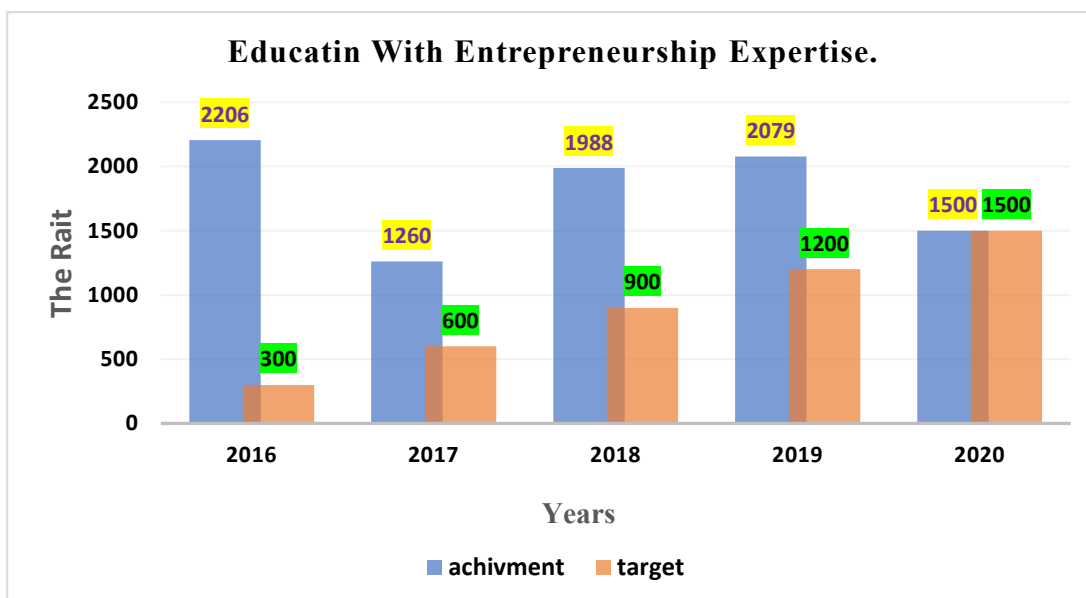
Graph 4.19: Percentage of Student business achieved to target at HIEs from 2016 to 2020.

Overall, the graph illustrates a clear and encouraging pattern of increasing student engagement in business activities alongside their studies, indicating a growing entrepreneurial spirit within the student population.

4.5.2.4 Educators with Entrepreneurship Expertise (KPL4)

Graph 4.20 demonstrates this. By the end of 2019, however, it exceeded the target with 2079 academics being trained in entrepreneurship. At the same time, KPI 4 Educator with Entrepreneurship Expertise showed excellent achievements that were highly above targets. This meant that there was enough room for growth in academic training entrepreneurship, which meant quite a number in excess of what was initially aimed at. It is an optimistic sign showing how entrepreneurial spirit can be build among the learners and also how they can start business or even improve on those

which had been started by others since over two thousand lecturers will have already acquired these skills by then.



Graph 4.20 : Number of educators with experience in entrepreneurship achieved the target in HIEs from 2016 to 2020.

The fact that KPI 4 has shown excellent achievements even beyond targets underscores even more effectively its success rating. This represents proactive steps towards integrating entrepreneurship into education possibly resulting to enhanced innovation, industrial collaborations and consequently economic growth as seen from table above indicating a rising trend in investor interest and support of teacher entrepreneurship initiatives through buying shares in companies run by teachers themselves.

These results show a good effort made to make our schools more responsive to the demands of the current economy that is becoming so entrepreneurial and innovative. It would be interesting to explore the specific strategies and programs that resulted in these achievements, as they can serve as useful examples for other

institutions or regions trying to develop entrepreneurial environments. In summary, this bodes well for the future of education as a driver of economic growth.

4.6 Summary of the Findings

This study used the descriptive exploratory approach to compare the study variables from the period of launching the plan and the positive results achieved by these variables after the completion of the first and second waves in 2020.

Strict procedures were followed in selecting the secondary data for the variables intended for the study, namely (increasing access to higher education organizations - ranking at the Asian and global levels - entrepreneurship). Then, the data analysis process was carried out to reach the final frequencies for each year and each sub-field of the main variable separately to facilitate the comparison process. Then verify the hypotheses of the study after conducting the comparison process. Next, the comparison process was carried out, and the results were reported in detail. As shown in Table 4.4. the hypotheses of H2, H2a, H3, H2a, H3b, H3c, and H3d were statistically supported by the study's results. the hypotheses of H, H1a, H1b and H1c, were not supported.

Table 4. 4:Summry of results .

No.	Hypotheses	Decision
H1	Access to higher education has significantly increased substantially after completing the first and second phases of Malaysia Education Blueprint 2015-2025 (Higher Education).	Not Supported
H1a	The total number of Students' Intake, Enrolment, and graduation, by Level of Studies has increased significantly.	Not Supported
H1b	the number of students who participated in Bachelor, Master, and PhD degree programs only in HEIs, has increased dramatically.	Not Supported
H1c	The ratio of Academic Staff to students and international to local student enrollment has increased significantly.	Not Supported

H2	Performance on global rankings has significantly increased substantially the after completing the first and second phases of Malaysia Education Blueprint 2015-2025 (Higher Education).	Supported
H2a	According to the QS world ranking, Malaysian universities' performance has improved significantly.	Supported
H2b	According to the U21 world ranking, Malaysian universities' performance has improved significantly.	Supported
H3	Entrepreneurship has significantly increased substantially the after completing the first and second phases of Malaysia Education Blueprint 2015-2025 (Higher Education).	Supported
H3a	Entrepreneurship awareness among students (KPL1) has increased significantly.	Supported
H3b	The number of graduate entrepreneurs (KPL2) has increased significantly.	Supported
H3c	The student business (KPL3) has increased significantly.	Supported
H3d	Educators with entrepreneurship expertise (KPL4) have increased significantly.	Supported

4.7 Summary of Chapter

This study proved the presence of progress and failure in the performance level of its three main indicators (access - ranking - entrepreneurship). And that in general. As a result of completion, the first and second waves from the three waves of Malaysia Education Blueprint 2015-2025 (Higher Education) which launched in 2015.

This chapter reported the findings of this study. Initially, an analysis of data released by the Ministry of Higher Education in Malaysia regarding accessibility to higher education institutions from 2016 to 2020 allowed us to conclude that the (Malaysian Education blueprint (2015-2025), in general, has been negatively affected by the spread of the Coronavirus. In another context, introducing the Malaysian Education blueprint 2015-2025 (Higher Education) has increased interest in entrepreneurship education within the Malaysian higher education system. Entrepreneurship has been given attention as it is included as part of shift one, which aims to develop inclusive, entrepreneurial and balanced graduates.

In a related context, Malaysia has made significant progress in its scientific ranking among the top 500 universities, according to the QS report. However, it overtook the 28th place it was in the year the chart was launched, according to U21 reports from 2016 to 2020. It achieved 25th rank in 2017 and 27th rank in 2020.

CHAPTER 5

DISCUSSION

5.1 Introduction

This chapter presents a summary of the study along with the results of the research and its theoretical and practical contributions to the literature. The chapter also provides recommendations for those implementing the Higher Education Plan in Malaysia and discusses study limitations and suggestions for future studies. The chapter provides a summary of the research and a conclusion.

5.2 Recapitulations of the Research Findings

The study was justified primarily by the practical gaps in the literature regarding strategic management in terms of concept, tools, challenges, types, construction and stages. Then the study dealt in some detail with the Malaysian scheme in higher education in terms of the ten changes - increasing access to higher education institutions - entrepreneurship - ranking Malaysian universities at the level of Asia and at the global level .

Previous studies showed that the higher education scheme had an impact in some aspects directed by it and had failures in other elements after the end of the first and second waves in five years, starting in 2015 and ending in 2020, leaving only one direction remaining in the blueprint ending in 2025. In the same context, it was also clear from previous studies that they focus on specific parts of the changes that the scheme targets with positive change, and this may be due to the lack of data to the same degree for all the changes intended by the blueprint, or because some universities do not have the necessary capabilities to effect some of these changes fully.

Therefore, a conceptualization of the study was developed to answer the following questions: Does the access rate to higher education institutions increase after the completion of the first and second waves regarding Malaysia Education Blueprint 2015-2025 (Higher Education)? Is Malaysia's ranking improved in the U21 and QS reports after completing the first and second waves regarding Malaysia Education Blueprint 2015-2025 (Higher Education)? Is the number of student entrepreneurs increasing after completing the first and second waves regarding Malaysia Education Blueprint 2015-2025 (Higher Education)?

Aligned with the above research questions, several research objectives were developed to be achieved. The primary goals were to; 1) Identify the levels and degrees of study in Malaysian higher education institutions. 2) Identify Accessibility to higher education institutions in Malaysia and Compare it with performance Aspirations in Malaysia Education Blueprint 2015-2025 (Higher Education).3) Identify Malaysia's ranking in the U21 and QS report, Comparing it with performance Aspirations in Malaysia Education Blueprint 2015-2025 (Higher Education). 4)Identify student entrepreneurship in Malaysia, And Compare it with performance Aspirations in Malaysia Education Blueprint 2015-2025 (Higher Education).

Based on the abovementioned study objectives, the researcher extracted the variables to create the study framework, and then the descriptive exploratory approach was used (see Chapters Three and Four). Based on the problem statement, research questions, research objectives and literature review, the researcher developed the study's hypotheses to be tested. The secondary data for the study were collected from reliable sources, then the data was statistically analysed, and the required comparisons were made.

The fourth chapter dealt with the explanation related to the study data and the results obtained from the statistical analysis. The results were presented in graphs and sometimes in tables, and these results were commented on and interpreted in proportion to their purpose. Then it was identified whether there are positive changes according to the higher education scheme, according to the results presented in Chapter Four. This is followed by the present chapter (Chapter Five), which presents and

explains the study findings, recommendations and contributions, and study limitations. It also discusses directions for future studies and ends with the study's conclusion.

5.3 Discussion

To present structured results for exploratory, descriptive analysis, three sections are devoted to research questions in light of the objectives.

5.3.1 Increase Access to Higher Education Institutions

The study's first objective was to identify Accessibility to higher education institutions in Malaysia and Compare it with performance Aspirations in Malaysia Education Blueprint 2015-2025 (Higher Education). The secondary data related to this sub-shift was analysed. Then the results of the statistical analysis of the data were compared with the system's aspirations according to the blueprint in (Chapter four). They were lower than the expected performance according to the blueprint. Therefore, the first hypothesis (H1) was rejected. Whereas the number of local students' enrolment higher education institutions in 2014, the year before the blueprint was launched, was 1.2 million. While the number of international students was 0.1 million students. (Ministry of Education, 2015).

It is clear from the data in Table 4.2 that the total number of local students who enrolment higher education institutions are 1,224,098. In contrast, the total number of international students is 95,955. Thus, it becomes clear that the difference is not significant for local students, while the number of international students decreased by about 4000.

In the same context, the blueprint indicated that it aims to raise the Projected level of 53% tertiary enrolment. (2.5M students) 70% higher education .(Ministry of Education, 2015) .

Overall, our study supports our argument that increasing Access to higher education institutions resulted from implementing the first and second waves in Malaysia Education Blueprint 2015-2025 (Higher Education). The study expected an increase in the number of students enrolment Malaysian universities and institutes based on implementing the first and second waves of the Higher Education blueprint, which begins in 2016 and ends in 2020. see (James, Busher and Suttill, 2015); despite the diversification of the student population in higher education, there has been little research on the impact of Access to Higher Education institutions (AHE). And the positive effect of the higher education scheme on increasing the percentage of students joining universities, colleges and other institutions affiliated with the Ministry of Higher Education at its various levels.

As shown in **Graph 4.1**, the number of students in all categories is dropped slightly with each passing year, in private and public universities and at all levels of study. Although the blueprint targets an annual increase in access to higher education institutions by 5.1% percent in private universities, it targets an increase of 2.6 % percent in public universities. (Ministry of Education, 2015). This indicates the significant impact of the spread of the Corona virus in that period in the world in general and in Malaysia in particular, and its economic repercussions and the ability to move as a result of some regulating laws. A social value contention keeps on giving a convincing motivation to extend Access to higher education; notwithstanding, the issue of extended admittance has acquired significant significance considering continuous changes in the makeup of the Canadian populace and difficulties to the public economy. Canadian work market projections reliably propose that around two-thirds of the new positions will require additional education over the following ten years (Kirby, 2010).

The results are also shown in **Graph 4.7** and **Table 4. 1**. On average, the general ratio of females exceeded the average of the available proportion of males. Because males consider continuing studying too slowly, males prefer to work rather than study, and maybe they try to help their families. Demand is impacted by an assortment of demographic, social, and financial elements that set out the imperatives and open doors limiting or giving admittance to higher education. From the exciting

side, higher education access strategy and arranging centres around the beneficiaries of the schooling, the people who benefit from it and bear its expense. This incorporates understudies, guardians, bosses, and networks. Since they are personally associated, it is not unexpectedly impractical to independently distinguish and evaluate the express effect of interest-side factors and supply-side variables in higher education (Mountford-Zimdars and Sabbagh, 2013).

It can be seen in **Graph 4.8.** that the ratio between domestic and international students was approximately 9:1. Thus, there is one international student for every nine local students, with an average of five years. Strategic planning has often focused on internationalizing the curriculum at home. Moreover, this involves internationalizing content, learning, and teaching practices (Arkoudis, 2006). Malaysia aspires to continuously expand its capacity to host international students in higher education, with a target of 250,000 international student enrolments by 2025. (Ministry of Education, 2015) Table 4.2 shows that the number of international students decreased over time, as it was 172,886 in 2016 and continued to decline until it reached 95,955 in 2020.

The analysis of the data issued by the Ministry of Higher Education in Malaysia regarding the accessibility of higher education institutions in the last five years is a sub-shift, part of one of the 10 Shifts, and it allows us to conclude that these Shifts were negatively affected by the spread of the Coronavirus. However, most universities developed their strategy out of the general strategy of The Ministry, which was expected to increase the Percentage of students' Access to Malaysian universities and institutes, whether they are in the graduation or postgraduation stage because all the axes of the Ministry's strategic blueprint support this trend.

Therefore, the study recommended the Ministry of Higher Education in Malaysia take some exceptional measures, especially after the Coronavirus crisis, to support the Access of local and international students to higher education institutions. Moreover, the study urges the Malaysian Government to encourage males to complete their education, comprehensive university and post-graduate education, and achieve a balance in demand for jobs between males and females. According to each scientific

discipline, the ratio of faculty members to students needs to be re-adjusted to be consistent with international standards.

Introducing the Malaysian Education Blueprint 2015-2025 (Higher Education) has increased interest in entrepreneurship education within the Malaysian higher education system. Entrepreneurship has been given the utmost importance because it is included as part of Transformation 1, which aims to develop holistic, entrepreneurial, balanced graduates. The goal of shift 1 is to improve the quality of graduates across four dimensions: intellectual, spiritual, emotional, and physical, to enable them to thrive in today's complex global economy and contribute to the betterment of society.

5.3.2 Performance on Global Rankings

Graph.4.10 illustrate that the QS ranking increased from 6 universities in 2016 to 20 universities in 2020. Which represents 2% of the universities included in the QS World University Rankings 2020. In the same context, this ratio includes 1 in the top 100 (University Malaya), four in the top 200, and seven in the top 500. Malaysia's Higher Education blueprint, concerning the ranking of universities in international reports, clarified that the system aspires to the following: 25 In QS research output ranking, 1 University in the Asian Top 25, 2 Universities in the Global Top 100, and 4 Universities in Global Top 200(Ministry of Education, 2015).

By comparing the ranks that the education system aspired to in the blueprint, the ranks referred to in the report are very close. Knowing there is still a third wave (five years) ending in 2025. This reflects the superiority of higher education institutions over the system's aspirations in the Blueprint. Regarding the report of U 21, as shown in Graph4. 1, Malaysia ranks 27th in all 50 countries and third out of five countries in Southeast Asia. While graph 4. 2 illustrates that Malaysia ranked 28th out of the 50 countries covered by the report in 2019 and 27th in 2016 and 2020. This reflects the convergence of the contribution ratios of the five components based on the report in the three years. On the other hand, Malaysia ranked 25th in 2017.

This report reflects a state of fluctuation in the ranks of Malaysian universities, where she advanced from 2014 by one rank. From rank 28 to rank 27 in 2020. According to the Higher Education Scheme, the system aspires to rank 25. There may be still a full wave (five years) in the remaining years of the scheme period. Thus, the study's results support the second hypothesis (H2). As shown in graph 4. 3, the six countries were chosen based on the Malaysian educational plan's selection for them in its final report for 2015 under the name of the Asian Neighboring Countries. Malaysia occupies 3rd place.

5.3.3 Entrepreneurship

Regarding the awareness of entrepreneurship students, **Chart 4.17** illustrates the increased awareness of entrepreneurship among students, exceeding the target percentage in 2017, 2018, and 2019 .The targeted percentages from 2016 to 2019 were 60%, 70%, 80% and 90%, respectively(M. of H. Education, 2020).

Regarding the graduate entrepreneurs, graph 4.18 shows the number of graduate entrepreneurs is higher than the target ratios for most of the five years of the first and second waves of the Malaysian Higher Education blueprint. The target percentages in 2016 to 2020 were 2.5%, 3%, 3.5%, 4%, and 5%, respectively(M. of H. Education, 2020).

In the same context, as shown in graph 4.19, the proportion of students doing business while studying has grown from 3% in 2016 to a sharp increase of 10.20% in 2019. We were attempting to approach the target percentages in Malaysia's scheme for higher education in the first and second waves. The target percentages in the years 2016 to 2020 were: 3%,6%,9%,10%, and 15%, respectively, as we can see in Chart 4.20. Until 2019, the percentage of academics who received training in entrepreneurship reached 2,079, as it exceeded the target number of 1,500 trainees.

CHAPTER 6

CONCLUSION AND RECOMMENDATIONS

6.1 Contributions of the Study

Methodologically, the study contributes in different ways, the first of which is the use of the exploratory and descriptive study method and the comparative approach sometimes to investigate the extent of progress made in three Variables, namely (increases in access to higher education - Performance on global rankings – Entrepreneurship) . This would contribute to determining the extent to which the scheme is going according to what is expected. Therefore, in the third and final stage, avoid any negative aspects of the three mentioned indicators.

6.1.1 Contribution to the Literature

The study also contributes to the strategic management of Malaysian higher education organizations in the light of the higher education blueprint in theory and practice in light of the ten transformations that the scheme referred to. This study aims to clarify the results of the application of the first and second phases and to contribute to planning some of the obstacles faced by the third phase of the Blueprint. The study's results contribute to the literature on the strategic management of higher education organizations.

The current study also contributes to reducing the lack of reported studies on the higher education blueprint. as very few studies have been conducted on this scheme, it is not commensurate with the size of the change targeted by the blueprint and its objectives. as most of the studies conducted in this field do not support the

current contents and therefore do not provide insight into the impact of some variables on the transformations intended by the scheme. The study suggests that further studies be conducted to determine the similarities and differences between the current implementation results of the blueprint and its aspirations.

6.1.2 Practical Contribution

The study results significantly contribute to and affect all practitioners of the strategic management process in higher education organizations. I explained to them, through the realistic results related to the three principal axes of the study and its branches, that some of the axes did not achieve their aspirations in the blueprint; therefore, this result reflects a deficiency either in the aspirations or in the possibilities available to institutions of higher education. Through this brief presentation, it can be deduced that the practical benefit of this study is to draw the attention of the officials to identify and treat this shortcoming to avoid its recurrence in the third wave.

The findings highlight that the fundamentals of entrepreneurship must be effectively incorporated into Malaysian educational systems (public and private) so that graduates are equipped with the essential knowledge they need to react to the required changes in the business environment. It helps graduates from successful business management in a dynamic environment, and they will lack even the slightest knowledge required for a decent position.

6.2 Limitations and Future Research Directions

Each research work has its limitations that must be highlighted while interpreting the results, and further studies can use these limitations to expand the literature. Specifically, in this study, secondary data issued by the Ministry of Higher Education and some Malaysian universities were used to analyze it. These data were related to three main variables, namely (increased access to higher education institutions - ranking of higher education institutions at the level of Asia and the global

level - Entrepreneurship), and these variables are sub-transformations of some of the ten Shifts addressed by the blueprint, as they do not rise to be three complete Shifts.

Thus, based on the available data, the three variables were selected. Based on this shortcoming, future studies may decide to pursue a lengthy study to examine the entire ten Shifts if data are available or to examine a specific number of these Shifts so that the Shift is measured in full, including all sub-Shifts. The blueprint, as we know from the study, was established by the Ministry of higher education. As a result, the evaluation unit must be objective and independent of management. This action will aid in the creation of a solid roadmap for the future. Expand the limitation and future research.

6.3 Conclusion

In sum, it is expected that the strategic management of higher education organizations will remain a priority subject because of its link to economic and social development. Therefore decision-makers are interested in this administrative process to improve the general level of performance of higher education institutions.

Therefore, a general framework has been developed to bring about ten major Shifts in higher education. This framework defines the work systems, the main directions, and the system's aspirations; At the same time, it is impossible to use traditional management systems. Then the directors of higher education organizations will have a primary choice: to activate the strategic management systems in their institutions. To allow them to keep pace with these Shifts and then keep pace with the accelerating global development in various fields.

In this study, the researcher looked at the importance of strategic management in the application of the Malaysian blueprint for higher education, especially (increasing access to higher education institutions - the ranking of Malaysian

universities in Asia and globally - entrepreneurship) and compared that to the aspirations of the system according to this blueprint.

Literature has, time and again, stressed the importance of Strategic management theories providing a basis for novel approaches to strategy development in higher education institutions. However, they do not address all the pressing issues that education managers face today. Modern universities are sophisticated multi-level organizations, and the complex pattern of various contributory factors forms the background of educational management. In developing their strategy, education managers must also consider specific organizational characteristics of this sector (Tavernier, 2005). Therefore, there is a need for a thorough analysis of both traditional approaches and innovative attitudes that education managers can use in strategy-making. (Stukalina, 2014).

In the literature dedicated to entrepreneurship, Using the framework of an educational model, and after doing a systematic review of the empirical evidence on the impact of entrepreneurship education (EE) in higher education on a set of entrepreneurship outcomes., it was clear to us from the results of the study that this effect is positive. (Nabi *et al.*, 2017) This is consistent with the results of this study and following the results presented in Chapter Four.

The importance of this study lies in the fact that it was conducted in Malaysia, a country of great significance in the field of higher education at the international level, where a distinguished group of higher education institutions match and sometimes surpass their peers in Western countries. The study's objectives were determined, and then secondary data were collected according to the axes mentioned in the goals.

In conclusion, there is no doubt that the blueprint of the Ministry of Higher Education had an influential role in the three sub- Shifts that the study dealt with, which reflects the role of strategic management and its frailty in the advancement of higher education institutions, especially in this period of increased competitiveness among universities at the global level. But, if there are some failures in some Shifts,

we can attribute this to other non-administrative reasons, perhaps related to the state of closure at the local and global levels due to the spread of the Coronavirus.

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