

**INNOVATIVE INTERVENTIONS TOWARDS
SUSTAINABILITY
A CASE OF UNIVERSITI SAINS ISLAM MALAYSIA**

HAMMAD FARHI BIN MOHD SAUDI

UNIVERSITI SAINS ISLAM MALAYSIA

**INNOVATIVE INTERVENTIONS TOWARDS
SUSTAINABILITY
A CASE OF UNIVERSITI SAINS ISLAM MALAYSIA**

Hammad Farhi Bin Mohd Saudi

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AUTHOR DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged.

Date: 25 August 2021

Signature:



Name: Hammad Farhi Bin Mohd Saudi

Matric No: 4180001

UNIVERSITI SAINS ISLAM MALAYSIA
جامعة العلوم الإسلامية
ISLAMIC SCIENCE UNIVERSITY OF MALAYSIA

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Hammad Farhi Bin Mohd Saudi

ABSTRAK

Objektif utama kajian penyelidikan ini adalah untuk membudayakan dan menyumbang idea inovasi di USIM dengan mengoptimumkan sumber sedia ada ke arah pertumbuhan ekonomi yang lestari dalam lima bidang utama dalam tadbir urus dan pembangunan sesebuah universiti. Lima bidang utama tersebut merangkumi aspek pemasaran, pengurusan, pengurusan operasi, kewangan dan pengurusan strategik. Kelima-lima bidang ini memerlukan kepada penemuan dan teknik terkini berpaksikan inovasi dalam usaha USIM mengorak langkah untuk menjadi sebagai sebuah ‘Universiti Sains Islam Global Berimpak Tinggi’. ‘Glokal’ adalah istilah yang menggabungkan ‘global’ dan ‘lokal’ yang diterjemahkan di peringkat nasional dan global bahawa USIM akan dilihat sebagai universiti yang tersohor. Kaedah penyelidikan berorientasikan kaedahgunaan dan secara aplikasi (*applied research*) digunakan dalam setiap isu dan permasalahan yang dibentangkan dalam bentuk kajian kes. Manakala, tinjauan soal selidik (*survey*) telah digunakan sebagai instrumen kajian untuk mencapai objektif bagi setiap kajian kes tersebut. Kajian penyelidikan telah dijalankan bermula pada bulan Disember 2017 sehingga Julai 2019. Kesemua lima kajian kes yang dibentangkan dalam tesis ini menyentuh isu-isu yang dihadapi oleh USIM pada ketika itu dan telah dikenal pasti sebagai permasalahan yang agak kritikal kepada universiti di dalam setiap bidang utama yang telah dinyatakan. Setiap kes kajian penyelidikan tersebut memerlukan kepada solusi yang berkesan, jitu dan mantap dalam tempoh masa selama 3 hingga 4 bulan. Senario setiap permasalahan dikaji, dianalisis dan seterusnya, cadangan penyelesaian serta solusi terbaik kepada isu dan permasalahan tersebut dicadangkan dengan menggunakan kaedah metodologi yang tepat, analisis yang komprehensif dan mengaplikasikan teori serta model yang bersesuaian bagi menangani isu-isu tersebut. Penemuan, cadangan dan inovasi baharu dalam kajian penyelidikan ini telah dikemukakan kepada pihak Pengurusan Tertinggi universiti dan telah diluluskan untuk pelaksanaan. Tempoh masa yang singkat adalah kekangan utama untuk pelaksanaan sepenuhnya bagi kesemua cadangan penyelesaian untuk setiap kes dan permasalahan tersebut. Namun, kajian penyelidikan bagi kelima-lima kajian kes tersebut telah berjaya dilaksanakan dengan jayanya. Kajian ini turut memberikan cetusan idea dan inovasi berikutan keadaan ekonomi semasa dan ketidakcukupan peruntukan kewangan yang disalurkan oleh pihak Kerajaan kepada Institusi Pengajian Tinggi. Kajian ini telah memberikan sumbangan yang amat signifikan dalam proses penambahbaikan kepada operasi proses kerja, modus operandi dan seterusnya memberikan sumbangan kepada Universiti dalam usaha untuk menjana sumber pendapatan. Hasilnya, proses penambahbaikan di dalam operasi dan inovasi baharu dengan menggunakan sumber sedia ada telah berjaya dihasilkan dan direalisasikan, seterusnya memberikan sumbangan kepada pemilik taruh, masyarakat dan warga kerja universiti. Cetusan inovasi tersebut telah memberikan hasil yang amat positif, memberikan sumbangan dan impak yang besar kepada universiti.

ABSTRACT

The main objectives of this applied research study are to cultivate and contribute towards the innovative ideas and new interventions at USIM by optimising available resources towards sustainability in governing, driving and developing the university. The five key areas mainly in marketing, management, operations management, finance and strategic management require new discoveries and techniques on innovation in USIM's efforts to make strides to become a 'Prestigious Islamic Science Glocal University'. 'Glocal' is a term that combines the word 'global' and 'local', which is locally and internationally translated that USIM will be described as a prominent university. The method used in analysing each issue is by adopting applied research approach and presented in the form of case study. The survey which consists of sets of questions as the instrument has been utilized. The study was conducted from December 2017 until July 2019. All five case studies presented in this thesis touch on issues at that time that have been identified as relatively critical problems to the university in each of the key areas that have been mentioned earlier. Each case study requires an effective, accurate and robust solution over a period of three (3) to four (4) months. The scenario of each problem is studied, analysed and the proposed and the best solution to the issue is proposed using the appropriate methodology, comprehensive analysis and apply the appropriate theories and models to address those issues. New findings, recommendations and innovations in this research have been proposed to the University's Top Management and have been approved for implementation. The short time frame was the main constraint for the full execution of all the recommendations made for each case study. Nevertheless, despite the obstacles encountered, all the five cases have been successfully highlighted the importance of implementing and executing innovative ideas by the university. Besides that, this research has made contributions in terms of improving the fundamental operations of a Higher Education Institution as well as providing alternative approaches to counter the financial problems arising from the budgetary cut downs from the government. Nevertheless, the ability to generate alternative revenues was not the only achievement resulting from this study. Several systems and operating procedures (SOPs) for USIM was improved and enhanced which giving benefits for the stakeholders, society and USIM's community. The outcomes and the results from the research were tested and proven to be successful, as USIM experienced numerous positive outcomes as a result of problem identification and the implementation of improved processes from the operational and policy making perspective. The spark of innovative interventions has given very positive results, giving great contribution and impact to the university.

الملخص

إن الهدف من هذه الدراسة هو تحديد ومعالجة القضاة الخالية التي نواجهها الجامعة الموفرة (أوسيم)، فقد أجرينا دراسة بين الفترة من ديسمبر 2017 حتى يوليو 2019م للتعرف إلى المشكلات التي واجهتها الجامعة، ولتي يجب معالجتها بطريقة فعالة جادة للوصول إلى حلها. ولستخلصنا إلى أن هناك خمس مجالات رئيسية يجب الإلمام بها والمساهمة في تحسين نموها، وهي: مجالات التسويق، الإدارة التنظيمية، إدارة العمليات، الإدارة المالية، والإدارة الاستراتيجية. وعلى هذا الأساس، استوجب علينا أن نبحث عن أفكار جديدة تمثل في إيجاد تقنيات نركز على مفهوم (glocal)، أي (global) و (local)، بمعنى إفرار وطرح أفكار وتقنيات نوكب النكدات العالمية وننافسها (global)، ونلبي المتطلبات المحلية (local) على حد سواء. وهذه الدراسة سنكون محطة نقاش ودراسة لجميع القضاة الخمس التي تم تحديدها، ولتي صارت سيناريو وحول إدارة الجامعة في الوقت الراهن. وإذن الله سبتم دراسة هذه القضاة خلال فترة قصيرة من 3 إلى 4 أشهر للوصول إلى قرار وحل لها. كما ستوفر هذه الدراسة مداخل ومناهج حل هذه القضاة، ولتي ستكون بلا شك قائمة على المنهجية والتحليل الشامل، إلى جانب إيجاد دبنابكية التطبيق لأي نظرية يمكن أن تطرأ إثر هذه القضاة، ولعمل على تكبيفها بشكل مناسب وفقاً لكل مجال من المجالات التي أشر إليها. وسبتم تقديم هذه الدراسات إلى إدارة الجامعة، مرفقاً بالحلول المقترحة، والحصول على موافقة إدارة الجامعة العليا لتنفيذها، إن المدة القصيرة التي نواجهها هذه الدراسة نعتبر هي العائق الرئيسي للتنفيذ الكامل لجميع الحلول المقترحة لكل قضية من هذه القضاة الخمس. ومع ذلك، فإن هذه الدراسة التي شملت البحث عن منهجية إصلاح وتزيم القضاة الخمس التي نواجهها الجامعة نعتبر دراسة في غاية الأهمية، وتنفيذ مقترحاتنا نعتبر خطوة رئيسية للتغيير ولوصول إلى الأحسن. وبالفعل، فإن نتائج هذه الدراسة أظهرت نتائج مثمرة، وفهمت أثرها إيجابياً.

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LIST OF ABBREVIATIONS

ABC	Activity-Based Costing
BOS	Blue Ocean Strategy
DTC	<i>Dewan Tuanku Canselor</i> (DTC Hall)
ERRC Grid	Eliminate-Reduce-Raise-Create Grid
FPBU	Faculty of Major Languages Studies
FSU	Faculty of Syariah and Law
FPQS	Faculty of Quranic and Sunnah Studies
FEM	Faculty of Economics and Muamalat
FKP	Faculty of Leadership and Management
FST	Faculty of Science and Technology
FKAB	Faculty of Engineering and Built Environment
FPSK	Faculty of Medicine and Health Sciences
FPg	Faculty of Dentistry
HEI	Higher Education Institution
JKPU	USIM's Board of Management
JPA	Public Service Department
LLL	Lifelong Learning
MEB (HE)	Malaysian Education Blueprint for Higher Education
MOE	Ministry of Education, Malaysia
MOHE	Ministry of Higher Education, Malaysia
MQA	Malaysian Qualifications Agency
RC	Residential Colleges
ROI	Return on Investment
SPM	Malaysian Certificate of Education (<i>Sijil Pelajaran Malaysia</i>)
STAM	Malaysian Higher Religious Certificate (<i>Sijil Tinggi Agama Malaysia</i>)
SWOT	Strengths, Weaknesses, Opportunities, Threats
STPM	Malaysian Higher School Certificate (<i>Sijil Tinggi Persekolahan Malaysia</i>)
University	Universiti Sains Islam Malaysia
USIM	Universiti Sains Islam Malaysia
UPU	University Admission Unit, Ministry of Higher Education
VSM	Value Stream Mapping

CHAPTER 1

INTRODUCTION

1.1 Introduction

As a developing country, Malaysia needs to go extra miles in establishing innovation culture and ecosystem in any of its economic and socio industries. Lounsbury et al. (2019) revealed that the innovation practice and work-balance culture in any sector will enhance the capability of nurturing, developing, and educating people to be at their best. The swift transition of economic development no longer depends on any specific sector but somehow there has to be interlink between all sectors in contributing towards economic development (Raudino, 2016). As all sectors play important roles in economic development, the education industry also plays its part in ensuring that the human capital is embedded with skills and knowledge that can be used innovatively in the future (Burgess, 2016).

According to Granstrand and Holgersson (2020), innovative is either part of the idea, technique or both of them, that are produced by the people. He added that by employing innovative ideas, a product can be improved, a solution can be generated, a new concept can be introduced either for the product or services sector which benefits the stakeholders.

From an organisational perspective, being innovative with creativity will produce and enhance the competencies and capabilities which will drive towards organisational development (Snowdon & Alessi, 2018). The organisational aim, mission, and vision will assist the organisation to grow stronger and in line with the current trends in the world. For example, innovative in marketing has used online platforms such as

Facebook, Instagram, and Twitter to market the product or services provided by the specific organisation (Baker et al., 2015). In sum, the definition of innovative is the idea, strategy, or technique that is being applied to help or improve one's daily routine and in any kind of scope to ease and comfort people.

From the business perspective, innovative can be defined as an ideal interpretation of processes that leads to ultimate output with values or also known as a method in reducing costs of product or services and must meet all the specific requirement (Fahmi et al., 2017). Furthermore, innovative comprises of the deliberate use of information, imagination, and initiative to derive greater or different values from resources and encompasses all procedures by which new ideas are created and transformed into beneficial products (Giones & Brem, 2017; Harmancioglu et al., 2020; Ones et al., 2015).

The growth of a business may influence an individual's thought process. Perkmann and Walsh (2007) affirmed that the nature of business encouraged companies towards innovation to remain relevant to the industry and was the best value-generating technique in the company's products or services. Additionally, Spohrer and Welser (2020) stated that to raise revenues and boost business performance, the requirements for innovative strategies may also include the introduction of new technologies, designs, or processes in the marketplace.

The implementation of technological interventions for sustainable economic development and to enable innovative projects would involve a holistic approach as a starting point in economic development across cultures. The main purpose and vision of technological innovations would distribute human responses socially, apart from assisting in problem-solving. In this context, people's level of happiness, life quality, justice, and respect for human rights must be in integral propositions to the innovative

implementation (Visvizi et al., 2018). Also, industrial development and growth are helpful for some dimensions of sustainability, such as economic growth. Although economic growth is the main catalyst for sustainability, the unique effects on sustainability were found in different conditions (Nasrollahi et al., 2020). Besides, sustainable practices varied depending on the size and maturity level of the organisation, the strategic planning involved, and the organisational structure. These practices would eventually bring challenges in implementing, analysing and identifying possible improvements for sustainable practices (Van de Watering et al., 2017).

The current projection of the Industrial Revolution 4.0 (IR 4.0) has led to experimentations in innovative discoveries and creation in many countries (Bahrin et al., 2016; Roblek et al., 2016; Shahroom & Hussin, 2018). The anxiousness, curiosity, and excitement generated in problem-solving became the main objective in using technology as a platform of execution (Jones et al., 2018; Pieniazek, 2016; Shapiro & Euchner, 2016). However, not every country was able to respond to the advent of IR 4.0. Many limitations were present to manipulate innovative and creative ventures, as innovation required a big capital and a skilled and experienced workforce to understand the relevant issues and convert the issues into valuable products or services to be routinely used.

In the current Malaysian scenario of IR 4.0, all the local sectors contributed to the nation's economic growth, as the IR 4.0 has brought tremendous changes in assimilating the culture of innovation to the industry (Hamdan, 2018; World Economic Forum, 2016). Consequently, these innovative elements contributed to developing a strategic economic model that could generate more income for the country and benefit the citizens. Simultaneously, product innovations attained by either Higher Education Institutions (HEIs) or other industries should hold high economic values in stimulating

the country's wealth production (Shahroom & Hussin, 2018; Spillan et al., 2019). The global arrival of IR 4.0 has affected many industries, including the education sector. Technological evolutions have created a new phenomenon for the stakeholders in this industry to be creative and innovative in classroom management (Chun et al., 2016; Healey, 2018; Kessler, 2018). In HEIs, the assimilation process of using technology in education was practised by developed countries, specifically in the introduction of hybrid and blended learning techniques requiring students' involvement in accessing lectures and discussions online (Boelens & De Wever, 2018; Dziuban et al., 2018). Thus, the management of HEIs needed to develop a strong and executable strategic plan during the transition from conventional ways of teaching to more innovative methods.

The HEIs essentially needed awareness of the global changes occurring in the education industry to adapt and adopt new norms for the teaching and learning process. This preparedness is important to support the country's vision and mission of becoming an industrialised high-income nation that is both innovation-driven and creativity-driven (Barbón Pérez & Fernandez Pino, 2018). The HEI is also a domain where talents are nurtured and moulded based on individual interests by prominent academicians, scholars, and management who ensure the progressive development of excellent skill sets.

In the context of HEIs in Malaysia, there are 20 public government funded HEIs monitored by the Ministry of Higher Education (MOHE). The educational transformation, particularly in adopting and adapting technology in teaching and learning, has positioned the Malaysian HEIs among the world's top ranking. The power of autonomy given to the management of HEIs enabled strategic planning development in the integration of the innovative and creative components. This integration is crucial for HEIs to generate income without full reliance on government funds.

As such, HEIs served as an essential knowledge point and acted as the main source of skills and formal education that contributed significantly to the current innovations and economic growth.

The competitiveness of the positioning of HEIs was not restricted to local perspectives but is a worldwide phenomenon. The main role of HEIs comprised of teaching and learning, research, conferences, and book and journal publications, which has transformed into organisations requiring talents based on skill sets, experiences, and qualifications to ‘compete’ with other institutions. As such, competition existed between the HEIs to be acknowledged as the institution of choice by the people and other parties. Therefore, HEIs need to holistically and strategically revamp the current system in instilling the current innovative trends in attracting worthy talents. In addition, with the current pandemic of COVID-19 has sparked a flurry of discussions about access and equity in higher education around the world, although the contexts are differed, the pandemic has also highlighted common problems and global interconnectedness. Being off-campus, online classes and working fully online have been a really challenging issue, especially for economically disadvantaged students with home situations that are uncondusive to learning or getting online has happened almost everywhere, HEIs need to think innovatively and thinking hard about what to do going forward.

Besides, HEIs should contribute to developing an innovative culture and enabling Malaysian HEIs to compete with other renown universities worldwide. This capacity could be accomplished by establishing innovation as the main driving force in teaching and learning, research development, and the universities’ operations. Besides, innovative ideas and interventions prompted an increase in organisational performance and revenue, as these organisations created and employed more efficient and effective

cost-reductive processes and facilitated the development of better products (Mohammed et al., 2016).

On the other hand, sustainability is defined as the process of retaining an object or situation and pertained to the effort of maintaining and preserving originality. Also, sustainability is a form of development that meets the present needs without compromising the ability of future generations to meet individual needs (Farley & Smith, 2020). According to the United Nations Brundtland Commission in 1987, sustainability has been defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (De la Poza et al., 2021). In the world today, there are almost 140 developing countries in the world seeking ways of meeting their development needs, but with the increasing threat of climate change, concrete efforts must be made to ensure development today does not negatively affect future generations (De la Poza et al., 2021). The Sustainable Development Goals (SDGs), also known as the Global Goals, were adopted by all UN Member States in 2015 as a universal call to action to end poverty, protect the earth, and ensure that all nation enjoy peace and prosperity by 2030. The SDGs were addressed and interconnected, recognising that actions in one area have an impact on outcomes in others and the development must be balanced between social, economic, and environmental sustainability. The goal was to create a set of universal goals to address the world's serious environmental, political, and economic concerns. Besides, the SDGs were also aimed to eliminate poverty, hunger, and inequality; address climate change and environmental issues; increase health and education access; and contribute to strong institutions and partnerships (De la Poza et al., 2021). In the context of HEIs, since the adoption of Agenda 2030, Higher Education Institutions (HEIs) have expressed rising worries about sustainability issues, however this is insufficient for

society stakeholders seeking and delivering innovation and excellence. It was also addressed and pose a challenge for HEIs for the efforts made to fulfil them and knowing how to assess their performance. To realise the SDGs, all of society's creativity, know-how, technology, and financial resources are required.

The terminology 'campus sustainability' in Universiti Sains Islam Malaysia (USIM) is based on the Islamic development focusing on value orientation and the need to upgrade campus welfare in all aspects, achieving a blessed campus life, and success in this world and the hereafter.

In realising the concept of campus sustainability, the USIM community which comprised of the management, academicians, administrators, students, and stakeholders are required to appreciate the '*khalifatullah*' concept, which is an individual's role as the administrators and coordinators of the universe in achieving blessings and prosperity. Besides, USIM believed that every community played an important role in the aspect of sustainable development to nurture, balance, and appreciate the blessing (*barakah*) campus concept (USIM Annual Report, 2019). The measurement on *barakah* campus can be described as achieving the quality of a shariah compliant university, percentages of integration of *naqli* and *aqli* in academic programs and research activities, high numbers of graduate employability based on the integration of *revealed* knowledge (*naqli*) and rational sciences (*aqli*) knowledge (GIINA) Model, level of compliance with university regulations, avoid waste of resources (time, energy, utilities), the amount of donation (*infaq*) increased over time, and adequacy of operating expenses in times of economic downturn (Source: Barakah Campus Pioneer Book, USIM Publication, 2017).

1.1.1 Performance Management in HEIs

In recent years, Higher Education Institutions have become obsessed on the issue of performance since it has been visible in rankings (Williams & de Rassenfosse, 2014). Performance in this context relates to the activities that objectives are achieved consistently effectively and efficiently (Chahar & Hatwal, 2018). Performance management is vital in the educational institution, but it requires to be redefined and implemented according to the requirement and standards of institutions.

According to Dreher and Dougherty (2001) in (Chahar & Hatwal, 2018), performance information is employed for decision making about employees which includes promotion, adjustments in annual wages and performance-based bonus. Besides, it will also provide advice and feedback to employees for improvement. Another key use of performance management is centred around the organizational goals and objectives. It serves as a criterion for measuring the effectiveness or validating the selection of employee, training programs, or any other measure to improve the productivity of employee or organization. On the other hand, Seeber et al. (2015) claimed that performance can be measured by fostering diversity at the system level would therefore help to ensure that institutions with strong basic research capabilities and distinctive commercialisation competences could co-exist with institutions with greater focus on engaging with a wider array of external, often local or regional stakeholders. Meanwhile, Coste and Tiron-Tudor (2015) claimed for universities, the performance management systems must ensure the academic activities improvement, whether institutional or instrumental, and make universities accountable for their policy and services in accordance with their level of autonomy. However, according to Birdsall (2018), “politics, resource constraints, organizational capacity, institutional differences, and the nature of public goods and services” create a number of complications that may

make implementing performance management systems ineffective or harmful for public institutions. Antonowicz et al. (2017) summarise, global, national or regional competitive pressures may hinder Higher Education Institutions to mimic rather than to develop their own distinctive mission profiles to achieve for outstanding performance. Paradoxically, specialised universities, while facing such competitive pressures, appear to be those where academics are more likely to report sharing a distinctive identity (Seeber et al., 2015).

The university sector was also concerned by the performance measurement. This is mainly due to the increasing number of students, to the reduction of available financial resources, to the national and international competition, the growing mobility of students and academic staff (Melo & Figueiredo, 2020). The universities have been forced to improve governance system, organisational structure and management style. In previous years, increasing interest in performance measurement in higher education was generated (Nisio et al., 2018). The globalisation of higher education and the demand for universities' accountability by governments are favouring a faster and better implementation of performance systems in these organisations, but there are still many things to improve. For example, performance systems in universities sometimes do not measure the whole process of university academic activities from input, process to output and outcome. Universities cannot and must not be treated as institutions producing public services but rather as cultural institutions which pursue three ultimate purposes: education, research, and technological transfer. Among the variables that mostly influence the characteristics of the performance management system, worth remembering are the governance system, the micro and meso organisational complexity, the presence of assessment experience, the funding criteria (Melo & Figueiredo, 2020).

This chapter will continue with the elaboration on the organisational background, operational activities, and structure. It will be followed by the background of the study consisting of the problem statement, research objectives, and research scope. The research motivation and thesis structure conclude this chapter.

1.1.2 Organisational Background

Universiti Sains Islam Malaysia (USIM), formerly known as Kolej Universiti Islam Malaysia (KUIM), is the first Islamic university and the 12th Public HEI established by the Government of Malaysia. Additionally, USIM was established in line with the Universities and University Colleges (Amendment) Act 1996 with approval for establishment in a Cabinet meeting on 11 June 1997, subsequently being gazetted on 12 March 1998. The establishment of USIM was the brainchild of the former Education Minister, YB Dato' Seri Mohd Najib Tun Hj Abdul Razak, with the support of the former Prime Minister, YAB Tun Dr. Mahathir Mohamad.

The establishment of USIM was also under the government's effort to produce credible leaders capable of protecting the country's interests, the society, and bringing Islamic education into the country's mainstream higher education sector. Other than the aspiration to provide students from the State Religious Secondary Schools (SMAN), People's Religious Secondary Schools (SMAR), and National Religious Secondary Schools (SMKA) with the opportunity to further their religious education without travelling to the Middle East, the establishment of USIM was also a way of reducing the government's burden, at that point of time, in sending students abroad for further studies. Simultaneously, the government intended to establish a centre of excellence in producing intellectual Islamic scholars.

As such, USIM intends to become a leading Islamic HEI in line with the vision of building the strength of the Muslim ummah in Malaysia. Apart from producing graduates to meet the country's need for manpower, USIM serves as a centre producing Islamic scholars with expertise in the fields of Shariah, Quran, Sunnah, and *dakwah* to rebuild the Islamic civilisation in Malaysia. At the time, USIM's Management encouraged students to master the Arabic language for direct reference to the *muktabar* books in the original language rather than using translation. Besides, the mastery of other languages, such as English, and ICT skills, there are additional attributes of USIM graduates before entering the job market or becoming Islamic intellectuals (Source: USIM Website, 2019).

Unlike other Islamic educational institutions, USIM emphasised on courses related to Islam, besides offering several other courses, such as in Social Sciences, Sciences, Information Communication Technology, Computer Science, Linguistic, Medicine and Dentistry. The programmes offered at USIM also utilised knowledge integration by combining revealed knowledge and rational sciences. In this regard, 60% of the USIM courses focused on all the branches of Islamic knowledge, whereas the remaining 40 % incorporated subjects such as computer skills knowledge, creative thinking, communication, English and management. The medium of instruction used in all the courses was English, except for courses related to the religious field, which were taught in Arabic. Furthermore, the intended teaching and learning approach for Islamic studies at the time was conventional and resembled the methods used by other universities, locally or abroad. Also, USIM's permanent campus was equipped with modern learning facilities, including optical lines to promote the advancement of Islamic studies' teaching and learning by fully utilising Information and Communications Technology (ICT), as stated below:

“Further, the co-curricular activities at KUIM are aimed at strengthening students’ intellect and physical, whereby the Halaqah Studies enables students at that time to study al-Quran, al-Sunnah and turath in Islam.”

Tan Sri Shukor (Berita Harian, 8 June 2000)

“KUIM’s study concept is to integrate the Naqli knowledge which is revelation through the prophet and the Aqli knowledge which is humanities with arguments that make sense with the addition of unique features such as mastery of ICT, English and other languages”.

Tan Sri Shukor (Berita Harian 18 May 2000)

Therefore, USIM practised the fundamentals of Islam in delivering the sciences of revelation (*Naqli* knowledge) and rational sciences (*Aqli* knowledge) that differed from other Malaysian public universities. Moreover, in establishing a position, both locally and internationally, innovative plans and strategies were implemented by turning conventional methods to the modern method of offering and providing knowledge to society, as stated below:

“A unique feature of KUIM is its students are required to undertake practical training by working temporarily in Government departments or agencies and private sector to expose them to the career field, practising knowledge and establishing cooperation with the community”.

Tan Sri Shukor (Berita Harian, 8 June 2000)

1.1.3 USIM’s Operation

USIM started its first operation on the 5th Floor of the Faculty of Islamic Studies building at the National University of Malaysia. In January 2000, a Memorandum of

Understanding (MoU) was signed between the Federal Territory Islamic Religious Council (MAIWP), Kolej Universiti Sains Islam (KUIM) and the Baitulmal Professional Institute (IPB) as an agreement to rent IPB building as KUIM's temporary campus. The MoU was signed by the Minister in the Prime Minister's Department, YB. Datuk Dr. Abdul Hamid Othman representing MAIWP, Prof. Dato' Dr. Abdul Shukor Haji Husin representing KUIM, and the Chairman of IPB, Tan Sri Hanafiah Ahmad.

The MOHE appointed Dato' Dr Yusof Noor as the Chairman of the University's Board of Directors, while the first Rector or Vice-Chancellor was Prof. Dato' Dr. Abdul Shukor Haji Husin. Meanwhile, the first Chancellor of USIM was Her Royal Highness Tunku Ampuan Najihah binti Almarhum Tunku Besar Burhanuddin and the second Chancellor was Her Royal Highness Tunku Ampuan Besar Negeri Sembilan, Tuanku Aishah Rohani Binti Almarhum Tengku Besar Mahmud. The Pro Chancellors of USIM were Yang Amat Mulia Tunku Besar Seri Menanti, Tunku Ali Redhauddin Ibni Tuanku Muhriz, and Tun Dato' Seri (Dr.) Zaki Tun Azmi.

1.1.3.1 First Student Intake

The 18th of June 2000 was a historical day for USIM, as it welcomed the university's first 255 students at the temporary campus in the Baitulmal Professional Institute (IPB), Kampung Pandan, Kuala Lumpur.

Subsequently, USIM enrolled 700 students for the 2001/2002 academic session, before gradually increasing the student intake. Initially, USIM focused on three fields of study, which were Shariah and Judiciary Studies, Quranic and Sunnah Studies, and Dakwah and Islamic Management Studies in three faculties, namely, the Faculty of Shariah and Judiciary, the Faculty of Quranic and Sunnah Studies, and the Faculty of

Dakwah and Islamic Management, which offered a bachelor's degree programme with Honours.

1.1.3.2 Ground-Breaking Ceremony

On 22 August 2002, the former Prime Minister, YAB Tun Dr. Mahathir Mohamad, officiated USIM's permanent campus in a ground-breaking ceremony in Nilai, Negeri Sembilan. Phase I of USIM's permanent campus construction consisted of only the major basic facilities in ensuring the functionality of the campus and consisted of the Chancellery building, lecture halls, and student hostels. The USIM management emphasised the development of an environmentally friendly campus for students to have an interactive and communal campus environment characterised by knowledge and harmony.

On 1 February 2007, the name of Kolej Universiti Islam Malaysia (KUIM) was officially changed to Universiti Sains Islam Malaysia (USIM). Subsequently, on 25 November 2008, the former Prime Minister, YAB. Dato' Seri Abdullah Hj. Ahmad Badawi officiated the USIM campus in Nilai, Negeri Sembilan.

Upon rebranding, USIM was led by prominent and capable vice-chancellors. The list of the succession of vice-chancellors are as follows:

- a. 1st December 2009, Prof. Dato' Dr. Muhamad Muda was appointed the second Vice-Chancellor.
- b. 1st December 2012, Prof. Dato' Dr. Asma Ismail became the third Vice-Chancellor.
- c. 16th August 2014, Prof. Dato' Dr. Musa Ahmad was appointed the fourth Vice-Chancellor.

- d. 23rd September 2019 to date, Prof. Dato' Dr. Mohamed Ridza Wahiddin is at the helm of USIM's leadership.

Also, the succession of the Chairman of the University's Board of Directors are as follows:

- a. 1st April 2000, Tan Sri Dr. Yusof Noor became the first Chairman of the University's Board of Directors.
- b. 1st April 2012, Prof. Emeritus Tan Sri Dato' Dr. Abdul Shukor Haji Husin became the 2nd Chairman of the University's Board of Directors.
- c. 1st April 2016, Tan Sri Dato' Prof. Dzulkifli Abdul Razak was appointed as the 3rd Chairman of the University's Board of Directors.
- d. 1st October 2018 to date, Prof. Dato' Dr. Siddiq Fadzil serves as the 4th Chairman of the University's Board of Directors.

1.1.3.3 USIM Main Campus

As such, USIM continues to develop and expand the main campus in Bandar Baru Nilai, Negeri Sembilan Darul Khusus and is the home of seven (7) faculties, namely, the Faculty of Quranic and Sunnah Studies, the Faculty of Leadership and Management, the Faculty of Shariah and Law, the Faculty of Science and Technology, the Faculty of Major Language Studies, and the Faculty of Engineering and Built Environment. Meanwhile, the Faculty of Medicine and Health Sciences and the Faculty of Dentistry is based at the Pandan Indah Branch campus in Ampang, Selangor. Furthermore, USIM is strategically located, within a 20-minute distance from the Kuala Lumpur International Airport (KLIA), a 30-minute distance from Putrajaya, and a 40-minute distance from Kuala Lumpur.

Similar to any other HEIs, USIM created the motto, philosophy, vision, mission, and objectives to competitively drive the institution in the right direction, both locally and internationally, from the academics and management perspectives. All these principles supported the establishment of USIM in becoming the best service provider in higher education in terms of management, teaching and learning, or research. These elements boosted the spirit of USIM's stakeholders to contribute to communal and societal development.

The details are as follows:

- a. Motto: Knowledgeable, Disciplined and Devout.
- b. Philosophy: The Integration of *Naqli* (Revealed) and *Aqli* (Rational) Knowledge and Virtues are the Bedrock of an Outstanding Generation and Knowledgeable Society.
- c. Vision: Distinguished Islamic Science Higher Education Institution.
- d. Mission: To Produce Competent Intellectuals, Leaders and Professionals Based on Islamic Intellectual Tradition, Noble Values of Religion and Culture for the Universal Good.
- e. Objectives
 - i. To advocate and channel Islamic Education into the mainstream of National Education.
 - ii. To enculturate the cohesion between theory and practice within every graduate.
 - iii. To produce Muslim scholars with integrated education, capable of leading a multicultural society and have high potential to spearhead national development.

- iv. To explore and revive outstanding Islamic scholarship tradition appropriate to the environment and current technologies.
- v. To supply human resource who firmly embrace Islamic values and are capable to interact and communicate effectively in society.

Core values: Trustworthy, Consensus, Professional, Efficient (*Al-Qawiiyy Al-Amin*) and Global (*Alamiyyah*). Source: USIM Website (2020)

The USIM education model focusing on the fundamental principle and combining religious sciences with social and physical sciences would not only provide a more holistic view of the current global challenges, but the model also proposed a new solution to address and overcome these challenges. This is because the fundamental existence of Islamic values and history demonstrated the possibility of sharing these qualities for harmonious living with mutual respect and tolerance.

The solution was also an attempt to restore the scientific and technological contributions of past Muslim scholars for future reference. As of June 2020, USIM offered a total of 85 academic programmes, consisting of 4 *Tamhidi* (Foundation) programmes, 32 undergraduate programmes, 46 postgraduate programmes (30 Master programmes and 16 PhD programmes, and 3 postgraduate diploma programmes, respectively, as shown in Appendix 1 (i to v). (Source: Marketing and Admission Department of USIM, USIM Website, 2020).

The Vice Chancellor, in his welcoming speech in conjunction with the registration of new students in May 2020, remarked that USIM is growing with an increase in staff and student intakes. Data up to April 2020 revealed 1,655 members of the staff and 12,840 students, comprising of 10,145 undergraduate students, 1,525 postgraduate students, and 860 *Tamhidi* (Foundation) students. This included 717 international

students and 310 students from the GENIUS Insan College. Additionally, USIM aimed to produce high-quality graduates with strong theoretical and hands-on knowledge to be integrated with different demographics, cultures, and environments to contribute significantly towards the Malaysian economic development. The Vice-Chancellor also mentioned that USIM graduates were moulded within this culture to ensure professional work efficiency and the readiness to contribute and make a difference to society in the Islamic tradition.

As of March 2020, the total number of USIM alumni was 22,667, with some of the alumni returning to contribute to USIM, while the remaining alumni charted careers in various fields. On another note, the Vice-Chancellor also mentioned that USIM was scaling greater heights through the holistic development in rapidly developing facilities and campus amenities, student development, current student achievements, and alumni success as the current contributions of USIM members to the community.

Moreover, USIM designed study programmes to meet the market and industry needs while shaping students' development with soft skills to face new challenges in the future. As such, USIM was undeniably capable of producing successful quality graduates in various fields and industries. Source: Vice Chancellor's Office (2020).

1.1.3.4 Structure of the University

The operationalisation of a university requires the effort of collective management based on core elements. In USIM, there are seven (7) core elements, namely, the administration, academic affairs, knowledge management affairs, student affairs and alumni, research and innovation, finance, and legal. These elements were administered by 45 departments, with each entity spearheading a specific role and

function, including policymaking, services, and operations. Besides, there is one (1) Centre of Excellence (COE), the International Fatwa and Halal Centre (*iFFAH*), managing the research area on fatwa and halal management.

For example, in the administration element, specific departments under the Registrar oversee specific matters. The human resource department undertook matters of staff recruitment and training and development, and the Bursary Department, under the Bursar, responsible for matters of financial control in the university, including budget planning, inventories, and other matters relevant to the university's financial activities.

For the academic affairs element led by the Deputy Vice-Chancellor of Academic & International, the main activities were related to teaching and learning, including nine (9) faculties specializing in specific academic programmes, namely, arts & social sciences, Islamic education, science, and technology, medical, dentistry, engineering, and architecture. Also, the library, under the knowledge management element, was led by the Chief Librarian. The student affairs and alumni element were led by the Deputy Vice Chancellor for Students Affairs' and Alumni.

The research and innovation area were led by the Deputy Vice Chancellor, under research and innovation, and legal affairs were led by the university's legal advisor. Other than the department managing the seven core elements, other departments and entities managed specific activities. In general, each department in USIM oversaw different tasks and job scopes. For example, the Department of Development & Facilities would execute tasks in providing conducive facilities for teaching and learning requirements and ensuring the maintenance of the university building. Besides, other departments, such as the Division of Academic Management, handled matters of students' operation in academic matters.

The Student Affairs Division handled matters related to students' activities and affairs. The Housing Department was responsible for the students' accommodation and hostels. The IT Department (*Goal-ITQAN*) managed and provided services related to hardware and software needs for the teaching and learning process and administrative purposes. The Bursar Department managed financial issues. Finally, the Strategic Communication Centre managed the branding and positioning strategies for the university.

Despite being assigned to specific departments; particular issues could be co-handled between departments across the University. Therefore, under certain circumstances, issues related to marketing, management, operations management, finance, and strategic management could be transferred to other departments. This is in line with the concept of the matrix organisation, which can be defined as the sharing of multiple managerial accountability and responsibility collectively (Radojcic, 2019). According to Radojcic, (2019), in the matrix structure, individuals worked across teams and projects, together with the designated department or function to achieve the organisation's targets and goals. In other words, when specific tasks or assignment were delegated, a special task force committee would be formed by the university, whereby the task would be shared by the main department with other departments and faculties in USIM. For example, in terms of the university's strategic planning led by the Vice-Chancellor, the involvement of Department Heads, Directors, and Deans of Faculties would be anticipated by contributing ideas, execution plans, and strategies to achieve the plan as outlined by the university. The chart in Figure 1.1 outlines USIM's organisational structure.

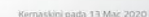


Figure 1.1: USIM Organisational Chart

1.2 Background of Study

With the world's development in new technological phases as the main platform, drastic changes have occurred, specifically in the education sector (Gong et al., 2004; Monteiro & Rocha, 2019). The usage of technology in the education sector has shifted from conventional ways of using paper and chalk in the classroom to using computers and digital gadgets to cater for the IR 4.0. Therefore, technology has eased the burden of teachers, students, and other stakeholders. Technological experimentations are constantly conducted as a means of solving people's problems. As such, an innovative ideas and mindset needs to be cultivated in young generations for more practical ideas in increasing the quality of life (Kahn, 2018; Ringberg et al., 2019).

Innovative ideas and interventions could be created in USIM by optimizing the available resources in several areas of interest. For this applied research study, five (5) areas were identified, as the number fit the time frame allocated for the study. The five areas include marketing, management, operations management, finance, and strategic management. For each area, specific problem that requires the implementation of new methods and techniques through innovative elements were identified. The applied innovative ideas hopefully can contribute to the sustainability of USIM.

Although USIM is a well-established Malaysian university, its sustainability in existing and new challenges must be suitably addressed to minimize any potential risks that could jeopardize her development. The challenges related to the marketing, management, operations management, finance, and strategic management sectors must be identified to help the university in deriving plans to solve the existing critical problem. Hopefully, the time taken by the university authorities to act upon the recommendation of the outcome of this applied research will be fast to reflect the

seriousness of the sustainability issues. The five areas to be researched are described briefly hereafter.

In this applied research, USIM is chosen as the focal point and five (5) main areas specifically in marketing, management, operations management, finance and strategic management have been identified for the innovative activities. Therefore, five (5) cases were presented in this thesis involving marketing, management, operations management, finance, and strategic management, to be presented in separate chapters. Each case study would carry elements of autonomy, in that each case comprised of separate objectives, references, set of data and models, and methodology of analysis. Nonetheless, the different analysis and issues may be naturally congruent and lead to a unified solution.

1.2.1 Problem Statement of All Five (5) Cases

This section explains the five (5) applied research areas in detail. In general, the overall scope of this study was confined within USIM's activities. As such, four functional and one strategic area were identified within the time frame to provide the required diagnostic analysis and subsequently make rational recommendations, solutions and decisions restrain the downward trend and strategize for USIM's sustainability in the future.

a. Applied Research in Marketing

A university is generally known as a place of study providing skill sets, knowledge, and experience to prepare students for the real world after a span of three to five years. In the current scenario, the nature of academia has shifted to a commercialised context, whereby every university was determined to attract more

talented students to enrol and be a part of the institution. This process currently being embraced by universities is known as marketing.

Marketing has become an essential strategy for universities to gain student enrolment and enable students to study in these universities. As a Malaysian university with a competitive edge, USIM encountered many challenges, specifically in attracting international students to register for the undergraduate courses. On the contrary, the number of local students registered with USIM increased annually a result of effective marketing strategies in attracting local students. These two scenarios differed in the type of marketing strategies implemented, where one group was successfully attracted to USIM, whereas the other group was not attracted. As such, the number of international students decreased annually. In this context, the pull factors in strategic marketing should be practised by the university. Ideally, it involves the elements such as the market size, economic and social conditions and foreign market characteristic need to be observed in setting up strategies.

The first case study is related to the marketing context. The university was confronted with a few difficulties, especially in terms of the enrolment of international students in USIM's undergraduate programmes. Besides, USIM had a low visibility level among international students. Although the university showed an improvement in the number of local students enrolled annually, the yearly audit for the international students' enrolments reported inconsistent findings. As the university had a lower number of international students' enrolment, there was a need to investigate the factors and root causes for this lower number. Also, existing marketing techniques and platforms were evaluated in this case study, with suggestions to increase the university's visibility among international students. The visibility of academic institutes is important in obtaining the enrolment of international students.

As such, this case study would guide USIM in establishing approaches to increase exposure among international students. Innovation in marketing strategies is vital for USIM to develop successful advertising. Innovative marketing includes the utilisation of marketing strategies by business leaders to promote new and enhanced goods or services. Thus, innovative marketing is a new marketing strategy requiring major changes in product design or packaging, product placement, product advertisement, or product pricing (Azar & Ciabuschi, 2017; Kahn, 2018; Kalkan & Bozkurt, 2017; Gupta et al., 2016).

The marketing issue has been selected first to be researched into. The issue of marketability of USIM's programmes is of high priority faced by the university to increase enrolments and visibility among international students. Table 1.1 briefly shows the enrolment projections by the university for acquiring international students for undergraduate program.

Table 1.1: Enrolment Projections by the University for Acquiring International Students (Undergraduate)

Year	Enrolment Projections (International Students)	Application from International Students	Enrolled (International Students)
2014	126	16	7 (5.5%)
2015	120	15	8 (6.6%)
2016	120	29	21 (17.5%)
2017	125	30	20 (16%)

Source: Division of Academic Management (2018)

Table 1.1 shows; from year 2014 to 2017, the enrolment target for international students was far behind hitting the projection for each year, it was less than 20 % of the yearly enrolment target. Based on the reported numbers, USIM faced a critical issue in attracting potential international students for enrolment.

The numbers illustrated from 2014 to 2017 for international student applications provided clarity in USIM's inability to come up with effective strategies and action plans to attract international student enrolments. Therefore, this case study needs to be conducted in addressing and identifying the root cause of ineffectiveness marketing strategies in attracting international students' enrolment in USIM.

b. Applied Research in Management

In general, management is defined as directing and controlling a group of people or an organisation to reach ultimate goals. In other words, the management often indicated the deployment and manipulation of human, financial, technological, and natural resources. As such, management encompassed five functions, which are planning, organizing, directing, motivating, and controlling. In many organisations, human capital is the most valuable asset to be addressed, from the on-boarding process of staff members to staff resignation, in that order.

As a civil servant, specific schemes were outlined by the Public Service Department (JPA), comprising of the service group, top management group, management and professional group, supporting group, the service scheme, integrated service schemes and obsolete service schemes.

In this context, the targeted respondents were focused on the management and professional group, symbolised as the "N" scheme, which served in government statutory bodies, specifically in public universities' employment schemes. Although the

government provided a 'golden' package for civil servants, including retirement schemes, medical benefits, remunerations, and salary increments, staff turnover was inevitable due to dissatisfaction, biasness, favouritism, sexual harassment, and unfair treatment. Therefore, the Human Resource Division needed to provide an effective action plan for staff retention in the organisational and human capital development. As the 12th Malaysian public university, USIM also experienced staff turnover among the management and professional staff under the administrative (N) scheme.

This issue was raised due to the increase in staff turnover based on the statistical reports provided by the Human Resource Division of USIM. In this case study, data was retrieved from USIM's Human Resource Division, which indicated an increase in the number of staff turnover between the years 2016 and 2018. With regards to the human resource management area, recruitment was considered as an investment. Therefore, each staff developed personal strengths and talents that was invested by the organisation and required employees' contribution to the development of the organisation. Consequently, USIM lost in terms of skills investment with every resignation of a trained staff. For example, in USIM's case, a total number of 21 staff members were reported to have resigned from the designated position, hence incurring a loss of approximately RM 789,624.36.

Thus, the case study in the area of management needed to be conducted in identifying the turnover determinant among the staff in USIM. The identified factors would enable USIM to avoid future losses, as all the on-board staff were given training and development programmes and certificates for essential skills. Further investigation on this issue would enable a better future planning in staff recruitment, better budget allocation and distribution, and better judgement in handling similar cases more effectively in USIM. Also, if this issue continued to be downplayed, staffing issues

would worsen with more staff leaving the university and bigger losses to bear. Hence, the identification of this issue would provide insight into solutions for reducing the staff turnover rates.

c. Applied Research in Operations Management

In the context of an organisation, operations management involved the process of turning inputs or resources into products and services and improving the output of the current process. Operations and facilities are particularly essential factors, as it includes the stakeholders in devising a plan, specifically for universities. According to Andersch et al. (2018), the planning of customer satisfaction strategies is fundamental in enabling excellent customer experience and a sound understanding of the clients' expectations. For example, an upset customer would more likely transmit negative views and responses to potential clients.

Therefore, in the context of operations management, the case research identified the serious issue of the new intake students' registration process. Every year, USIM received an average of 2,400 to 2,800 new students' enrolments for the undergraduate programs. Umpteen complaints were received from the parents, guardians, students and the management on the current registration procedure for new students. Hence, in support of this argument, the researcher conducted an in-depth review on the past records on the registration process. Based on the records, the case research identified five main issues, which are time consumption, miscommunication, misinterpretation, congestion, and human error. Therefore, the focus of this case study was in reducing waste in organisational administrative processes. Indeed, this study is crucial to assist USIM to produce a solution and improve the new students' registration process.

d. Applied Research in Finance

The next case study is related to financial management. Financial management is a broad term describing activities pertaining to banking, leverage or debt, credit, capital markets, money, and investment. In essence, finance involved money management and the process of fund procurement when needed. In an organisation, the finance department is an essential service in identifying the strengths, weaknesses, cash flow, profitability, and losses in an organisation. Therefore, all the organisational activities were interlinked and involved financial management, which is crucial in forecasting organisational sustainability.

As all the fully funded government universities were encouraged and expected to execute independent financial planning in generating income and revenues, the revenues ensuring the long-term financial sustainability and survival should be drawn from diverse source, as these universities required heavy financing for research activities, cost of human resources, development, and other aspects in operational activities. Consequently, universities needed to think uniquely and creatively in seeking self-sufficient resources instead of solely relying on government funding. For example, business leaders need to decide on the target market segment when launching any new or improved products and services and determine the value received by customers. Also, the business leaders' ability to formulate and implement strategies for existing and potential customers' satisfaction would determine the organisations' levels of financial success (Gupta, 2018; Mohamad et al., 2017).

As such, each service quality and the subsequent customer satisfaction were the principal catalysts of financial performance, thus increasing service quality by managing the performance of service attributes (Murali et al., 2016). The cutdown in budget allocation from 5% to 20% for public universities, as announced by the MOF in

2019 prompted the MOHE to come up with innovative solutions on how public universities could generate income independently through other revenue channels.

The fourth issue to be addressed concerned USIM's financial scope. With reference to the Malaysian Education Blueprint from the year 2015 to 2025 (Higher Education), all the fully funded government universities were encouraged and expected to execute independent financial planning in generating income and revenues.

The revenues ensuring the long-term financial sustainability and survival should be drawn from diverse source, as these universities required heavy financing for research activities, cost of human resources, development, and other aspects in operational activities. Consequently, universities needed to think uniquely and creatively in seeking self-sufficient resources instead of solely relying on government funding. Specifically, universities needed to enhance profitability for economic sustenance and minimizing the constraints on public budgets by rationalising the limitation in public funding. Additionally, both public and private HEIs mainly relied on the government for direct grant allocation and student loans. To date, government grants have funded 80% of the expenditure at public HEIs, including USIM (Source: USIM Bursar Department, 2019). To reduce this dependency, HEIs needed to identify alternative income sources for fortification, more flexibility, and financial sustainability.

Further, the present financial situation of the university was another crucial issue which requires for a serious action to be dealt with. According to Na Ranong and Phuenngam (2017), the need for income generation was induced by institutions facing and experiencing the rise in operational costs, primarily due to inflation.

Apart from the financial reliance on the tuition fees imposed on students, which was the main income contributor to USIM, other possible income- generating channels

could contribute to USIM's strategy for revenues. Therefore, it was essential for this study to be conducted in identifying alternative incomes for USIM's growth and sustainability at par with other top local and international higher education institutions.

e. Applied Research in Strategic Management

The fifth and final area is related to strategic management. In this context, the case study would be focusing on USIM's strategic planning and ensuring that the university was aligned with the university's mission and vision. Five core components were the basis for USIM to continue in terms of development and sustainability. Also, innovating ideas with the current strength of the university could enhance the university's capacity and creativity to generate alternative sources of income. For example, companies could innovate by finding alternative business techniques, developing new tools for internal use, transforming company processes, or renovating business models (Ausloos et al., 2018; Saguya & Taoukib, 2017). As such, the case study concerned the issues in USIM's strategic planning.

USIM outlined the Strategic Planning from the year 2016 to 2025, based on the consensus and declaration made during the Strategic Planning Workshop and endorsed by the USIM's Board of Management on strategic planning. The new Strategic Planning for USIM consisted of six (6) Thrusts, as declared by the University. Out of the six Thrusts, the fifth (5th) Thrust, 'Empowering Income Generation and Financial Sustainability', would be the focus of this case study. Therefore, the study would highlight suggestions and remedies on the execution of such thrust, as illustrated in USIM's Strategic Planning. Hence, for the USIM community to generate revenues, necessary actions were required to generate alternative incomes for sustainability. The

aims and goals of this case study were to critically analyse USIM's strategic planning to achieve the desired outcome that was outlined and addressed by the university.

The crucial success factors behind the strategic planning were the execution component that must be strategized to gain a competitive advantage. Therefore, specific strategies, recommendations, solutions, and implementations that were required would be addressed in this study to achieve the target of the 5th Thrust. Additionally, the case study suggested and after some thorough analysis methods for fulfilling the Fifth Thrust of the strategic planning in USIM. Therefore, to solve the problems identified in the five (5) areas, there was a need to address the specific areas in separate applied case studies, as presented from Chapter 2 to Chapter 6 through specific approaches and techniques in line with the objectives constructed.

1.2.2 Research Questions and Research Objectives of All Five (5) Cases

The research questions for this study are closely related to the five areas as mentioned in Section 1.2.1:

a. Marketing

In this area, the problems identified is summarised in Table 1.1. The research questions that can be derived are:

- a. What is the current status of the undergraduate enrolment for international students and what has been the trend like in the past few years?
- b. What is the preferred enrolment that USIM would like to achieve in the future and perhaps what need to be done to achieve this?
- c. What action need to be taken to increase USIM's visibility among the prospective international students?

Meanwhile the research objectives are:

- i. To examine the existing undergraduate international student enrolments at USIM.
- ii. To identify and analyse the key issue of the case, from the marketing perspective to increase USIM's visibility in getting international students for undergraduate level in USIM.
- iii. To recommend a course of action by investigating the preferred choice of source of information among the international students in obtaining information on USIM.

b. Management

The problems highlighted in this area has been focused in Section 1.2.1 on the Management and Professional staff (N) scheme turnover rate. Thus, the research questions proposed are:

- a. What are the characteristics and patterns of the staff turnover among the Management & Professional staff under the administrative scheme (N) in USIM?
- b. What is the impact of this staff turnover rate on USIM's operations?
- c. How can this turnover be investigated and to seek solution for the betterment of USIM?

On the other hand, the objectives are:

- i. To examine the impact on turnover rate among the administrative staff to USIM's operation.

- ii. To identify the characteristics and determining factors that leads to staff turnover among administrative staff in Management and Professional (N) scheme in USIM.
- iii. To recommend a course of action and solution in retaining the staff to work for the university.

c. Operations Management

In the areas of operations management, the identified problem has been confined to issue related to the registration process for new students' intake as highlighted in Section 1.2.1. Thus, the research questions proposed are:

- a. What is the current practise for the new student intake registration process?
- b. What are the issues raised in the registration process?
- c. What is the solution in improving the registration process of new students in USIM?

Meanwhile the research objectives are:

- i. To identify the key activities in the current registration process that need to be revamped.
- ii. To analyse the current registration process of new students and to evaluate the cause and effect on USIM's resources.
- iii. To look for alternatives so that there will be a drastic improvement on the outcome.

d. Finance

The problems highlighted in this area has been identified in Section 1.2.1 on the issue to generate alternative source of revenue for the university.

Thus, the research questions proposed are:

- a. What is the present financial situation of the university?
- b. How may the university utilize the available resources within the vicinity in contributing towards increase revenue generation?

Meanwhile, the research objectives are:

- i. To describe and analyse the present financial situation of the university based on the previous years' annual financial report.
- ii. To propose an upgraded residential college (premium accommodation) as a possible alternative as potential sources of revenue for the university.

e. Strategic Management

In the area of strategic management, the identified issue has been confined to issue on the execution of the strategic planning as outlined by the University, specifically on the 5th Thrust which is concerning 'Empowering Income Generation and Financial Sustainability'.

Thus, the research questions proposed are:

- a. What are the strategies needed for the execution of USIM's Strategic planning, specifically on the 5th thrust?
- b. What is the capability of USIM in executing the thrust?
- c. What are the possible solutions to successfully execute the thrust as outlined in the strategic planning of USIM?

The case research and the objectives in this area need to be generic in nature as it needs to look from a larger perspective. To answer the research questions as stated above, the objectives are stated as follows and derived from the direction of USIM.

Out of the six strategic thrusts, thrust number five had been selected to meet the case requirement as well as to confine within the time constraints faced. Thus, the research objectives are:

- i. To explore and identify possible new sources of revenues generating strategies in order to realise USIM's 5th Thrust specifically on 'Empowering Financial Sustainability'.
- ii. To evaluate the top few strategies that are of high potential and be able to prioritise them and to recommend serious action plan to make them a reality.
- iii. To chart a blueprint for its execution.

The research questions together with the objectives listed above have been sequenced based on the problems identified in the section before it. This will be followed by the research scope accordingly which will finally lead to their analysis in the full-blown case analysis (Chapters 2-6).

1.2.3 Research Scope

This section elaborates on the research scope conducted. The purpose is to briefly captures the reader's understanding on innovative ideas and interventions for HEIs by optimising available and sustainable resources focusing on. All the cases presented in this research corresponded to previous issues and situation in USIM. The five (5) separate case research done comprised of marketing, management, operations management, finance, and strategic management. These areas operated as the 'back-bone' of USIM in achieving the institution's mission, vision and objectives.

Detailed analysis using available data and are generated complemented by appropriate theories, models, and references were used and would be discussed in detail

in the respective cases. Consequently, recommendations were suggested at the end of each case analysis. As such, the overall flow of the analytical decision process would be discussed based on the sectoral cases. For the record, all the case studies were conducted from the year 2017 to 2019. As the five (5) areas of analysis comprises of diverse areas, therefore, the references and analysis methods would differ and be later discussed by section. The general methodology utilised in this research would also be elaborated on. In ensuring USIM's sustainability, it requires a 360° review involving internal and external factors was deemed necessary.

1.3 Research Approach

In this section, the general issues and analysis method in solving the problems will be described briefly. For any organisation to grow, a check and balance process must be executed and is an imperative step to ensure the organisation's awareness of the advantages or disadvantages of the current situation.

This thesis used a case study research method, with five different case studies presented from Chapter 2 to Chapter 6, ranging from marketing, management, operations management, finance, and strategic management. Finally, all the case studies were consolidated in Chapter 7, with the contributions and overall benefits gained by USIM. The rationale of using the case study research method was to gain an in-depth evaluation of a 'case' within the real-world context and differed from other methods, such as surveys and experiments, as the case study evaluation could address the following matters:

- i. Capture the complexity of a case, including relevant changes over time.
- ii. Fully attend to contextual conditions (Tight et al., 2016)

Besides, the case study approach may have a tentative theory and can explain the research design and data collection procedures focused on actual events and scenarios. The need to study and identify the issues extensively through problem-solving was the main objective to be accomplished (Huang et al., 2019). Therefore, applied research was utilised to resolve specific individual or organisational challenges. In other words, this research strived to improve the understanding of a specific problem, with the intention of resolving a specific issue faced by the organisation. The applied research was conducted in four (4) stages:

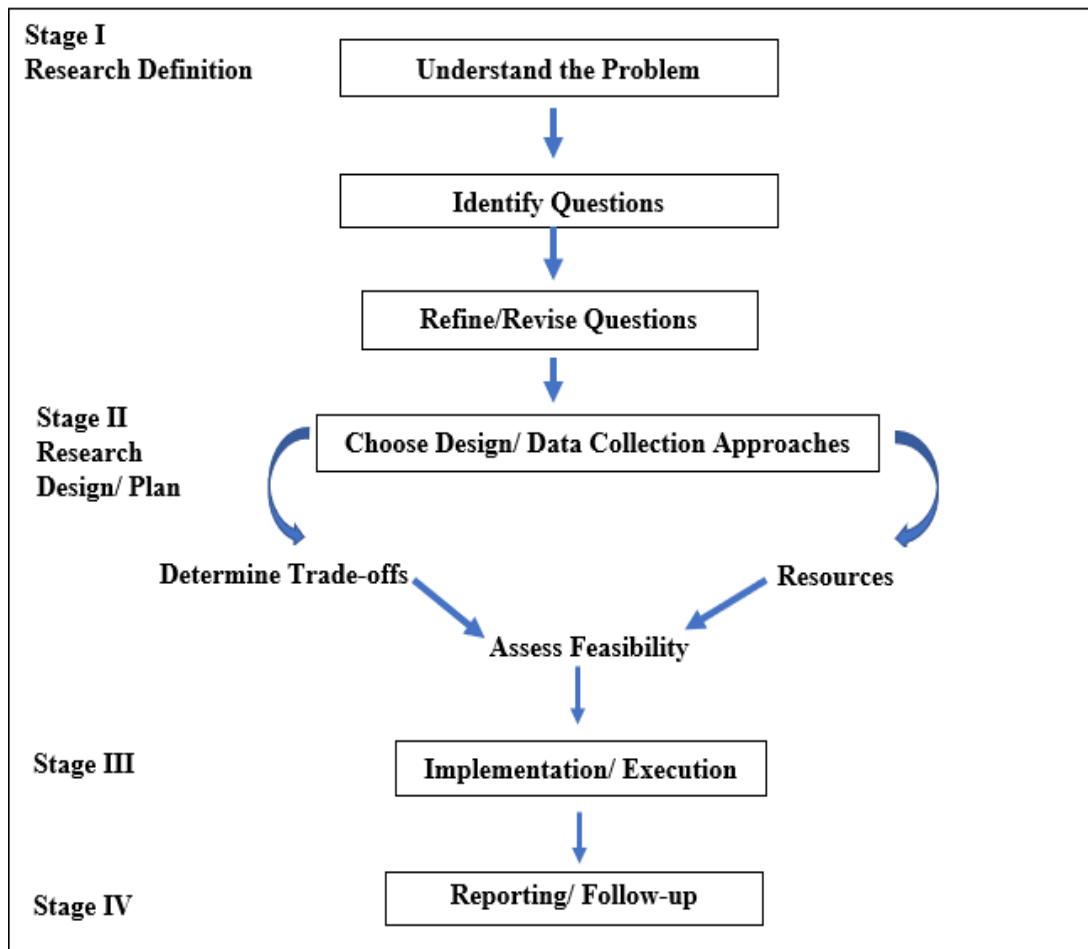
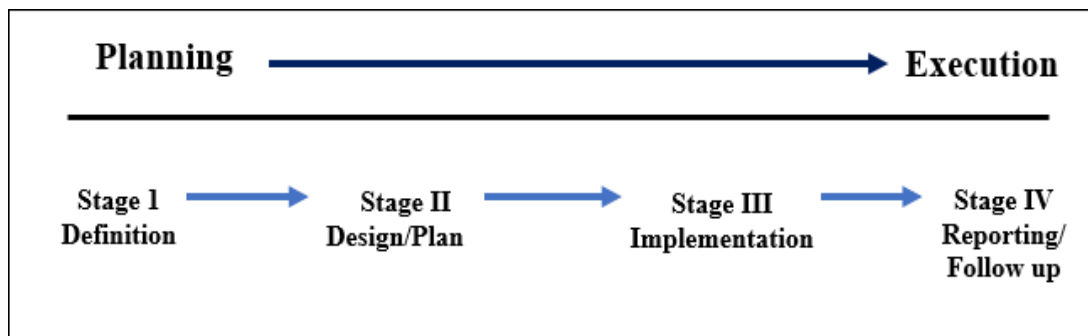
Stage 1: To identify the issue and understand the problem encountered by the organisation (university) and develop research questions and objectives.

Stage 2: In this stage, the applied research required the performance of activities such as data collection by analysing the available resources and the feasibility of solving the issue.

Stage 3: Execution and implementation of suggested solution.

Stage 4: Follow up the actions taken and post-mortem.

Figure 1.2 outlines the stages and steps to be taken in conducting an applied research.



Source: Hedrick, Bickman, and Rog (1993)

Figure 1.2: Applied Research Design Planning

1.4 Data Collection Method

Data collection methods can be defined as the process of collecting, evaluating, and analysing the correct inputs by using the chosen techniques (Pervez et al., 2021).

There were two methods of data collection namely the primary and secondary data.

Primary data collection is the first source of data obtained by the researcher (Ajayi, 2017). Meanwhile, secondary data collection is defined as data or information already available and ready to use (Caro et al., 2019).

In this study, both types of data collection were utilised, with survey method as the primary data used. On the other hand, secondary data was gathered from articles, journals, books, annual reports, newspapers, blueprints from the Ministry of Higher Education and USIM documentation.

To meet the objective of this case study, the method used in analysing the issues of each case was by adopting the applied research approach and appropriately selected for each of them.

- a. In Case Study 1, which is marketing, the focus was on international student enrolments for USIM's undergraduate programmes.

From the marketing perspective, the main issue involved finding ways to attract more international students' enrolment into the USIM undergraduate programmes. For this case study, a survey consisting of a set of questions as the instrument was utilised. With regards to sampling and population, the target group of international students from undergraduate programmes were chosen to be a part of the respondents in this case study. The International Business Machines Statistical Package for Social Science 23 (IBM SPSS 23) was used to derive a descriptive analysis in fulfilling the objective of this case study.

The results would aid USIM to provide a better guideline in handling and strengthening the marketing strategies to increase the visibility of USIM as a brand among international students. Creative and innovative marketing strategies should also

be applied, in this context to assist the university in preparing significant plans and strategies, specifically in the global of USIM.

- b. In Case Study 2, the focus is from the perspective of human resource management. The case research is focused on the “N” scheme personnel referred to as the Management and Professional staff employment scheme in USIM. The case research was intended to explore the determinant of staff turnover among the “N” scheme staff.

The general issue in the human resource management segment concerned the administration of the “N” scheme Management and Professional staff where the turnover rate is high. With the resignation of trained members of staff, USIM would lose the specific skill sets that was invested in the staff and would no longer be available for USIM. Similarly, the professional networks gathered during their service period would no longer be accessible. Hence, it is crucial for this study to determine the factors of high turnover rates among the administrative “N” scheme staff.

A survey consisting of a set of questions as the instrument was utilised. As mentioned by Williams et al. (2017), a study design is an essential consideration to be discussed by the researcher on different project management plans. Hence, the utilisation of developed and established instrumentation with proven reliability and validity were focused on. In terms of sampling and population, the target group of contract staff was identified from the management and professional staff under the administrative scheme (N) to participate in this case study. Moreover, in analysing the collected data or information the IBM SPSS 23 was utilised to perform a descriptive analysis in achieving the objectives of the case study.

- c. In Case Study 3, the focus is on the student registration process which received several negative complaints from the students and parents in previous years. The case research will explore and identify the most appropriate methods and techniques to minimise the source of complaints specifically on the time, and monetary wastage as well as the high operational cost.

In the context of operations management, the university faced an issue regarding the new student registration process as the process was time-consuming, costly and a deterioration in hospitality index in dealing with the new students' registration process.

For this case study, a survey consisting of a set of questions was utilised as the instrument. In terms of sampling and population, the focus group of 1st year undergraduate students in the 2nd semester, Academic Session 2017/2018 were the respondents for this case study. In evaluating the findings obtained through data collection, the IBM SPSS 23 was utilised to derive a descriptive analysis in achieving the objective of this case study.

- d. In Case Study 4, which is focus on finance, specifically on how USIM may generate alternative revenues besides the tuition fees. The study particularly explored the opportunities and possibilities of generating income from available resources within the university vicinity and assets.

All the Malaysian universities were confronted with financial issues due to the reduction in the annual budget or operational expenditure allocation provided by the government. This was in accordance with the current economic situation of the country. Under normal circumstances, tuition fees were the main source of income for USIM's sustenance. Nonetheless, many projects were proposed by USIM to generate alternative incomes for sustenance.

In this case study, a survey was done on international students enrolled with USIM and they became part of this case study as respondents. The IBM SPSS 23 was utilised to perform a concise and descriptive statistic to find ways of increasing revenue for USIM. The details are in Case Study 4.

- e. In Case Study 5, the focus is on University's strategic plan, specifically on Thrust number 5, which is 'Empowering Income Generation and Financial Sustainability'. Hence, the results obtained were quite specific without generalisation to other thrusts of USIM's strategic planning. As such, the case study would come up with suggestions and remedies on the execution of such thrust, as illustrated in USIM's Strategic Plan.

A survey was done on a selected sample of the community surrounding USIM. On top of that, an additional survey among the staffs was done to evaluate USIM's capability in achieving and executing the strategy, as outlined by the university. A descriptive analysis on the findings obtained during the data collection period was also done. Additionally, USIM's capacity and capability in achieving and executing the strategic planning as outlined by the university would also be measured. For this purpose, the Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis formulae and the elements of Eliminate, Reduce, Raise, Create (ERRC) Grid in the Blue Ocean Strategy model would be a part of the instrumentation in measuring the factors of the university in executing the Fifth (5th) Thrust of USIM's Strategic Planning.

1.5 Research Motivation

The Industrial PhD programme is meant for experienced practitioners with the intention to deepen and develop careers in the consultancy or advisory service sectors.

In the context of a philosophical doctorate, the rigour and depth of research is reflected in the literature review. On the contrary, the knowledge content in an Industrial PhD, are based on the practicality of the issues to be solved and the sharing of experiences of all the parties involved.

All the five case studies presented throughout this thesis began in December 2017 and ended in July 2019. Also, the research issues corresponded to the previous situations and scenarios in the organisation. The identified issues in the different areas were researched within three (3) to four (4) months for each case, as stipulated in the Industrial PhD programme structure, and was written using the case study method. The cases were classified as problematic and in need of practical solutions.

The proposal of new ideas was presented to the Top Management of the University (Board of Management) and was approved for implementation. Although time was the main constraint for the full execution of all the recommendations made, all the cases were successfully implemented and executed by the university. As such, the university has experienced several positive outcomes as the result of the subsequent implementation of the suggested solution. Therefore, this study undoubtedly provided several contributions concerning the fundamental operations of a HEI and provided exemplary alternative approaches in the education industry to counter the financial problems due to budgetary cutdowns from the MOHE.

The ability to generate alternative revenues was not the only achievement resulting from this study. Additionally, a systemised operating procedure with improved enhancements for the university was achieved with benefits for the society, stakeholders, staff, students, guardians, and community. The structure of this Industrial PhD programme study involved vigorous problem-solving experiences in five different areas (marketing, management, operations management, finance, and strategic

management). At the end of the program, the researcher would have undergone various problem-solving experiences in the five different areas and become effective, efficient problem solver and productive personnel of the university.

The most striking point of the Industrial PhD programme is the ability to observe the implementation of the research in reality, with regards to real-life problem-solving in the current working environment. The outcome of this programme served to be much more valuable than mere results from literature review studies, as actual problems were analysed and solved to enhance the existing working condition. The university experienced numerous positive outcomes as the result of problem identification and the implementation of improved processes. As such, this study did not only provide positive outcomes from the learning process, but also provided research opportunities, exposure and valuable knowledge from the theoretical aspect, specifically on the application of the studied theories. In other words, the Industrial PhD programme produced observable, applicable, and proven results as the research outcome, with proven and practically applicable theories in actual scenarios.

1.6 Ethical Considerations

This research abided by all the mandatory procedures by USIM with the approval of USIM's Board of Management through the University's Registrar approval before conducting the applied research. This study involved willing participants and the study was transparent, in terms of both the research purpose and research questions. The researcher's identity was divulged and promoted voluntary participation. However, in some cases, participation was mandatory based on the requirements determined by the university to access the operational and procedural flow of specific projects particularly involving the staff and students. Also, informed consent was a primary principle in

social research and would be obtained from the organisation (USIM) and individual participants respondents prior to the commencement of this research. Moreover, confidentiality would be guaranteed to each respondent with no disclosure of the respondents' identity (See Appendix 2, Appendix 3 and Appendix 4).

The informed consent process involved explaining to all the research participants on the purpose of the proposed research study, how the proposed study may benefit the university, the process of conducting the study, and the voluntary nature of the proposed study (Artal & Rubenfeld, 2017). Consent forms were used to provide information in ensuring confidentiality and the protection of participants' rights during the data collection process (Petrova et al., 2016).

For this study, consent forms were distributed to all the respondents through e-mail or in person during the survey process. Besides, the participants were asked to respond by ticking the box stating: "I agree and give consent" in response to the e-mail or directly consenting to the researcher before the start of the survey to participate in this study. Researchers must ensure that the informed consent rules were followed, which included obtaining the participants' consent to the research.

Furthermore, participants could withdraw from the study at the participant's own discretion, must receive protection and confidentiality, and face minimal or no risks upon participating (Foe & Larson, 2016; Friesen & Williams, 2016). Additionally, participants should be aware of the right to withdraw from a study (Hifnawy et al., 2017). The researcher informed the study participants on the withdraw of participation at any time by e-mail, telephone, or in person. Researchers are obliged to contact the participants to address compensation methods and the participants' right to end the participation (Sterling & Gass, 2017).

The researcher did not provide compensation for participating in this research, as the study involved voluntary participation. Therefore, the ethical rights of research participants is vital (Arifin, 2018), as researchers faced ethical challenges in all stages of a study, from design to reporting, privacy, confidentiality, informed consent, researchers' potential influence on the participants and vice versa (Akaranga et al., 2016; Rucker & Rucker, 2016; Van Wee, 2016). Also, bias was an influential risk that may distort the study results or conclusions (Whiting et al., 2016). Therefore, researchers must make a deliberate effort to prevent bias by avoiding participants' personal beliefs and opinions gained from experience. The utmost care in data gathering, data storage, and data analysis was taken to protect and preserve the participants' rights and privacy (Levitt et al., 2018), as participants shared a concern in confidentiality and anonymity during the data collection process (Carmichael & Cunningham, 2017; Rudnicka et al., 2019).

The data used for this research was stored in a password-protected external hard drive that would be secured in a safety deposit box for a minimum of five years to protect the participants' confidentiality. Electronic files and digital formats were also used to maintain the safety of the research data (Trace & Karadkar, 2017). Besides, handwritten notes that were captured during the session with the respondents were converted into digital files and stored in a password-protected external hard drive, with the paper documents subsequently shredded to protect the participants' confidentiality. Research projects with poor quality in research designs, data analysis, and reporting of the research findings lacked ethical support (Brzeziński, 2016). Therefore, the participants' identities were kept confidential to protect the privacy integrity of the research (Marshall & Rossman, 2016).

1.7 Thesis Structure

The thesis is organised accordingly by chapter as stipulated in the Industrial PhD program's rubric to capture the reader's attention on the research context and concept.

i. Chapter 1: Introduction

The first chapter begins with an attentive introduction to provide an overall picture of the research concept to the reader. This chapter also described the study and organisational background consisting of location, sample, population, and an in-depth analysis to ensure the reader's understanding of the overall concept of this applied research study. Besides, the chapter addressed the issues found in the problem statement with literature reviews relevant to the case study, thus developing the research questions and objectives in each of the case study presented. The direction of this applied research study would be based on the outlined objectives to highlight the significance of the applied research study from different angles in USIM.

Further, this section enlightens the reader on the study scope and research methodology in brief. It also addressed the organisation's general issues and analysis methods. Moreover, each case would be briefly explained to capture the reader's attention. Finally, the chapter would consolidate all the five (5) case studies to generate innovative interventions and ideas in enhance and developing sustainability in USIM.

ii. Chapter 2 to Chapter 6

Chapter 2 to Chapter 6 elucidates all the case studies in detail for the readers' understanding on how the applied research study was addressed and assisted in identifying the issues in USIM to ensure the best approaches and techniques to be implemented. Specifically, Chapter 2 focused on marketing, Chapter 3 on management, Chapter 4 on operations management, Chapter 5 on finance, and Chapter 6 on strategic

management. In detail, all the chapters followed the same structure. The case study would be classified by sections and began with the introduction of the case study, analysis of the issues in the problem statement, objectives, and the importance of the case study to the organisation. The next section focused on the relevant literature reviews and methodology in addressing the case study.

In each case study, the individual case would include the analysis findings and outcomes, and the subsequent solutions vital for each case study to achieve the objectives.

iii. Chapter 7

For the final chapter, the study consolidated all the five (5) case studies and synthesised the key points to be highlighted throughout the thesis. Also, the study highlighted the benefits gained and contributed to the research of USIM's development and how the applied research may contribute to the learning process for the case users in the future. This chapter would conclude to help the reader understand the importance of conducting this applied research in developing a sustainable university.

1.8 Discussion and Conclusion: Consolidating All the Case Issues

The consolidation of an organisation's management issues is a very complex task, especially for a large organisation. In this study, USIM's issue comprised the sectors in marketing, management, operations management, finance, and strategic management in addressing the issues to ensure USIM's perpetual growth and sustainability.

This research focused on addressing all the identified issues in the current sectors of marketing, management, operations management, finance, and strategic management

in USIM which is important for the organisation to know. In any organisations, the stakeholders are generally aware of any arising issues.

Apart from that, the issues identified in this context provided clarity and a sense of direction to the staff at the top, middle and low managerial levels to execute the designated roles accordingly in ensuring that USIM's pathway.

- i. In the context of marketing, the study was conducted with regards to the issues USIM's branding and image that failed to attract international students' enrolment in undergraduate level programmes.
- ii. From the management perspective, issues of administrative "N" scheme staff became the main agenda, with a high turnover rate among the employees. In each recruitment process, the university invested in each recruited staff with trainings, courses, personal development, and many other skills that the university expected to benefit from in return. However, with the high turnover rate, the university experienced the professional loss of skill sets.
- iii. In operations management, the student registration process normally takes hours to be completed, but through the IR 4.0 revolution, digitalization and the internet has become a common factor that could improve the registration process with technology.
- iv. From the financial perspective, it is obligatory for the researcher to come up with a solid action plan to generate alternative incomes for the university with the reduction in government funds for all the public universities.
- v. Finally, in the strategic management area, the study recognised the loopholes that could be minimised through one of USIM's strategic planning thrust, which is in empowering income generation and financial sustainability. In order to achieve this thrust, recommendations would be made to the

management for execution and implementation. In conclusion, with the brief description of the five (5) cases, it is hoped that the subsequent chapters of the individual cases that follow would consolidate the value of this applied research.



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APPENDICES

Appendix 1: List of Programmes

i. Tamhidi/ Foundation Programmes

No.	Tamhidi/ Foundation Programmes
1	Tamhidi in Medicine, Dentistry and Science
2	Tamhidi in Physical Science and Technology
3	Tamhidi in Shariah and Law
4	Tamhidi in Accounting and Muamalat

ii Undergraduate Programmes

No.	Faculty	Programmes
1	Faculty of Quranic and Sunnah Studies	Bachelor of <i>Qiraat</i> Studies with Honours
2		Bachelor of Quranic and Sunnah with Honours
3		Bachelor of Quranic Studies with Multimedia with Honours
4		Bachelor of Sunnah Studies with Information Management with Honours
5	Faculty of Leadership and Management	Bachelor of Da'wah and Islamic Management with Honours
6		Bachelor of Akidah and Religion Studies with Honours
7		Bachelor of New Media Communication with Honours
8		Bachelor of Communication with Honours
9		Bachelor of Counselling with Honours
10	Faculty of Syariah and Law	Bachelor of Law and Shariah with Honours
11		Bachelor of Shariah (Halal Industry) with Honours
12		Bachelor of Fiqh and Fatwa with Honours
13	Faculty of Economics and Muamalat	Bachelor of Accounting with Honours
14		Bachelor of Muamalat Administration with Honours
15		Bachelor of Islamic Banking and Finance with Honours
16		Bachelor of Administration and Corporate Relations with Honours
17		Bachelor of Marketing (Financial Services) with Honours
18	Faculty of Science and Technology	Bachelor of Science with Honours (Food Biotechnology)
19		Bachelor of Science with Honours (Industrial Chemical Technology)
20		Bachelor of Science with Honours (Information Security and Assurance)

No.	Faculty	Programmes
21		Bachelor of Science with Honours (Applied Physics)
22		Bachelor of Science with Honours (Actuarial Science and Risk Management)
23		Bachelor of Science with Honours (Financial Mathematics)
24	Faculty of Medicine and Health Sciences	Bachelor of Medicine and Health Sciences
25	Faculty of Major Language Studies	Bachelor of Arabic and Communication with Honours
26		Bachelor of English Language with Commerce (Honours)
27		Bachelor of Education (Islamic Education) with Honours
28		Bachelor of Arabic Language and Islamic Literature with Honours
29	Faculty of Dentistry	Bachelor of Dentistry with Honours
30	Faculty of Engineering and Built Environment	Bachelor of Electronic Engineering with Honours
31		Bachelor of Electrical Engineering with Honours
32		Bachelor of Science in Architecture with Honours

iii Master's Degree Programmes

No.	Faculty	Programmes
1	Faculty of Syariah and Law	Master of Laws
2		Master of Comparative Law
3		Master of Syariah
4		Master of Law (International Law)
5	Faculty of Economics and Muamalat	Master of Muamalat Administration (Halal Product)
6		Master of Accounting and Syariah Audit
7		Master of Islamic Banking
8		Master of Islamic Finance
9		Master of Muamalat Administration
10		Master of Economics and Muamalat Administration
11	Faculty of Leadership and Management	Master of Da'wah and Islamic Management
12		Master of Da'wah and Islamic Leadership
13		Master of Communication (Media Management)
14		Master of Counselling (Family Counselling)
15		Master of Counseling (Substance Abuse)
16	Faculty of Major Language Studies	Master of Akidah & Religion Studies
17		Master of Arabic Communication
18		Master of Arabic Language (Islamic Literature)
19	Faculty of Quranic and Sunnah Studies	Master of Arabic Language (Translation)
20		Master of Quranic and Sunnah Studies
21		Master of Science (Risk Management)

No.	Faculty	Programmes
22	Faculty of Science and Technology	Master of Science (Financial Mathematics)
23		Master of Computer Science (Information Security & Assurance)
24		Master of Science (Food Biotechnology)
25		Master of Science (Actuarial Science)
26		Master of Sciences
27	Faculty of Medicine and Health Sciences	Master of Medical Sciences
28	Faculty of Engineering and Built Environment	Master of Science in Engineering
29	Centre for Graduates Studies	Master of Islamic Sciences
30		Master of Social Sciences

iv Doctor of Philosophy Programmes

No.	Faculty	Programmes
1	Faculty of Syariah and Law	Doctor of Philosophy (Law)
2		Doctor of Philosophy (Syariah and Judiciary)
3	Faculty of Economics and Muamalat	Doctor of Philosophy (Economics and Muamalat Administration)
4	Faculty of Leadership and Management	Doctor of Philosophy (Da'wah and Islamic Management)
5		Doctor of Philosophy (Counseling)
6		Doctor of Philosophy (Human Resource Management)
7		Doctor of Philosophy (Communication)
8	Faculty of Major Language Studies	Doctor of Philosophy (Arabic Studies)
9		Doctor of Philosophy (Education)
10		Doctor of Philosophy (English Studies)
11		Doctor of Philosophy (Quranic and Sunnah Studies)
12	Faculty of Science and Technology	Doctor of Philosophy (Science and Technology)
13	Faculty of Medicine and Health Sciences	Doctor of Philosophy (Medical Science)
14	Faculty of Engineering and Built Environment	Doctor of Philosophy (Engineering)
15	Centre for Graduates Studies	Doctor of Philosophy (Islamic Science)
16		Doctor of Philosophy (Social Sciences)

v Postgraduate Diploma Programmes

No.	Programmes
1	Postgraduate Diploma in Judicial and Advocatory Practise (DIJAP)
2	Postgraduate Diploma in Education (Islamic Studies)
3	Postgraduate Diploma in Substance Abuse (SPADA)

Appendix 2: Request Letter to Conduct Research

**UNIVERSITI SAINS ISLAM MALAYSIA**
جامعة العلوم الإسلامية الماليزية
ISLAMIC SCIENCE UNIVERSITY OF MALAYSIA

Date: 1 Apr 2018

Honorable Dato' Muhammad Haizuan Rozali,
Registrar of
Universiti Sains Islam Malaysia (USIM)

Assalamualaikum Warahmatullahi wabarakatuh and Good Day,

Honorable Dato',

REQUEST LETTER TO CONDUCT RESEARCH STUDY

May this letter reach you in high Islamic esteem and hope you are doing well.

In fulfillment of the requirements for Doctor of Philosophy (PhD) Economics and Muamalat Thesis, I would like to seek for your permission to conduct a research study entitled:
"ACCELERATING INNOVATION TOWARDS SUSTAINABILITY: A CASE OF UNIVERSITI SAINS ISLAM MALAYSIA".

In connection with this, I would like to ask your good office to allow me to use your materials as one of my references and to conduct my surveys and interviews in your vicinity. Rest assured that the data we will gather will remain confidential and to be used on academic purposes only. I believe that you are with me in enthusiasm to finish this requirement as compliance for the studies program structure and to develop our well-being. I hope for your positive response on this humble matter.

Your approval to conduct this study will be greatly appreciated.

Thank you very much.

Yours sincerely,


HAMMAD FARHI MOHD SAUDI
Student ID: 4180001


CERTIFIED TO ISO 9001:2008 CERT. NO: AR-3454

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Faks : (+6)06 - 798 8204

www.usim.edu.my

Appendix 3: Authorisation Letter to Conduct Research



UNIVERSITI SAINS ISLAM MALAYSIA
جامعة العلوم الإسلامية الماليزية
ISLAMIC SCIENCE UNIVERSITY OF MALAYSIA

Pejabat Pendaftar
No. Tel: 06-7988101 No. Faks: 06-7993843

Rujukan Kamis USIM 2/237/1 Jilid ()
Tarikh: 12. Mac 2018

HAMMAD FARHI MOHD SAUDI
Student ID: 4180001

Dear Sir,

AUTHORIZATION LETTER TO CONDUCT RESEARCH

The purpose of this letter is to inform that I give **HAMMAD FARHI MOHD SAUDI**, Student ID: 4180001 under the program of Doctor of Philosophy (PhD) Economics and Muamalat permission to conduct the research titled "**ACCELERATING INNOVATION TOWARDS SUSTAINABILITY: A CASE OF UNIVERSITI SAINS ISLAM MALAYSIA**".

We have agreed to the study procedures. Any data collected by him will be kept confidential and will be stored in a locked filing cabinet within his office and for the research to be released for the research.

We wish you all the best in your research. Thank you

Yours sincerely,


(DATO' MUHAMMAD HAIZUAN ROZALI)
Registrar

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Negeri Sembilan Darul Khusus, Malaysia.
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Appendix 4: Research Consent Form

Research Project Title

Innovative Interventions Towards Sustainability

A Case of Universiti Sains Islam Malaysia

You are being invited to participate in a research study titled: Innovative Interventions Towards Sustainability: A Case of Universiti Sains Islam Malaysia. This study is being done by Hammad Farhi Mohd Saudi from Universiti Sains Islam Malaysia (USIM)

The purpose of this research study is to gather information from the respondents in five major areas in management aspect, which is in the area of: marketing, management, operations management, finance and strategic management on how the university (USIM) may enhance its visibility, improve on administrative procedures, generating revenues and achieve its strategic planning by utilizing the university's assets and resources.

In connection with this, I assured that the data we will gather will remain confidential and to be used on academic purposes only. I believe that you are with me in enthusiasm to finish this requirement as compliance for the studies program structure and to develop our well-being.

If you agree to the term and participate in the study, you will be asked to complete an online survey consist of questionnaires.

Declaration of Consent

1. I understand that participation is voluntary and that I am free to withdraw myself or my data at any time, without giving any reason, and without any adverse consequences.
2. I understand who will access to personal data provided.
3. I understand how personal data will be stored and what will happen to the data at the end of the project.
4. I understand how the research will be written up and published.
5. I understand the benefits associated with this project.
6. I consent to being audio recorded.

By ticking (/) “I agree and give consent” below you are indicating that you have read and understood this consent form and agree to participate in this research study. I hope for your positive response on this humble matter. This research study will afford no individual benefits, it will benefit the institution, particularly to Universiti Sains Islam Malaysia (USIM).

I agree and give consent to take part in this research study

☐

Name of Participant:

Signature:

Date:

Name of Investigator:

Signature:

Date: