CHAPTER 5

CASE STUDY 4

FINANCE MODULE

TOWARDS FINANCIAL SUSTAINABILITY

5.1 Preamble

The fourth applied research case is related to the financial sector. At time when the country is experiencing an economic crisis and with the aspiration from the Ministry of Higher Education which urges every public university to generate its own income, any efforts and attempts that are able to reduce the dependency on the government in terms of financial budget allocations are seen as appropriate. Efforts to increase and strengthen the University’s financial sustainability should be made as the main agenda by redesigning financial management procedures that prioritize more investment component rather than just controlling expenditures. This is also in line with the principles contained in the Malaysian Education Blueprint (Higher Education) 2015-2025. Basically, the University should think of appropriate methods and platforms to generate income using the university's existing resources. Besides the conventional sources of income such as government funding and tuition fees, there are various innovative ways of generating income from a multitude of sources that can be explored by the universities.

Among the main potential sources of income are through: (1) Academic and Research Programmes; (2) Asset Monetization, Retailing, and Services; (3) Financial Management Activities & Investment; (4) Corporate Alliances for Business Ventures; (5) Endowment; (6) Waqf; and (7) Fundraising (MEB, Higher Education, 2015-2025).

Therefore, USIM needs to take this initiative by looking at the resources available around it to generate an alternative income. This is the focus of this 4th case research and will be deliberated further.

5.2 Introduction

Despite the increasing growth of Malaysia's education system, income generation activities have been highlighted among Malaysia's government supported universities or also known as the public Higher Education Institutions (HEIs). Various issues and factors leading to insufficient funding caused the public Higher Education Institutions (HEIs) to seek alternative resources as an additional income to support their operational expenses.

Through the launching of the Malaysia Education Blueprint 2015-2025 (Higher Education) or the MEB (HE), the University Transformation Programme was announced by the Ministry of Higher Education Malaysia (MOHE). It serves as a guideline for the Malaysian universities in becoming a high-income nation. The MEB (HE) outlines 10 Shifts that will spur to continue excellence in the higher education system. The 10 Shifts addresses key performance issues in the system, particularly regarding quality and efficiency, as well as global trends that disrupt the higher education landscape.

The fifth out of the ten shifts, Shift number 5: Financial Sustainability as shown in Figure 5.1, aims to ensure long-term financial sustainability of the higher education system. In order to achieve this goal, the relevant governance structures at the universities will be improved by the Ministry of Higher Education and public universities. Simultaneously, the income generation activities at the universities are expected to be strengthened, while stay focused on their core education missions.

Source: Malaysian Education Blueprint, 2015-2025 (Higher Education) (2015)

Figure 5.1: 10 Shifts of Malaysian Education Blueprint

Financial sustainability for Malaysian Higher Education Institutions (HEIs) is one of the ten shifts defined in the Malaysia Education Blueprint 2015-2025 (Higher Education), or MEB (HE). Malaysia needs a long-term financing system for higher education so that it can sustain and rapidly improve the nation's ability to provide an accessible, equitable, high-quality education that meets international standards.

Presently, public Higher Education Institutions (HEIs) rely mainly on the government for direct grants, allocations, and student loans. Government grants today funds more than 80% of the expenditure of public HEIs, including USIM (Source: USIM's Bursar Department, 2019). While student fees primarily support private HEIs. The MEB (HE) requires HEIs in Malaysia to seek additional alternative sources of revenue to make them more reliable, more flexible and financially sustainable. It will also enable them to forge mutually beneficial alliances with industries. Accordingly, the Ministry's overriding aspiration is to create a higher education system that ranks among the world's leading education systems and that enables Malaysia to compete in the global economy. When the economy continues to increase over the next decade, Malaysia will need to offer high-quality higher education to nearly twice as many students if it is to achieve the highest rate of enrolment within ASEAN nations. The challenge is that total government expenditure on higher education has been rising at a rate of 14% per annum, mainly driven by subsidies to public HEIs, where 90% of their expenditure is government funded (MEB, 2015). Financial sustainability will be one of the critical challenges for universities in the next decade; only those institutions that have sound economic structures and stable income will be able to fulfil their multiple missions and respond to current and future challenges.

Every university is unique. The role, operating model, and even the composition of an academic community must be tailored to the university's specific context: its history and current situation, and its priorities. Each university today will have its strengths, weaknesses, challenges and aspirations, as well as different starting points. Consequently, any implementation needs to be structured in a modular manner, so that universities can adopt the elements that are best suited to their situation and pace.

5.3 Issues and Project Brief

Universiti Sains Islam Malaysia (USIM), a public university under the Ministry of Higher Education Malaysia. It is wholly funded by the government and is subjected to the government's central budget approval and limitations.

The full amount of budget allocation was given as a yearly one-off to the university in three quarter phases. Over the years, this budget is no longer sufficient to cover the university's yearly operational expenditure. USIM, as a statutory body and with its autonomy status given by the Ministry of Higher Education needs to find its way of generating alternative income to ensure the university would continue to run smoothly.

In an attempt to bridge the gap between the budgetary allocations and actual expenditures, USIM should come out with income-generating activities from existing resources. However, in order to respond fully to this challenge, the university needs to separate the management of income-generating activities from the mainstream teaching and research functions, while ensuring that the income from these activities serves the university's core functions. This applied research will identify and evaluate USIM's responsibility to search for various possible alternatives as potential sources of revenue for the university.

5.3.1 Problem Identification

Financial sustainability will be one of the key challenges for universities in the next decade, only those institutions that have sound financial structures and stable income flows will be able to fulfill their multiple missions and respond to current and future challenges. Financial sustainability is not an end in itself; it aims to ensure a university's goals are reached by guaranteeing that the institution produces enough income to enable it to invest in its future academic and research activities (MEB, Silver Book, 2015). The government funding is showing a declining pattern as the government has begun to cut its allocation to all public universities. Generally, public HEIs generate income are mainly from the academic fees and fund allocation by the government.

Running a university requires a collective management effort from its core elements in USIM. For instance, the Bursary Department under the Bursar for matters related to the financial control of the university, including budget planning, inventories and others related to the university's financial activities. However, under certain circumstances, especially issues related to finance, despite being assigned by the university to be handle by specific departments, these issues can be co-handled by other departments across the university.

Due to the reduction of annual budget for the operational expenditure received by the university, the Vice Chancellor has requested all departments, faculties to actively seek for alternative source of income. This message was revealed during the meeting with Head of Departments and Deans held on February 2019. It is an indicator that the university may not sustain if just relying on the government funding.

USIM is scaling greater heights with its holistic development in the aspects of rapid development of facilities and campus amenities but despite of reduction budget from the government, the university needs to look for alternatives source of income. The additional source of income would ease the burden of USIM for its multifarious expenditures and enable USIM to carry out its programs or functions with more flexibility. On the other hand, the monthly routine meeting between the Deputy Vice Chancellor of Student Affairs and Alumni with the Principals of USIM's Residential Colleges and Student Housing Centre would among others discuss on reports involving the students' activities for the month and the financial expenditures for each residential college of USIM. Some of the reported financial expenditure has raised concerns among the Management as it involves a substantial amount to cover the maintenance and utilities of these residential colleges. The allocated budget received from the government is no longer sufficient to cover the reported expenses. Therefore, a means of alternative funding or revenue source is in need to ensure the University's sustainability.

To obtain a clearer picture on USIM's residential colleges financial situation, the researcher has decided to investigate on the issue by analyzing the previous years' annual financial report from the Bursar Department of USIM. From the report, it can be concluded that, a substantial amount is needed to cover the expenditures of these residential colleges for the duration of three (3) years, (2016-2018). As a result, the university must use the management budget for operational expenditure received from the government and other internal resources fund to compensate for this financial shortage. These data are as shown in Figure 5.3 to Figure 5.8. The financial statements shown that the expenditures or the operating cost for the residential colleges in USIM for three consecutive years exceeded the revenue obtained collected from the students' fees. Therefore, there is a need for the university to address this issue seriously as it has a big impact on the sustainability of the university.

5.3.2 USIM's Residential Colleges

Apart from disseminating knowledge to the students as the main stakeholders of the university, they also require a conducive and comfortable place or accommodation for them to stay during their studies. For this purpose, the university has provided several residential colleges for the students as their accommodation.

As of January 2019, USIM has only five (5) residential colleges for its students. These residential colleges are under the administration of the Student Housing Centre of USIM, and a principal oversee each residential college. In terms of location, only one residential college is located within the university compound, three residential colleges are located out of the university compound but within Nilai area and one residential college that caters for the Medical and Dentistry programme for undergraduate students, located in Pandan Indah, Kuala Lumpur. In terms of ownership, three (3) residential colleges are wholly owned by the university and the other two (2) are rented from third-party agents.

The five (5) five residential colleges in USIM are:

a. Residential College 1 (wholly owned by USIM, located in the university compound).
b. Residential College Sutera Indah (wholly owned by USIM, located outside the university compound.)
c. Residential College Acacia Avenue (wholly owned by USIM, located outside the university compound).
d. Residential College Nilam Court (rented from third party, located outside the university compound).
e. Residential College Pandan (rented from third party, located outside the university compound and for medical and dentistry students only).

The population of the students (*Tamhidi* & Undergraduate) for each residential college are stated in Table 6.2. It has shown that the total number of students who stayed in the university's residential colleges was 5,756 out of 11,979, which is equivalent to only 48% out of the total number of students in USIM. This means, 6,223 students chose to stay out of the campus with 4,972 students are undergraduate while the remaining 1,251 are the postgraduate students. This is higher than total number of students who stayed in university's residential colleges. From Table 5.2, it also shows that only 85.5% of the residential colleges are occupied. The balance 14.5% vacancy is due to several factors including the university's accommodation placing policy.

USIM's accommodation policy requires that all *Tamhidi* students to accommodate the Residential College 1. Female 1st year undergraduate students are required to accommodate Residential College Nilam Court while Residential College Sutera Indah for the 1st year male undergraduate students. An unequal number of genders with more female students than male students may also lead to the vacancy of 14.5 % because both genders are not permitted to occupy the same block in the same residential college. Under proper planning, these vacant units could be put for better use. Despite the availability of several vacant rooms at these residential colleges, most of the students, especially the male students, prefer to rent out third-party accommodation due to a cheaper rental cost and more flexibility for them to move.

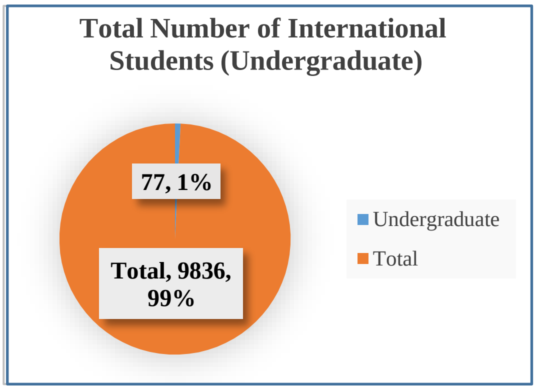
Students who are not staying at the university's residential colleges would normally rent rooms, houses, flats or apartments which are located nearby to the university. These students are known as the out-campus student. As a result, the local students, mainly in large groups of twenty (20) students would share and rent houses which are deemed desirable to them.

Being a student, a proper and comfortable accommodation might not be on their top list, as long as they can save some rental fee, home is just to sleep in. A third-party accommodation would have them pay a monthly rent of RM 60.00, that is RM 300.00 per semester individually compared to RM 550.00 per semester on university-imposed accommodation fees. This scenario may not happen if the university provides enough and decent accommodation to cater for all the students. The university covers the operating expenditure of the residential colleges, and the student accommodation fee is one of the main sources of revenue for USIM.

On several occasion, information obtained from USIM's Housing Centre pertaining to this matter on January 3, 2019. Based on their residential colleges prepared by the university record, they had mentioned that the international students were reluctant and preferred not to stay in the residential colleges provided by the university because of certain circumstances, such as too many occupants in a small room, uncomfortable and some privacy requirement. They rather stay out of the campus not only due to the factors as mentioned above, but it is more convenient for them to buy food and other necessities when staying out campus. They prefer some freedom and not wanting to be bound to the university rules and regulation of the residential colleges. Due to the factors such as too many occupants in a small room, uncomfortable and some privacy requirement, majority of the international undergraduate level students which around 97.4% of USIM's population preferred not to stay at the residential colleges provided by USIM. As for the postgraduate students in USIM, there is no accommodation dedicated for them. Hence, some rented houses, rooms, flat or apartments at the nearby housing area in Nilai are their alternatives although some it is far away from the campus.

As of January 2019, there are a total number of seventy-seven (77) international students from thirteen (13) different countries that have enrolled in the undergraduate programmes in USIM. On the other hand, a total of 523 international students from more than thirty (30) countries have enrolled for the postgraduate program (Master and Ph.D.) as shown in Table 5.3 to Table 5.5.

Table 5.3: Total Number of International Students (Undergraduate Level)



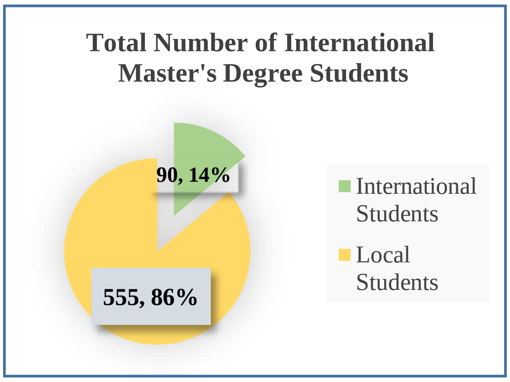
Total Number of Undergraduate Students	9,836
Total Number of Undergraduate Students (International)	77

Country of Origin	**Gender**	
	Male	**Female**
Algeria	1	
Bangladesh	4	
Brunei	2	2
Cambodia	1	2
China		1
Gambia	7	
Indonesia	7	7
Jordan		1
Nigeria		1
Pakistan	1	
Singapore	2	23
Sri Lanka		1
Thailand	8	6
Total	33	44
GRAND TOTAL	**77**	

Source: Marketing and Admission Department, Centre for Postgraduate Studies of USIM (2019)

For students under master's degree, there are 555 (86%) local students overall in USIM with 90 (14%) are international students.

Table 5.4: Total Number of International Students (Master Level)



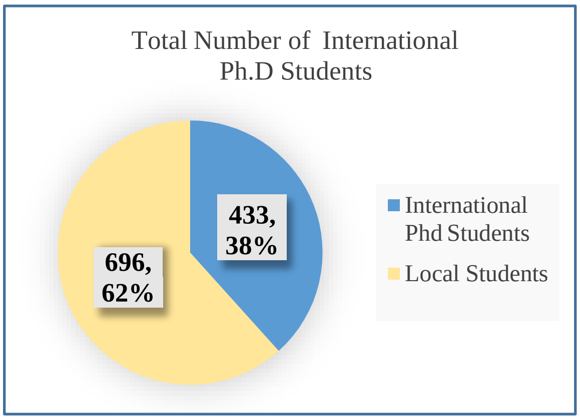
Total Number of Master's Degree Students	555
Total Number of Master's Degree Students (International)	90

Country of Origin	Gender	
	Male	Female
Algeria	1	
Bangladesh	5	
Brunei	1	
China	1	1
Comoros	1	
Cote D'Ivoire (Ivory Coast)	1	
Egypt	9	
The Gambia	1	
Guinea-Bissau	1	
Indonesia	7	3
Iraq	2	
Jordan	1	1
Libya	3	1
Mauritius		1
Netherlands	1	
Nigeria	2	
Oman	12	
Others	3	
Palestine	3	1
Somalia		1
Syria	4	1
Thailand	3	
United Arab Emirates	14	1
Yemen	3	
Total	79	11
GRAND TOTAL	**90**	

Source: Marketing and Admission Department, Centre for Postgraduate Studies of USIM (2019)

Meanwhile, the total number of Ph.D. students in USIM is 433 (38%) while 696 (62%) are the local students.

Table 5.5: Total Number of International Students (PhD. Level)



Total Number of Ph.D. Students	696
Total Number of (Ph.D.) Students (International)	433

Source: Marketing and Admission Department, Centre for Postgraduate Studies of USIM (2019)

Country of Origin	Gender	
	Male	Female
Afghanistan		1
Albania	1	
Algeria	5	1
Bahrain	1	
Bangladesh	37	4
British Indian Ocean Territory	1	
Comoros	1	
Egypt	9	4
Eritrea	1	
Finland	1	
Gambia	2	
Indonesia	16	2
Iraq	11	2
Jordan	38	11
Lebanon	1	
Libya	45	18
Nigeria	9	2
Oman	126	38
Others	7	1
Pakistan	3	1
Palestine	24	2
Qatar	3	
Saudi Arabia	3	
Singapura		1
Somalia	4	
South Sudan		1
Sri Lanka	1	
Syria	3	1
Tanzania	1	
Tunisia	1	
Turkey	1	
United Arab Emirates	30	3
United Kingdom	1	
Yemen	16	2
Total	345	88
GRAND TOTAL	**433**	

5.4 Analysis of Issue

Based on the issues stated in section 5.3.1, this applied case research could initiate and become the steppingstone for the university to put an extra effort in generating revenues. USIM has the opportunity not only to generate income but also show their concerns for the international students and at the same time will portray a good image to the university. The additional source of income would ease the burden of USIM for its multifarious expenditures and enable USIM to carry out its programs or functions with more flexibility.

5.4.1 Criticality of Issues

This applied research is of great significance as it will identify an alternative source of income that the university can benefit from. It will assist the University's Management to make use of the current asset and turn them into a potential source of income. Indeed, this case research would be of interest to the University's Management.

5.4.2 Case Study Objectives

Ministry of Higher Education Malaysia (MOHE) has announced that due to government budgetary constraints, public universities are required to find alternative ways and revenues for generating their revenues. Revenues to ensure a long-term financial sustainability for survival should be drawn from a variety of sources by universities. Universities require a great deal of funding for research activities, human resource costs, development, and other aspects of operational activities. As a result, universities need to think creatively about finding their own financial resources instead of relying solely on the government fund.

Financial sustainability to spur continued excellence in Malaysia's Higher Education is concentrated in the Fifth (5th) shift of Malaysia Education Blueprint (Higher Education). Collaborations between the universities and the Ministry of Higher Education (MOHE) have been made in unveiling the University Transformation Programme *(UniTP)* to assist public universities in creating and implementing their own tailored transformation plans. The five (5) to twenty (20) percent reduction in the budget allocation for public universities as stated in the 2019 budget by the Ministry of Finance (MOF) prompted the MOHE to come up with innovative ideas on how public universities can produce their income from other sources of revenues. The Minister of Higher Education has urged public universities to form its own strategy to increase their funding and reduce their dependence on the government from 90% of their operating costs to 70% as enshrined in Malaysia Education Blueprint (Higher Education) 2015-2025.

Based on the issues, this case research will therefore address the needs for USIM to seek potential alternative income generating channel. Besides, relying on tuition fees imposed to the students which is the main contributor as the source of income for USIM, there is another possible income generating channel that could contribute to USIM's strategy for getting revenue. Thus, the objectives of this case research 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.

5.5 Literature Review

5.5.1 Introduction

This section presents the review from literature pertinent to the present study and theories focusing on the needs for income generation by the institutions.

5.5.2 Innovative Approach on Income Generation

Over the years, public universities in the region have had to innovate in order to cope with increased competition and diminishing capitation particularly from the government. Most universities derive income from a broad range of sources, such as knowledge transfer, commercial operations, public-private partnerships, and philanthropic giving. There seems little doubt that financial pressures in future will increase, as funding body grants reduce, tuition fee income becomes less stable and the demands to pay for new and better facilities continue to grow.

As of January 2019, a total of 20 public universities, 41 private universities and university colleges, 10 international university branches, 33 polytechnics, 72 public community colleges and 500 private colleges in Malaysia (Education Malaysia, 2018). When HEIs are government-bound, they are restricted to earning income through diversification methods. In order to make a major contribution to the growth and development of society, the university must be transformed into a more research-driven institution (Giesenbauer & Muller-Christ, 2020).

Every university is a product of the different process of economic and intellectual growth and needs to find a balance between teaching, research, and a wide range of income-generating activities. Now the government is pushing universities into an entrepreneurial paradigm because of many external forces (Jiang et al., 2017).

The university is therefore responsible for raising income from a non-funding institution in order to avoid compound administrative terms and conditions along with public funding by the government (Kovalchuk et al., 2018). With higher demand for quality higher education and increasing costs and budgetary constraints, universities are expected to increase their own income generation. University Transformation Program (UNITP, Ministry of Higher Education,). Universities need to have policies on all income generation activities to protect university interests, good name, reputation and mission. It is therefore possible to contribute additional revenue to the institution, regardless of research, consulting, marketing and so on.

In addition, public universities are required to innovate in order to deal with competition and reduce the cost of capital (Chumba et al., 2019). As proposed by Bendickson et al. (2018), in Kenya, the Resource Dependency Theory (RDT) is used to describe the behaviour of educational institutions to start-up businesses with complementary income to ensure their survival. The characteristics of the theory as 'resource dependence' is the need to obtain resources from the environment in terms of financial, physical or information, which has caused the institutions to depend on external sources of funding. The RDT suggests that the institution may minimize its dependence on external resources through mergers or diversification, boards of directors, joint ventures and other inter-organisational relationships, political conduct and executive succession (Jeong et al., 2011).

The same applies to Higher Education Institutions. Albats et al. (2018) stated that, the university prescribed, on behalf of the principal position, to provide the Ministry of Higher Education with information on Key Performance Indicators (KPIs) in order to assess the university performance of academic staff. As described by Aarssen & Crimi (2016), higher education is consistent with the "principle of unbounded generation, dissemination and search for new and comprehensive knowledge." It has been controlled by the government and financed primarily by the state or other public authorities since it is recognized as a national key asset. Apart from government funding, a university can obtain different sources of funding to the extent that the sources could have an impact on its financial structure. Students and household fees, as well as other private institutions, will also be the other sources of funding for the university (Marrewijk, 2017). Yáñez et al. (2019) defined sustainability as "the ability of an institution to maintain a quality-free activity and to use appropriate resources in the future".

In developing countries, the government uses different approaches to allocate funds to its universities, such as a negotiation-based approach, a performance-based approach, or a formula-based approach (Li et al., 2017). However, all public universities are experiencing a reduction in financial allocation due to a reduction in government spending in 2010 as a long-term consequence of the financial crisis (UNITED NATIONS, 2018). Sustainability in financial terms for a university therefore plays an important role in order to maintain the normal functioning of the university in the future. Higher Education Institutions must strive to reduce their vulnerability to income-source uncertainties and the impact of resource providers.

They need to move from single revenue resources to prevent the planned activities from being restricted due to control from the main sources of funding, through the aspect of revenue inconstancy, changes in structure and process, and target displacement (Aleixo et al., 2018). The review of empiric studies on the impact of the economic crisis on higher education shows the different cost-saving methods used by most universities in Malaysia, including all reductions in travel expenditure, research grants, students' activity funds and delays in infrastructure development. Some universities are also developing innovative and entrepreneurial activities to generate extra income (Ahmad, 2012). There are also US foundation sectors offering large philanthropy in the form of grants to the education sector in Malaysia (Howe, 2017). According to Chelly et al. (2017), the generation of academic-oriented income is generated solely through the provision of teaching and education services. Thus, they can make full use of their knowledge and experience by immersing themselves in income generation activities. Likewise, academics are now transformed into researchers rather than lecturers (Talpey, 2018).

The university has another objective, which is to initiate and engage in a business boundary in order to improve the level of skills among employees and facilitate the transfer of knowledge. In order to reduce its dependency on grant funding, the university is responsible for raising revenues from non-funding organisations (Calixto & Pereira, 2016). However, the impression and position of the university will be judged by the public based on quality. From research conducted by Ahmad et al. (2012), international student fees contributed more than 10% to university funding compared to local students.

According to Florendo (2005), the need for income generation is brought due to following trends:

i. Institutions are facing and experiencing rising costs of operations primarily because of inflation.
ii. The increase in appropriation is in personal services and not in operating and other services and new technologies available that should be brought into the classroom.

iii. Demand for services is increasing with an increase in population, and the minimum standards set by the technical panels and accreditations standards of voluntary professional organisations require keeping up to certain norms.

5.5.3 International Student Expectations and Requirement

Engwall et al., (2016) stated that four internationalization strategies exist, namely, behaviour, rationality, competence and method. The two most common solutions to the challenge of no internationalization, despite having a direct effect on international students, include the activity method mentioned in a variety of events, initiatives, and services. Internationalization as "The international content of curricula, the international movement of researchers and scholars, and arrangements which involve programs of cooperation in education beyond their national boundaries", while Knight and Liesch (2016) viewed internationalization as 'the process of integration'. Any reasons for attending university, it is likely that students' expectations will affect their performance, attendance as well as their likelihood to drop out and overall satisfaction (Vázquez et al., 2016). International students arriving from a different country may face many difficulties in their daily life. Coming to a new country, they faced difficulties with to find places to live.

Surviving in a new community is the first lesson they have to deal with, and they need to have a support system when they newly arrive. Many of the studies in the choice of international students have ignored to determine the effect of internationalization and marketing practices on the choice of the host country and the host institution of international students. This research examined their role as factors in the attraction and recruitment of international students and their respective performance.

5.6 Research Methods

In order to meets the objectives of this applied research, the data obtained from primary and secondary resources. Primary data refers to the information obtained first-hand on the interest for the specific purposes of the case study. Secondary data refers to the information collected from the sources that already exist (Bougie, 2013). The primary data consists of questionnaires has been distributed among the international students in USIM to explore their expectation and requirement on university's accommodation. On the other hand, the secondary data has been obtained from the departments in USIM such as the Bursar Department, Division of Academic Management, Housing Centre, Centre for Graduate Studies and from other sources such as blueprints, reports and articles from Ministry of Higher Education such as MEB (Higher Education), newspapers, articles, USIM's annual report.

5.6.1 Introduction

Research methodology concentrates on the specific process that involves identification, selection and analysing all the related information obtained from the primary and secondary data. As indicated by Sekaran and Bougie (2016), research methodology can be defined as the stages used to gather the sources and data for the motive in the research decisions. Apart from that, it enforces researcher to be critically evaluated the method chosen in achieving the objective of the study. This section offers detail explanation regarding research design, sampling and population, instrumentation, data collection and data analysis. These processes of methodology will assist the researcher in enhancing the reader understanding about the research.

5.6.2 Research Design

Research design can be described as the structure of procedures to paste together the variety of research's components for handling the efficient research problem (Abutabenjeh & Jaradat, 2018). As stated by Creswell and Clark (2011), research design is an important aspect that needs to be considered by the researcher that refers to specific plan in manoeuvring the research. The process encompasses of problem statement determination, analysing research question, methodology, result analysis and writing justification and explanation. This applied research chooses descriptive research as the research design for this study. Descriptive research can be defined as one of the research methods that explains the attribute of the population, phenomena or situations of the research as well the study (Samar, 2017). The form of descriptive analysis as the instrument has been utilised.

5.6.3 Research Population

Research population is important approach in conducting research. The determination of population before starting the research will help the researcher in directing this research align with the outlined objectives. Purposive sampling will be used to collect the data in completing this applied research. Purposive sampling is a form of non-random sampling that requires certain criteria in selecting the sample. The sampling involves identifying and selecting individuals or groups of individuals that are especially knowledgeable about or experienced with a phenomenon of interest (Creswell & Clark, 2011).

This study is conducted towards international students of USIM. There are about 600 international students enrolled with the program of undergraduates and postgraduate. However, only 307 undergraduates (N=77) and postgraduate students Master (N=80), PhD (N= 150) were reachable and accessible to participate in this study.

5.6.4 Sample Size

Based on the statistical report received from Division of Academic Management of USIM, Centre for Graduate Studies and Housing Centre of USIM as of January 2019, there is a total number of 600 international students enrolled in the academic programs for undergraduate and postgraduate level in USIM. Thus, from that population number of the international students, a sample size could be calculated and determined by that number in order to conduct a survey. For this study, the population size has been determined by using the sample size formula based on desired accuracy with confidence level of 95% by Gill et al., (2010) in (Taherdoost, 2017). The description of minimum amount of sample size subset from population displayed as in Table 5.6.

Table 5.6: Sample Size Based on Desired Accuracy with Confidence Level of 95%

	Variance of the population P=50%					
	Confidence level=95% Margin of error			Confidence level=99% Margin of error		
Population Size	5	3	1	5	3	1
50	44	48	50	46	49	50
75	63	70	74	67	72	75
100	79	91	99	87	95	99
150	108	132	148	122	139	149
200	132	168	196	154	180	198
250	151	203	244	181	220	246
300	168	234	291	206	258	295
400	196	291	384	249	328	391
500	217	340	475	285	393	485
600	234	384	565	314	452	579
700	248	423	652	340	507	672
800	260	457	738	362	557	763
1000	278	516	906	398	647	943
1500	306	624	1297	459	825	1375
2000	322	696	1655	497	957	1784

Source: (Taherdoost, 2017)

Based on the Table for sample size of respondents as displayed in Table 5.6, the size of population respondents for 600 people, the ideal sample size is 234 respondents. However, the number of respondents for this study is 307 respondents.

5.6.5 Research Instrument

Selection of instrumentation is important that drives a desire result aligned with the objective of this study. According to Creswell (2012), the instrumentation selection is important process that resembles the reality aspects that turns into specific numbers and values that can be interpreted accordingly.

The researcher had to review past researchers that had already done the research in order to construct the questionnaire. Therefore, research instrumentation (questionnaires) has been adopted from previous study conducted by Kaur et al., (2013) ‘A Questionnaire on Survey of problems in Hostel Life using Data Mining’ and research by Lutalo, (2019) under a research on ‘Factors Influencing Students' Choice of Hostel Accommodation’. Li et, al. (2017) supported the statement as emphasize the accurate instrumentation will lead to empirical values and indicate the right form of the statistic.

The justification of these instrumentations’ selection is due to several reasons such as:

i. The questionnaire constructed is depicted the definite idea that has been discovered previously.
ii. The questionnaire constructed is fit with the objective of this research.
iii. The questionnaire constructed can be use generally that has not developed by focusing on specific organisation or institution.

According to the justification listed, the instrumentation chosen is appropriately applied in the study that has not bind with any specific related industries. The questionnaire practically used a specific language that can be understood by individual. Further action has been taken to coordinate the entire instrument chosen into one design of questionnaire. The questionnaire developed incorporated with different segments that could ease the process of data collection in the next process.

For the questionnaires, there are two sections. Section A is to explore on the respondents' demographic specifically the gender and level of studies. Meanwhile, Section B, is the areas pertaining the type of accommodation, facilities, and location that the students prefer to stay. In other words, the purpose is to explore international students' requirement and expectation on the university's student accommodation. This study chooses specific 5 Point-Likert Scale that represent 1-Strongly Disagree, 2-Disagree, 3-Neutral, 4-Agree and 5- Strongly Agree. For this case research, the Five Point-Likert scales is employed in this study is to ensure that the response rate and response quality increased and it is relatively easier for respondents to understand (Joshi et al., 2015). Likert scale is a psychometric scale usually included in research that deployed in questionnaire (Martín et al., 2018). Likert scales are employed as it has the advantage that the respondent does not expect a simple yes or no answer from the respondent, but rather allow for degrees of opinion, and even no opinion at all (Joshi et al., 2015). Therefore, quantitative data is obtained, which means that the data can be analysed with relative ease. It is commonly used to ask participants to rate a set of attitude statements using scales with common categories and in attitude measurement (Van der Linden, 2016). In addition, the agreement term uses in the questionnaires as it allows respondents to answer more precisely, and it provides with more nuanced survey responses to analyse (Joshi et al., 2015). It is commonly used to ask participants to rate a set of attitude statements using scales with common categories and in attitude measurement (Van der Linden, 2016).

The questionnaire is constructed in English language. According to "The Role of English in Present Day Higher Education," (Al-Khalil, 2017), English language has become an important language in any sectors such as banking, education, manufacturing, services and many more.

5.6.6 Validity

Validity refers to the degree to which the instruments can quantify the differences between individuals on the construct one seeks to measure. In this study, content validity was determined by an in-depth literature review and the usage of validated survey instruments from previous research.

Besides that, an in-depth literature review was conducted to guarantee that the instruments covered the concept intended for this study. The instruments were examined and approved by the Panel of Supervisors for Finance Module Committee and by the Deputy Vice Chancellor (Students Affairs and Alumni) of USIM in order to ensure the content and face validity.

Their comments were provided as below:

i. Language: Panels have suggested that the language used in the questionnaire should be proofread in a way to capture respondent's understanding.
ii. All the title of the questionnaires must be remained in English to avoid misunderstanding either to the researcher or respondents.
iii. Set of questionnaires must be with the serial number to help the researcher to analyse information better and avoid any repetitions of the same respondent.

Once the instruments have been validated, the necessary amendment to the instrument was made based on the recommendation given by the Panels of Supervisors for Finance Module Committee. Before the process of collecting data took place, researcher conducted a pilot study. A pilot study refers to the mini version of a full-scale study or a trial run conduct in planning of the whole study. It is also known as a 'feasibility' of the study. Gay et al. (2011) stated that, pilot study is conducted to ensure the researchers can interpret valuable data. The measuring instruments used to collect those data must be both valid and reliable. In addition, it also serves as a platform to verify appropriate instrument in collecting data for the actual study. A pilot study is an approach that has been implemented in this case research by utilising a questionnaire instrument. For this case research, 30 respondents among the international students from the postgraduate level were involved in the pilot study. Although it was a small quantity, however, it has same preferences in actual study (Eldridge et al., 2016). According to Eldridge et al. (2016), a small number of respondents (around 10 to 30 people) are needed in pilot study. The systematic practice of pilot study was useful to help the researcher to understand the process of conducting a survey well (Becker et al., 2017; Heaton & Britten, 2016; Johnston et al., 2017).

Further, all information obtained from the pilot study analysed using the IBM SPSS 23 to identify the reliability of the questionnaire. Data obtained by using internal consistency reliability of coefficient alpha or also known as Cronbach's Alpha co-efficiency, and according to Muijs (2004), the instrument is internally consistent and reliable if the test result is over 0.7. Furthermore, a pilot study led to additional look at the consistent quality of the instrument.

Cronbach's Alpha was additionally performed to test the consistent quality and consistency of the more significant part of the measurements, which will be gained from an exploratory element examination. It demonstrated that the instrument utilised was dependable. An outcome of 0.70 or more was acknowledged as a cut-off point (Muijs (2004). The result of the pilot test as shown in Table 5.7 provided helpful information on the questionnaire design, wording, and measurement scales. Thus, it gives a clear picture to the researcher to plan and execute on fieldwork based on the time obtained.

Table 5.7: Reliability Analysis of the Dimension

Variable	Cronbach's Alpha	N of Items
International Student Expectation on Students' Accommodation	0.894	4

The validity and reliability test were necessary because to ensure that the instrument used were fully examined and consistent with the allocated time (Lee & Seomun, 2016). Validity is a vital venture at the present examination, paying little mind to whether the exploration is qualitative or quantitative (Creswell et al. 2012). Meanwhile, Lee and Seomun (2016) characterized dependability as the consistency of the scores obtained and how predictable they are, for every involved in the research.

5.6.7 Data Collection

This section discussed about the method used to gather information from the respondents in order to meet the objectives. Therefore, questionnaires have been used to complete the survey in USIM. The goal of using questionnaire is to collect information about the same variables or characteristics from some cases where the result is a data matrix or a structured or rectangular set of data. As such, it begins with determining a set of questionnaires that comprised of demographic and on international students' expectation on student accommodation.

In collecting the data collection on finance case study, the study was conducted on 24 January 2019. For this purpose, purposive sampling has been utilised as it is an acceptable kind of sampling for special situations. It uses the judgment of an expert in selecting cases or it selects cases with a specific purpose in mind (Klar & Leeper,2019). Next, the established questionnaires are distributed among 600 international students using online platform.

The method of gathering the information from the survey was carried out via the electronic survey form (Google Form) and has been disseminated through various channel; via the International Students' Society in USIM, International Office of USIM, through collaboration with Out Campus Student Secretariat (OCSS) and the Housing Centre of USIM. They were given a week to complete the questionnaires. On 1st February 2019, the researcher retrieved the questionnaire and glanced through all the questions to avoid any missing or unanswered questions. However, only 307 questionnaires were returned and usable to be processed in the next stage. Based on the sample size of the respondents that has been calculated by using the Morgan's Table for sample size of respondents in the sample size section above, it was recommended the ideal sample size of this study as 234 respondents. However, in this study a total number of 307 respondents' data has been collected for this study that refers to 51% of the total population of the international students in USIM for the focus group of this study.

5.7 Data Analysis

5.7.1 Introduction

In this section, the results and findings has been analyse using (Statistics Package for Social Sciences) SPSS 23. All the results were explained in detail about the collected data using Descriptive Data. Basically, this involves the description of statistics and inferential of statistics. Descriptive statistics is used to measure or summarized the available data present in graph, chart or tables. Mostly, it implicates the means and standard deviation on this study.

Further, this subtopic also prescribed the demographic data which includes the gender and level of studies. It will be essential for arranging and displaying the data. The information data was coded into and analysed with the IBM SPSS 23 by Einspruch (2005). The information data obtained are analysed by using descriptive statistic. The description of the following research objective was described below. In achieving the research objectives, the researcher used percentage, frequency, mean and standard deviation as representative of the descriptive data analysis. According to Kim et al.,(2017), in conducting a descriptive analysis, the information that has been obtained need to be in a set of data. Meanwhile, according to (Devlieger et al., 2016), mean used to analyse each score in the distribution. The standard deviation was conducted to measure the data dispersion (Boley et al., 2017).

5.7.2 Findings Derived from the Survey

Descriptive analysis was utilised to establish a summary of research data received. The descriptive analysis for the study to explore international students' requirement and expectation on the university's student accommodation was explained by the number of the respondent (N), mean, standard deviation and the number of items. This section was to identify respondent's demographic profiles who are the participants for this study.

5.7.2.1 Demographic Profile of Respondents

Table 5.8 shows the demographic profile of respondents that have been collected through an online survey. Subjects' characteristics and background information such as gender, and level of studies were collected from total sample of (N=307) international students from Division of Academic Management of USIM, Centre for Graduate Studies and the Housing Centre of USIM.

Female respondents have shown the highest percentage which is 75% (N=225) while male respondents participated in this study are 25% (N=82). 48.9% (N=150) are the PhD students which recorded the highest followed by master students with 26.1% (N=80) and lastly bachelor's degree student participated consist of 25.1% (N=77) from the total respondents.

Table 5.8: Demographic Profile of Respondents

Description		N	Percentage %
Gender	Female	225	75
	Male	82	25
Level of Studies	Bachelor's Degree	77	25.1
	Master	80	26.1
	PhD	150	48.9

5.7.2.2 To Explore International Students' Requirement and Expectation on University's Student Accommodation

Table 5.9 shows the international student's requirement and expectation on the university's student accommodation. From the first question, the respondents chose Single Room as their preferred type of accommodation to stay during their studies with total number of respondents answered agree (N=107, %=34.9) and Strongly Agree (N=200, %=65.1) with the highest mean 4.65 (SD=.477). Meanwhile Twin Sharing showed that respondents answered were Strongly Disagree (N=36, %=11.7), Disagree (N=16, %=8.1), Neutral (N=25, %=8.1), Agree (N=186, %=60.6) and Strongly Agree (N=44, %=14.3) that leads to mean of 3.61 (SD=1.157) and the least preferred type of accommodation chosen is the Dormitory type with respondents answered Strongly Disagree (N=133, %=43.3), Neutral (N=148, %=48.2), Agree (N=7, %=2.3) and Strongly Agree (N=19, %=6.2) with mean of 2.28 (SD=1.221).

Next, in terms of facilities that the international students would like to have in their accommodation. The feedbacks obtained were; Strongly Disagree (N=6, %=2.0), Disagree (N=3, %=1.0), Neutral (N=17, %=5.5), Agree (N=107, %=34.9) and Strongly Agree (N=174, %=56.7) for a single bed with total mean of 4.43 (SD=.807), followed by sofa set which respondents answered of Strongly Disagree (N=42, %=13.7), Disagree (N=12, %=3.9), Neutral (N=90, %=29.3), Agree (N=41, %=13.4) and Strongly Agree (N=122, %=39.7) that lead of total mean 3.62 (SD=.1.392). On top of that, other facilities like fridge, the respondents were answered Strongly Disagree (N=47, %=15.3), Neutral (N=97, %=31.6), Agree (N=72, %=23.5) and Strongly Agree (N=91, %=29.6) that lead of total mean 3.52 (SD=.1.329). Finally, other facility of having air conditioner, the respondents were answered of Strongly Disagree (N=25, %=8.1), Disagree (N=36, %=11.7), Neutral (N=94, %=30.6), Agree (N=88, %=28.7) and Strongly Agree (N=64, %=20.8) that lead of total mean 3.42 (SD=.1.178).

Furthermore, in terms of the willingness of the international students to pay for the accommodation fee in Ringgit Malaysia (RM). The fee of RM 350.00 per-month for the accommodation provided by the University with Strongly Disagree (N=12, %=3.9), Disagree (N=2, %=7), Neutral (N=33, %=10.7), Agree (N=145, %=47.2) and Strongly Agree (N=115, %=37.5) the mean score of 4.14 (SD=.919). The fee of RM 400.00 per-month for the accommodation provided by the University with Strongly

Disagree (N=24, %=7.8), Disagree (N=12, %=3.9), Neutral (N=83, %=27), Agree (N=108, %=35.2) and Strongly Agree (N=80, %=26.1) and the mean score of 3.68 (SD=1.136).

The fee of RM 450.00 per-month for the accommodation provided by the University with Strongly Disagree (N=48, %=15.6), Disagree (N=14, %=14.6), Neutral (N=91, %=29.6), Agree (N=82, %=26.7) and Strongly Agree (N=72, %=23.5) that scored mean of 3.38 (SD=1.139). The fee of RM 500.00 per-month for the accommodation provided by the University with Strongly Disagree (N=83, %=27), Disagree (N=14, %=4.6), Neutral (N=93, %=30.3), Agree (N=14, %=4.6) and Strongly Agree (N=103, %=33.6) that scored mean of 3.13 (SD=1.583).

Finally, Sutera Indah is the location for the accommodation that the international students preferred to stay with Disagree (N=18, %5.9), Neutral (N=25, %=8.1), Agree (N=182, %=59.3) and Strongly Agree (N=82, % = 26.7) during their studies at USIM with 4.07 (SD=.762). Meanwhile, in Acacia Avenue, most respondents answered Strongly Disagree (N=33, %=10.7), Disagree (N=18, %=5.9), Neutral (N=25, %=8.1), Agree (N=182, %=59.3) and Strongly Agree (N=49, %=16) with total mean of 3.64 (SD=1.147). On the other hand, respondents answered others option with Disagree (N=200, %=65.1), Neutral (N=107, %=34.9), with total mean of 2.35 (SD=.447).

Table 5.9: To Explore International Students' Requirement and Expectation on the University's Student Accommodation

Descriptive Statistic					
	N	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
Type of accommodation I prefer to stay during my studies					
Single Room	307	4	5	4.65	.477
Twin Sharing	307	1	5	3.61	1.157
Dormitory	307	1	5	2.28	1.221

Facilities that I would like to have in this accommodation provided by the University					
Single bed	307	1	5	4.43	.807
Sofa set	307	1	5	3.62	1.392
Fridge	307	1	5	3.52	1.329
Air conditioner	307	1	5	3.42	1.178
Preferred rental fee in Ringgit Malaysia (RM) per month for the accommodation provided by the University					
RM350.00	307	1	5	4.14	.919
RM400.00	307	1	5	3.68	1.136
RM450.00	307	1	5	3.38	1.319
RM500.00	307	1	5	3.13	1.583
Preferred location to stay during my studies in USIM					
Sutera Indah	307	2	5	4.07	.762
Acacia Avenue	307	1	5	3.64	1.147
Others	307	2	3	2.35	.477

Descriptive Statistic

	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Type of accommodation I prefer to stay during my studies						
Single Room	307				N=107 (34.9%)	N=200 (65.1%)
Twin Sharing	307	N=36 (11.7%)	N=16 (8.1%)		N=186 60.6%)	N=44 (14.3%)
Dormitory	307	N= 133 (43.3%)		N=148 (48.2%)		N=19 (6.2%)
Facilities that I would like to have in this accommodation provided by the University						
Single bed	307	N=6 (2.0%)	N=3 (1.0%)	N=17 (5.5%)	N=107 (34.9%)	N=174 (56.7%)
Sofa set	307	N=42 (13.7%)	N=12 (3.9%)	N=90 (29.3%)	N= 41 (13.4%)	N=122 (39.7%)
Fridge	307	N=47 (15.3%)		N=97 (31.6%)	N= 72 (23.5%)	N=91 (29.6%)
Air conditioner	307	N=25 (8.1%)	N=36 (11.7%)	N=94 (30.6%)	N= 88 (28.7%)	N=64 (20.8%)
Preferred rental fee in Ringgit Malaysia (RM) per month for the accommodation provided by the University						
RM350.00	307	N=12 (3.9%)	N=2 (7.0%)	N=33 (10.7%)	N=145 (47.2%)	N=115 (37.5)
RM400.00	307	N=24 (7.8%)	N=12 (3.9%)	N=83 (27%)	N= 108 (35.2%)	N=80 (26.1%)
RM450.00	307	N=48 (15.6%)	N=14 (14.6%)	N=9 (29.6%)	N= 82 (26.7%)	N=72 (23.5%)
RM500.00	307	N=83 (27%)	N=14 (4.6%)	N=93 (30.3%)	N= 14 (4.6%)	N=103 (33.6%)
Preferred location to stay during my studies in USIM						
Sutera Indah	307		N=18 (5.9%)	N=25 (8.1)	N=182 (59.3%)	N=82 (26.7%)
Acacia Avenue	307	N=33 (10.7)	N=18 (5.9%)	N=25 (8.1)	N=182 (59.3%)	N=49 (16%)
Others	307		-	-	-	-

5.8 Discussion on the Findings

From the findings, it can be concluded that majority of the international students are more than willing to stay at USIM's residential colleges provided that several conditions are met:

i. Single occupancy is preferred for privacy.
ii. Competitive rental fee is at par with the amenities provided.
iii. Accommodation is at a convenient location in terms of fulfilling daily requirements and commute distance to USIM.
    a. The survey has indicated that majority of students preferred a single occupancy room than a twin sharing room. On top of that, extra comfort from facilities such as air conditioner, refrigerator and sofa are preferred.
    b. This indicates the available of demand from the international students for a premium type of accommodation (residential colleges).
    c. In terms of rental fee, majority of the students mentioned that an accommodation fee of between RM 350.00 to RM 400.00 per month would be a reasonable rate for them to commit. This information confirmed the financial stability and rental payment capability of USIM's international students.
    d. To find out regarding which location would attract more interest from the students, two USIM's residential colleges were named for selection. An open option for other location nomination was also included in the Questionnaire. The two residential colleges, Sutera Indah and Acacia Avenue differ in terms of distance to USIM and the surrounding area environment. Sutera Indah is an apartment located about 6 minutes' drive

from USIM. Despite its further location, the apartment is in a strategic location with the shopping mall, AEON, located just across the road, having plenty of restaurants and other commercial shops in its vicinity. Acacia Avenue, on the other hand, are located nearest to USIM, about 2 minutes' drive and is within walking distance. It is a 1st floor shophouses with the convenience of several restaurants and other commercial shops on the ground floor for the students' daily requirements. Feedbacks received has shown that majority of the students with 86% preferred Residential College Sutera Indah.

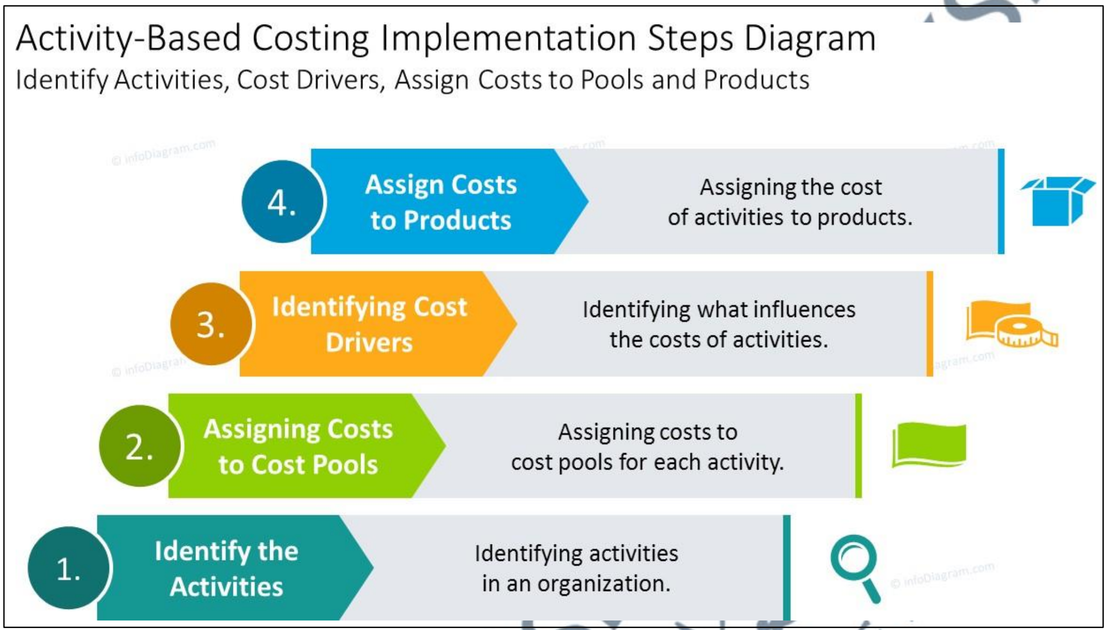
e. It is assumed that this preference was made based on the students' mobility convenience and social life requirement.

5.9 Models and Formulae Used

There are various financial and investment tools across the finance and investment discipline which are designed to help organisations to develop their action plans in order to achieve their goals. However, for this case research, the Activity-Based Costing (ABC), Return on Investment (ROI) and the Payback period are seen as the most appropriate formulae to be used due to its framework to overcome the existing scenario by comprehensively identifying and analysing the capability of organisation to accomplish the desired outcome.

5.9.1 Activity-Based Costing (ABC)

Activity-Based Costing (ABC) as shown in Figure 5.9, is a costing method that identifies activities in an organisation and allocates the cost of each activity to all products and services according to the actual consumption by each. This model assigns more indirect overhead costs into direct costs compared to conventional costing. (Farlex Financial Dictionary, 2009).



Source: Bragg, S. (2019)

Figure 5.9: Activity Based Costing Model

By applying the Activity Based Costing (ABC), an organisation can measure the cost elements of entire products, activities and services, that may help inform the organisation decision to either identify and eliminate those products and services that are unprofitable and lower the prices of those that are overpriced (product and service portfolio aim) or be able to identify and eliminate production or service processes that are ineffective and allocate processing concepts that lead to the very same product at a better yield (process re-engineering aim).

5.9.2 Return on Investment (ROI)

Return on Investment (ROI) is a performance measure used to evaluate the success of an investment or to compare the productivity of a variety of specific investments. ROI is trying to calculate explicitly the magnitude of the return on a single investment compared to the cost of the investment. The benefit (or return) of an investment is divided by the cost of the investment to calculate the ROI.

The Return-on-Investment formula:

ROI = (Gain from Investment - Cost of Investment) / Cost of Investment

Source: Corporate Finance Institute (2019)

In the above formula, "Gain from Investment” refers to the proceeds obtained from the sale of the investment of interest because ROI is measured as a percentage, it can be easily compared with returns from other investments, allowing one to measure a variety type of investments against one another. Essentially, ROI can be used as a rudimentary gauge of an investment’s profitability. This could be the ROI on a stock investment, the ROI that a company expects on expanding a factory, or the ROI that was generated in a real estate transaction. The calculation itself is not that complex, and the wide variety of implementations makes it easy to interpret.

When the ROI on a project is positive net, it is certainly worth it. But if other opportunities with higher ROIs are available, these signals can help investors eliminate or select the best options. Likewise, investors should avoid negative ROIs, which imply a net loss.

5.9.3 Payback Period

Payback period is the time in which the initial cash outflow of investment is expected to be recovered from the cash inflows generated by the investment. It is one of the simplest investment appraisal techniques. The formula to calculate the payback period of a project depends on whether the cash flow per period from the project is even or uneven.

In case they are even, the formula to calculate the payback period is as follows:

$$\text{Payback Period} = \frac{\text{Initial Investment}}{\text{Cash inflow Per Period}}$$

Source: Andersson, E. R. (2019)

5.10 Potential Impact and Recommend Solution to the Organisation

It was noticeable that there is 14.5% vacancy in USIM's residential colleges. Since many apartment units are still available *(vacant)* and under-utilise. Hence, the study proposed that those units of apartments to be upgraded to a better apartment with facilities that will attract the international students. The upgraded facilities like having own private room equipped with air-conditioning, single bed, sofa set at the main hall, refrigerator, and individual study table for three students in a three-room apartment. This proposal serves as an alternative for the university to enhance and utilize the existing resources and property for income generation.

In addition, it was also supported by the result from the findings, that there are high demands of these premium residential colleges from the international students who study in USIM. As for the beginning, at the initial stage, the planning for upgrading the residential colleges will involve two residential colleges:

i. Residential College Sutera Indah, Nilai, Negeri Sembilan
ii. Residential College Acacia Avenue, Nilai, Negeri Sembilan

From the data and discussion with the Senior Officer, Housing Centre of USIM, Principals of the Residential College of Sutera Indah, there are 40-unit apartments that are vacant and still available. Each apartment has three rooms. This means that the residential college can accommodate around 120 students on a single room basis and can be filled with three (3) students per apartment. On the other hand, for Residential College at Acacia Avenue, there are 20 units available which can accommodate around 60 students on a single room basis and can be filled with three (3) students per apartment as well. Therefore, the total numbers of apartments that can be upgraded are 60-unit apartments which can accommodate around 180 students for 180 single rooms.

As the competition for international students becomes more intense among Malaysia's Higher Education Institutions, developing strategies that effectively attract students to study on its campus is crucial for USIM. International student mobility and globalization have caused universities around the globe to compete for students by promoting their universities using various ways.

This applied case research was initiated to explore the possibility of an alternative source of income for the university by introducing '**Premium Student Accommodation**' to provide an upgraded accommodation which is similar to the commercial concept of accommodation, targeting specifically for the international students. The focus group for this case research is the international students due to the available demand and their capabilities on paying the rental house outside the campus. It has been shown from the survey findings, that they are willing to pay extra cost for their accommodation as long as it meets their requirements.

From the data shown in Table 5.3 to Table 5.5 on the number of international students in USIM, majority of the students are from developing countries. Due to the higher rate of currency exchange as of year 2019 between those countries and Malaysia, the international students have no financial difficulties in paying extra as long as they are comfortable, and the accommodation meets their requirements to live in throughout their studies.

i. Activity- Based Costing (ABC)

The study has come out with the details on the expenditure costing to upgrade the apartments, which includes the investment required by the university at the initial stage. This investment includes purchasing of those facilities or called as fixtures and fittings like basic furniture, white goods and other equipment needed to upgrade the apartments such as single bed, mattress, individual study table and chair, sharing sofa, air-conditioner, curtains and a refrigerator for each apartment.

For the rental fee, the suggested rental charges that will be imposed to the students by the university will be at RM 350.00 per student/ per month. The details calculation on the rental charges and revenue generated will be as the calculation in Table 5.10 and Table 5.11 respectively based on two (2) residential colleges. Meanwhile, details on the costing for upgrading the residential colleges for international students and revenue projection (forecast) is shown in Table 5.12 which indicates the capital expenditure for upgrading residential colleges, working capital requirement and revenue projection.

Table 5.12: Capital Expenditure for Upgrading Residential Colleges, Working Capital Requirement and Revenue Projection

INDIVIDUAL FACILITIES *(Fixtures & fittings)* (A)	**SHARING FACILITIES *(Fixtures & Fittings)* (B)**	**UPGRADING COST FOR RESIDENTIAL COLLEGES (C)**	**(WORKING CAPITAL) UTILITIES (D) and MAINTENANCE (E)**		**CAPITAL EXPENDITURE**	**MONTHLY RENTAL CHARGES**	**REVENUE PROJECTION**
Single bed + mattress RM 355.00 *Wardrobe* RM 220.00 *Study table & chair* RM 105.00 + RM 35 =RM 715.00 per/student x 3 students *(Per apartment)* **=RM 2,145.00 (A)** **RM 2145.00 x 60 units of Apartment** **= RM 128,700.00**	*Air conditioner* RM1,500.00 per unit x 3 units (1-unit per room) = RM 4,500.00 *Refrigerator* RM800.00 per unit *Sofa set* RM800.00 per unit *Curtains* RM800.00 (1-unit per apartment) = RM 6900.00 **(B)** RM 6900.00 x 60 units of Apartment = RM 414,000.00	(A)+ (B) RM 2,1450.00 + RM 6,900.00 = RM 9,045.00 = RM 9,045.00 x 60 units apartments **RM 542,700.00** **(C)**	**Utilities** RM 300.00 per apartment x 60 apartments = RM 18,000.00 per month x 12 months **=RM 216,000.00** yearly **(D)**	**Maintenance** (Building and air conditioner) RM 15.00 per month x 180 students = RM 2,700.00 x 12 months **=RM 32,400.00** **(E)**	**(C) + (D) + (E)** RM 542,700.00 + RM 216,000.00 + RM 32,400.00 + **= RM 791,100.00**	RM 350.00 per student x 180 students **=RM 63,000.00** per month	RM63,000.00 x 12 months **= RM 756,000.00 for 1 year** **** 1 year** *(Details in the cash flow forecast table and explanation)*

Source: Developed for the Current Study

From the Statement of Cash Budget as indicates in Table 5.13, it indicates that all calculation excludes buildings, emoluments and depreciation as buildings owned by the university and staff emoluments paid and taken from the university's Operational Expenditure (OE) Management Budget. The cash flow from operation which also called as Cash Out Flow for the 1st year (2019) will be the initial investment at the opening balance of RM 791,100.00 which involves the cost to start the project at RM 542,700.00 for purchasing fixtures and fittings and for the working capital, utility and maintenance cost at RM 248,400.00. (RM 216,000.00 + RM 32,400.00).

The seed money will be needed from the university to kick start the project. The investment involves are mainly to purchase the fixtures and fittings such as air-conditioners, single bed and mattress, sofas, curtains and refrigerators. Those items will be prepared as per room basis except for sofas, curtains and refrigerator on sharing basis for a unit of the apartment. The capital of RM 791,100.00 also involves the cost of working capital, maintenance and utilities as the apartments will start to be fully operated during the 3rd month of the current year 2019 and it is subject to the renovation period phase will be completed.

In terms of revenue, for the 1st year, the revenue will only be calculated for the duration of 10 months only, considering 2 months will be the grace period to set up and equip the residential colleges (apartments) with all the fixture and fitting. The total amount of RM 630,000.00 is expected to be collected from the students' rental. The calculation will be (RM 350.00 x 180 student's x 10 months). During the 3rd month, the rental period will commence, and the rental will commence to be collected.

Meanwhile, the cash flow from investing activities (outflow), total the amount of RM 542,700.00 (RM 128,700.00 + RM 414,000.00). Those cost includes the purchasing of fixtures and fittings to be equipped in the apartments. Items such as air-conditioner, singe bed, mattress, wardrobes, study tables and chairs, refrigerators, sofa sets and curtains. Next, is the cash flow from operation cost which involve the working capital, utilities and maintenance cost which will be RM 248,400.00. The detail calculation on the cash flow on a monthly basis also will be calculated as depicted in Table 5.14 on Cash Flow Monthly Forecast.

Table 5.13: Statement of Cash Budget (2019-2023)

Year	2019	2020	2021	2022	2023
INITIAL INVESTMENT/ CASH BALANCE	**791,100.00**	**630,000.00**	**1,137600.00**	**1,645,200.00**	**2,152,800.00**
CASH OUTFLOW					
Fixtures and Fittings	**128,700.00**				
Single bed + mattress RM 355.00 x 180 units	63,900.00				
Wardrobe RM 220.00 x 180 units	39,600.00				
Study table & chair RM140.00 x 180 units	25,200.00				
Facilities	**414,000.00**				
Air conditioner RM1500.00 x 180 units	270,000.00				
Refrigerator RM 800.00 x 60 units	48,000.00				
Sofa set RM 800.00 x 60 units	48,000.00				
Curtains RM 800.00 x 60 units	48,000.00				
Working Capital	**248,400.00**				
Cash inflow from Operation Revenue (RM350.00 per student x 180 students x 12 months) First year revenue only counted for 10 months.	**630,000.00**	**756,000.00**	**756,000.00**	**756,000.00**	**756,000.00**
Cash Outflow for Operation	**248,400.00**	**248,400.00**	**248,400.00**	**248,400.00**	**248,400.00**
Utilities	216,000.00	216,000.00	216,000.00	216,000.00	216,000.00
Maintenance Cost	32,400.00	32,400.00	32,400.00	32,400.00	32,400.00
Cashflow From Operation	**381,600.00**	**507,600.00**	**507,600.00**	**507,600.00**	**507,600.00**
Working Capital in the Form of Cash	248,400.00				
Net Cash Balance	630,000.00	1,137600.00	1,645200.00	2,152,800.00	2,660,400.00

Table 5.14: Cash Flow Monthly Forecast

Month	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Total	Year 2	Year 3	Year 4	Year 5
Opening Balance	791,100.00																
INITIAL INVESTMENT: RM791,100.00																	
Cash Flow from Operation (inflow)																	
Revenue (RM350.00 per student x 180 students x 12 months). First-year revenue only counted for 10 months.			63,000.00	63,000.00	63,000.00	63,000.00	63,000.00	63,000.00	63,000.00	63,000.00	63,000.00	63,000.00	**630,000.00**	756,000.00	756,000.00	756,000.00	756,000.00
Cash Flow from Investing Activities (Outflow)	**128,700.00**												**128,700.00**				
Fixtures and fittings																	
Single bed + mattress RM355.00 X 180 units	63,900.00												**63,900.00**				
Wardrobe RM220.00 X 180 units	39,600.00												**39,600.00**				
Study table & chair RM140.00 X 180 units	25,200.00												**25,200.00**				
Facilities	**414,000.00**												**414,000.00**				
Air conditioner RM1500.00 X 180 units	270,000.00												**270,000.00**				
Refrigerator RM800.00 X 60 units	48,000.00												**48,000.00**				
Sofa set RM800.00 X 60 units	48,000.00												**48,000.00**				
Curtains RM800.00 X 60 units	48,000.00												**48,000.00**				
Cash Flow from Operation Cost (Outflow)	**20,700.00**	**20,700.00**	**20,700.00**	**20,700.00**	**20,700.00**	**20,700.00**	**20,700.00**	**20,700.00**	**20,700.00**	**20,700.00**	**20,700.00**	**20,700.00**	**248,400.00**	**248,400.00**	**248,400.00**	**248,400.00**	**248,400.00**
Utilities	18,000.00	18,000.00	18,000.00	18,000.00	18,000.00	18,000.00	18,000.00	18,000.00	18,000.00	18,000.00	18,000.00	18,000.00	**216,000.00**	216,000.00	216,000.00	216,000.00	216,000.00
Maintenance Cost	2,700.00	2,700.00	2,700.00	2,700.00	2,700.00	2,700.00	2,700.00	2,700.00	2,700.00	2,700.00	2,700.00	2,700.00	**32,400.00**	32,400.00	32,400.00	32,400.00	32,400.00

ii. Return on Investment

For the calculation on Return on Investment (ROI), Table 5.15 indicates the details for this project. When calculating the ROI, it is mandatory to know and understand how long the payback period will take. In addition, there is a relationship between the payback period and the ROI models that have been presented.

Table 5.15: Calculation for Return on Investment (ROI)

2019	**2020**	**2021**	**2022**	**2023**
-52%	-36%	100% Profit	100% Profit	100% Profit

Negative (-) ROI indicates that the investment is in loss and without negative (-), means making profit. It was calculated based on Cash Flow account. The detail calculation on return on investment will be made for the duration of five (5) years (2019-2023) as shown in Table 5.16.

Table 5.16: Detail Calculation for Return on Investment (ROI)

Net Project Cash Flow (for every year-end)	
1^{st} year =	RM 381,600.00 *(Net Project Cash Flow in 2019)* - RM 791,100.00 *(Cost of Investment)*/ RM 791,100.00 *(Cost of Investment)* = 0.52 x 100% = -52%
2^{nd} year =	RM 507,600.00 *(Net Project Cash Flow in 2020)*- RM 791,100.00 *(Cost of Investment)*/ RM 791,100.00 *(Cost of Investment)* = 0. 36 x 100%= -35.84(-36%)
As for the third year (2021) and onwards the project will start to gain profit as the initial investment made by the university has been paid off.	
3^{rd} year =	RM 507,600.00 *(Net Project Cash Flow in 2021)* after deduction of operating cost
4^{th} year =	RM 507,600.00 *(Net Project Cash Flow in 2022)* after deduction of operating cost
5^{th} year =	RM 507,600.00 *(Net Project Cash Flow in 2023)* after deduction of operating cost

Source: Developed for the Current Study

iii. Payback Period

The formula for the Payback Period will be as follows:

$$\frac{\text{Cost of capital (Initial Investment)}}{\text{Net annual cashflow per period (inflow) at the closing balance (Year End)}}$$

$$\frac{\text{RM 791,100.00}}{\text{RM 381,600.00}}$$

= 2.07 years = 2 years

Exact duration will be in 22 months = 1 year 10 months.

Table 5.17: Payback Period on Initial Investment Paid to the University

Year	Initial Investment Made RM)	Net Annual Project Cash Flow (RM)	Payback Period (In Month/ Years)
0	791,100.00	-	24 months (2 years)
1	-	381,600.00	10 months
2	-	507,600.00	12 months

Source: Developed for the Current Study

The Payback Period as shown in Table 5.17 will be calculated as follows:

RM 791,100.00 (Initial investment) – Net Project Cash Flow (for the 1st year which will be calculated for 10 months of duration) = RM 381,600.00

- The amount paid to the University for the initial investment will be paid for the 1st year (2019) will be = RM 381,600.00 and there is still pending payback amount of RM 409,500.00
- As for the 2nd year (2020), the Net Project Cash Flow will be at RM 507,600.00. **(Revenue: RM 756,000.00 – Operating expenses RM 248,400.00)**

So, the remaining balance of RM 409,500.00 will be paid from the Net Project Cash Flow (RM 507,600.00 – RM 409,500.00) = RM 98,100.00 (balance after the initial investment has been paid off). This means that the completed Payback Period will be in a duration of 22 months which equivalent to **1 Year and 10 months** (Breakeven).

5.10.1 Feasibility of the Project

This project is feasible to be operationalised, which means the ability to accurately and completely view the processes, transactions and other activities as shown in the financial aspect of the project. The budget allocation in the form of cash or the seed money to kick start the project will be funded by the University as the financial provider. The cash budget or cost budget for this project is clearly shown in the initial investment shown in the table in Table 5.12 (Statement of Cash Budget). A cost budget is a financial plan and as a tool to estimate about identified expenses and the costs or necessary efforts for projects, work packages or activities in any project management. It also includes the estimation of costs, setting a fixed budget, and managing and controlling the actual costs compared to the estimated ones.

In terms of the Salvage Value of the property, since these two residential colleges wholly owned by the University and due to its strategic location at the prime area in Bandar Baru Nilai, Negeri Sembilan, it is predicted that the estimated resale value of these asset at the end of its useful life will be at a very competitive price. In order to capture the value at the end of the forecasting period, a 'terminal value' will be included.

It is most often used in multi-stage discounted cash flow analysis and allows for the limitation of cash flow projections to a several-year period. Terminal value allows for the inclusion of the value of future cash flows beyond a several year projection period, while satisfactorily mitigating many of the problems of evaluating such project cash flows as depicted in Table 5.18. While for the project valuation, the calculation will be shown in Table 5.19 in the Project Valuation. Project valuation defines as 'a process for calculating the monetary value of an asset'.

For the 'opportunity cost' or the 'discount rate'. It is defines as the 'interest rate that the Federal Reserve charges a bank to borrow funds when a bank is temporarily short of funds'. A discount rate of 3% will also be reserved and included in the future for this project even though this project will be funded by the University. It is a precaution measure if there is anything happen for this project in the future.

Meanwhile, for the perpetuity growth for this project to be sustained, the revenue gained from the project will be invested in other financial investment scheme like fixed deposit or any other type of investment available in the market to gain more profit from the rental charged to the students after the payback period of the initial investment funded by the university completely paid off. A growing perpetuity is a series of periodic payments that grow at a proportionate rate and are received for an infinite amount of time.

The Perpetuity Growth Model accounts for the value of free cash flows that continue growing at an assumed constant rate in perpetuity. In addition, the projected free cash flow in the first year beyond the projection horizon (N+1) is used.

The formula for the Perpetuity Growth Model will be calculated as follows:

$$T_0 = \frac{D_0(1+g)}{k-g}$$

- D_0 = Cash flows at a future point in time which is immediately prior to N+1, or at the end of period N, which is the final year in the projection period.
- k = Discount Rate.
- g = Growth Rate.

Table 5.18: Terminal Value

Terminal Value of this project will be calculated as follows:

Terminal Value = RM 507,600.00 (from the Net Cash Flow)/ Discount rate of 3 % which total up to RM 16,920,000.00.

Net Project Cash Flow = RM16,920,000.00 (Terminal Value) + RM 507,600.00 (Net Cash Flow) = RM 17,427,600.00.

NPV of Cash Flow RM16,006,569.90. IRR of Cash Flow RM111.01%.

Table 5.19: Project Valuation

A. INPUT	**RM**					
Initial investment	791,100.00					
Initial revenue per month	63,000.00					
Initial expenses Utilities	216,000.00					
Maintenance	32,400.00					
Discount Rate (%)	3%					
B. CAPITAL INVESTMENT		**2019**	**2020**	**2021**	**2022**	**2023**
Fixtures & Fittings						
Single bed + Mattress RM335.00 x 180 units	63,900.00					
Wardrobe RM220.00 x 180 units	39,600.00					
Study table & chair RM140.00 x 180 units	25,200.00					
Air conditioner RM1500.00 x 180 units	270,000.00					
Refrigerator RM800.00 x 60 units	48,000.00					
Sofa set RM 800.00 x 60 units	48,000.00					
Curtains RM800.00 x 60 units	48,000.00					

Changes in Working Capital	248,400.00					
Total initial investment	791,100.00					
C. Operating Cash Flow						
Revenue		630,000.00	756,000.00	756,000.00	756,000.00	756,000.00
Operating Expenses						
Utilities		216,000.00	216,000.00	216,000.00	216,000.00	216,000.00
Maintenance		32,400.00	32,400.00	32,400.00	32,400.00	32,400.00
Net Operating Cash Flow	381,600.00	507,600.00	507,600.00	507,600.00	507,600.00	
Terminal Value						16,920,000.00
D. Project Valuation						
Net Project Cash Flow	-791,100.00	381,600.00	507,600.00	507,600.00	507,600.00	17,427,600.00
Payback Period	-791,100.00	-409,500.00	98,100.00			
1 year 10 months		1	2			
NPV of Cash Flow	16,006,569.90					
IRR of Cash Flow	111.01%					

Source: Developed for the Current Study

5.10.2 Islamic Perspective on Managing the Project

In addition, from the Islamic perspective and point of view, particularly in the Islamic finance concept, the funding for this project is in accordance with the *Shariah* principles (*Shariah Compliance*) as it does not involve any financial loan from any financial institution to fund the project. Therefore, there will be no issue on any forbidden transaction, or any financial interest imposed for this project. It is an interest free project and not involve any usury or "*riba".* It is corresponding with the verse in the Holy Quran in Surah Al-Baqarah 2:275 which prohibited *riba*.

> *"Those who consume interest cannot stand on the Day of Resurrection except as one stands who is being beaten by Satan into insanity. That is because they say, "Trade is like interest." But Allah has permitted trade and has forbidden interest so whoever*

has received an admonition from his Lord and desists may have what is past, and his affair rests with Allah but whoever returns to dealing in interest or usury- those are the companions of the Fire; they will abide eternally therein".

(Al-Qur'an. Al-Baqarah 2:275)

The project will be financed and funded by the university. The university will not impose any interest on the initial investment, as it is used as the capital expenditure to begin the project. Mutual understanding and arrangement on the payable payback amount to the university and the period will be based on the actual amount of money funded from the university.

5.10.3 Risk Appetite

In risk management, risk appetite is the level of risk an organisation is prepared to accept. Hence, constraints are not easy to define whereby every organisation can tolerate different levels of risk (Iraci, 2019). In a simple form, risk appetite is referring to the amount and type of risk that an organisation is willing to take in order to meet its strategic objectives.

In terms of risks for this project, the investment for this project which includes the capital expenditures invested by the university is worthwhile. This is based on the strategic location of the project which is convenient and close to the new shopping mall; AEON Nilai. The fair value of the property might not be the issue, since if the project is not as projected, the residential colleges may be offered to any local students who are willing to pay for the rental. In fact, worst-case scenario, the residential colleges might be converted to commercial accommodation (apartments) and can be offered to the university's staffs or even to public.

Secondly, concerning the security aspect and social cost from this project. Indeed, as the residential colleges are under the university's surveillance, there will be no issue on security and safety of the students since those residential colleges are under the residential college management lead by the principal together with the fellows. The residential colleges are also safe as dedicated security guards will be at the residential colleges 24/7, 365 days. This will not only bring benefits and advantages to the students but is also vital to the guardians and parents of the students knowing that their children are in a safe environment while studying in USIM.

5.11 Conclusion

Due to the reduction of the governmental budget allocation to public universities and the needs for these universities to find their own resources to support its expenditure cost. This case research is intended to find a possible solution pertaining to the budget constraints. This proposal may ease part of the university burden for finding an alternative income. One of the alternatives that can be explored by USIM is by offering an upgraded accommodation to the international students, which can be called as *Premium Residential Colleges*. The income generated from the rental charged to the international students, which also could be extended to the staff can be used to compensate the insufficient funds.

Malaysia inspires to be the educational hub of the region. It is already known that Malaysia universities offers an affordable tuition fee, and another great reason to study in Malaysia is the relatively low cost of living as compared to other countries. These two criteria attract increasing interest among the international students to study in Malaysia. However, the issue of poor accommodation standard in Malaysia's public universities has been raised and highlighted in the meeting held at Ministry of Higher

Education in Putrajaya between all Malaysia public universities with Education Malaysia and Education Malaysia Global Services (EMGS) under Ministry of Higher Education Malaysia which play the roles in promoting Malaysia as the educational hub globally. From an international students' point of view, to live as a foreign student in Malaysia will depend on their accommodation budget like everywhere else, the higher the budget, the better the lodging! Hence, student accommodation is seen as a potential lucrative business to the university.

The increasing number of students' enrolment would bring an increase in revenue to the university with every year. Steer forward by the increasing demand for a prime quality accommodation, this case research project is being regarded as a very potential long-term project and with proper planning and implementation of this project, it could help to further boost the university's image as the ideal choice of place to study among the students, especially the international students.

Despite conservative attitudes and negative perceptions that efforts to pursue income- generating activities in an academic setting like in USIM would compromise the quality of education, a paradigm shift towards entrepreneurship should be cultivated among the university's management and workforce. Positive attitudes on the needs to generate own income needs to be developed. The teaching and learning themes should be translated into ideas that generate income and services in order to increase the relevance of the university's study programs. Potential projects such as this case research would help to showcase USIM to the world, contributes to ummah and to be the leader in the integration of *Naqli* and *Aqli* knowledge.

After all, a human being, like the vicegerent of Allah SWT, does not come to this planet without reason, and through His own will. All in the heavens and on earth was produced for man and made arbitrary and submissive to man for him to use to fulfil the position of His vicegerent. In reality, Allah SWT promotes humanity in the Holy Quran as servants were requested to try, receive, and produce property (revenue) when residing in the earth. It was clearly stated in Surah Al Jumu'ah, verse 62:10.

﴿ فَإِذَا قُ يِ ضَ ـَلاةُ فَانتَ شِ صُرِ وا فِي الأَ رْ ضِ وَابْتَغُوا مِن فَضْ لِ اللَّهِ وَاذْكُرُوا اللَّهَ كَثِيرًا لَّعَلَّكُمْ تُفْلِحُونَ ﴾

"o you who believe! When the call is proclaimed for the Salah on Al-Jumu`ah (Friday), then hasten (Fas`aw) to the remembrance of Allah and leave off business. That is better for you if you did but know!"

(Al-Qur'an. Al-Jumuah 62:10)

Tafsir Ibn Kathir describes the context behind the verse as when the solat (prayer) is over, you may disperse across the land and pursue Allah's blessings, and remember Allah very well, so that you may succeed.

As a conclusion, this case research managed to achieve its objectives. The details outcome, overall benefit gained and contribution of this case research towards the organisation will be presented in Chapter 7 respectively.

REFERENCES

Aarssen, L. W., & Crimi, L. (2016). Legacy, Leisure and the 'Work Hard–Play Hard Hypothesis'. *The Open Psychology Journal, 9*(1).

Abutabenjeh, S., and Jaradat, R. (2018). Clarification of Research Design, Research Methods and Research Methodology: A Guide for Public Administration Researchers and Practitioners. *Teaching Public Administration, 36*(3), 237–258.

Ahmad, A. R., Farley, A., & Naidoo, M. (2012). The Study of Government-University Relationship in Malaysian Higher Education System. *International Education Studies*, *5*(5), 25-34.

Al-Khalil, E. A. (2017). The Role of English in Present Day Higher Education. (2017). *International Journal of Social Sciences & Educational Studies*. *4*(2), 123-128

Albats, E., Fiegenbaum, I., & Cunningham, J. A. (2018). A Micro Level Study of University Industry Collaborative Lifecycle Key Performance Indicators. *Journal of Technology Transfer*. *43*(2), 389-431.

Aleixo, A. M., Leal, S., & Azeiteiro, U. M. (2018). Conceptualization of Sustainable Higher Education Institutions, Roles, Barriers, And Challenges for Sustainability: An Exploratory Study in Portugal. *Journal of Cleaner Production. 172*, 1664-1673.

Becker, H. V. & Mikan. (2017). *A Pilot Study of a Cognitive-Behavioural Intervention for Breast Cancer Survivors*. Oncology Nursing Forum.

Bendickson, J., Gur, F. A., & Taylor, E. C. (2018). Reducing Environmental Uncertainty: How High-Performance Work Systems Moderate the Resource Dependence-Firm Performance Relationship. *Canadian Journal of Administrative Sciences. 35*(2), 252-264.

Boley, M., Goldsmith, B. R., Ghiringhelli, L. M., & Vreeken, J. (2017). Identifying Consistent Statements about Numerical Data with Dispersion-Corrected Subgroup Discovery. *Data Mining and Knowledge Discovery. 31*(5), 1391-1418.

Bougies, U. S. (2013). Research Methods for Business. In U. S. Bougies, *Data Collection Methods.* Wiley.

Bragg, S. (2019). Accounting Tools. Retrieved November 25, 2018 from https://www.accountingtools.com/articles/2017/5/14/activity-based-costing

Calixto, R. & Pereira, A. (2016). *EUDIS European Universities Diversifying Income Streams. 4th Connecting Civil Societies of Asia and Europe: Changing Challenges, New Ideas*. Brussels: European Universities Association.

Chelly M, Hermassi S, Aouadi R, Shephard R. (2017). Good University Income Generating Governance in Indonesia: Agency Theory Perspective. *International Journal of Learning & Development,* 3(1), 67-78.

Chumba, J. A., Muturi, W., & Oluoch, J. O. (2019). Effect of Financial Investment Strategies on The Financial Sustainability of Universities in Kenya. *International Academic Journal of Economics and Finance*. 3(3), 37-49.

Corporate Finance Institute (2019). ROI (Return on Investment) Formula. Retrieved October 25, 2018 from https://corporatefinanceinstitute.com: https://corporatefinanceinstitute.com/resources/knowledge/finance/return-on-investment-roi-formula/

Creswell, J. W., & Clark, V. L. P. (2011). Choosing a mixed methods design. *Designing and conducting mixed methods research*, *2*, 53-106.

Creswell, J. W. (2012). *Educational Research: Planning. Conducting, and Evaluating Quantitative and Qualitative Research*, (4th ed.). Boston, MA. Pearson.

Devlieger, I., Mayer, A., & Rosseel, Y. (2016). Hypothesis Testing Using Factor Score Regression: A Comparison of Four Methods. *Educational and Psychological Measurement. 76*(5), 741-770.

Education Malaysia, Ministry of Higher Education, (2018).

Einspruch, E. L. (2005). *An Introductory Guide to SPSS? for Windows?* Sage.

Eldridge, S. M., Lancaster, G. A., Campbell, M. J., Thabane, L., Hopewell, S., Coleman, C. L., & Bond, C. M. (2016). Defining Feasibility and Pilot Studies in Preparation for Randomised Controlled Trials: Development of A Conceptual Framework. *PLoS One. 11*(3), e0150205.

Engwall, L., Kipping, M., & Üsdiken, B. (2016). *Defining Management: Business Schools, Consultants, Media*. Routledge.

Florendo, F.S. (2005). *Income Generating Projects and Institutional Development of Selected State Universities and Colleges in Luzon: Implications to Policy Formulation*. Unpublished Doctoral Dissertation, Technological University of the Philippines, Manila.

Farlex Financial Dictionary. (2009). Activity Based Costing. (n.d.), Retrieved November 10, 2019, from https://financialdictionary.thefreedictionary.com/Activity+Based+Costing.

Gay, P., Schmidt, R. E., & Van der Linden, M. (2011). Impulsivity and Intrusive Thoughts: Related Manifestations of Self-Control Difficulties? *Cognitive Therapy and Research, 35*, 293–303.

Giesenbauer, B., & Müller-Christ, G. (2020). University 4.0: Promoting the Transformation of Higher Education Institutions Toward Sustainable Development. *Sustainability*. 12(8), 3371.

Gill, J., Johnson, P. & Clark, M. (2010). *Research Methods for Managers*. SAGE Publications

Heaton, J. Day, J. & Britten, N. (2016). Collaborative Research and The Co-Production of Knowledge for Practice: An Illustrative Case Study. *Implementation Science.11*(1), 1-10

Holy Quran. All Quranic Translations are Based on Abdullah Yusuf Ali, 1989. The Holy Quran, Text, Translation and Commentary, Maryland: Amana Corporation. Accessed: February 22, 2019.

Holy Quran, Tafsir Ibn Kathir. Accessed: March 22, 2019.

Howe, B.T. (2017). *Validation of Non-Profit Organisation Behavioural Models and Why It Matters for Public Policy and Mixed Industries.* ProQuest Dissertations and Theses.

Iraci, J. A. (2019). *Risk Appetite, Culture, and Conduct: A Guide for Risk Management*. RMA Publishing. Pennsylvania.

Jeong, H. G., Kim, J., Lee, J. W., & Hong, I. (2011). Change in North Korea's Policy for Foreign Direct Investment and Future Direction of the Inter-Korean Economic Cooperation. *White paper on GIC Project, Ministry of Unification*.

Jiang, Xiong, & Cao. (2017). Research on The Mechanism of Entrepreneurial Education Quality, Entrepreneurial Self-Efficacy and Entrepreneurial Intention in Social Sciences, Engineering and Science Education. *Eurasia Journal of Mathematics, Science and Technology Education. 13*(7), 3709-3721.

Johnston, S., Coyer, F., & Nash, R. (2017). Simulation debriefing based on principles of transfer of learning: A pilot study. *Nurse education in practice*, *26*, 102-108.

Joshi, A., Kale, S., Chandel, S., & Pal, D. K. (2015). Likert Scale: Explored and Explained. *British Journal of Applied Science & Technology*, *7*(4), 396.

Kaur, H., Singh, M., & Kaur, R. (2013). A Questionnaire on Survey of problems in Hostel Life using Data Mining. *International Journal of Computer Technology and Applications.* 4(3), 400.

Kim, H., Sefcik, J. S., & Bradway, C. (2017). Characteristics of Qualitative Descriptive Studies: A Systematic Review. *Research in Nursing and Health. 40*(1), 23-42.

Klar, S., & Leeper, T. J. (2019). Identities and Intersectionality: A Case for Purposive Sampling in Survey-Experimental Research. *Experimental Methods in Survey Research: Techniques that Combine Random Sampling with Random Assignment*, 419-433.

Knight, G. A., & Liesch, P. W. (2016). Internationalization: From Incremental to Born Global. *Journal of World Business, 51*(1), 93-102.

Kovalchuk, V.G., Daudova, G.V., & Kurnosov, O.V. (2018). Conceptual Basis of Decentralization in Conditions of Transformation of Public Finance. *Financial and Credit Activity: Problems of Theory and Practice. 3(*26), 402-410.

Lee, Y. & Seomun G.A. (2016). Development and Validation of an Instrument to Measure Nurses' Compassion Competence. *Applied Nursing Research. 30*, 76-82.

Li, L., Jamieson, K., DeSalvo, G., Rostamizadeh, A., & Talwalkar, A. (2017). Hyperband: A Novel Bandit-Based Approach to Hyperparameter Optimization. *The Journal of Machine Learning Research*, *18*(1), 6765-6816.

Li, Tongtong, Hu, Zheng, Su, Liu, & Luo. (2017). The Influence of Visual Mental Imagery Size on Metamemory Accuracy in Judgment of Learning. *Memory*. *25*(2), 244-253.

Lutalo, A. (2019). *Factors Influencing Students' Choice of Hostel Accommodation* (Doctoral Dissertation, Makerere University).

Malaysian Education Blueprint, 2015-2025 (Higher Education) (2015). Putrajaya.

Marrewijk, M. (2017). Concepts and Definitions of CSR and Corporate Sustainability: Between Liagency and Communion in Corporate Social Responsibility. *Journal of Business Ethics*, *44*(2-3), 95-105.

Ministry of Higher Education (2016). *Enhancing University Income Generation, Endowment & Waqf*. The University Transformation Programme (UNITP), Purple Book.

Muijs, D., (2004). *Assessing Teacher Effectiveness: Developing A Differentiated Model*. Psychology Press.

Samar, R. (2017). Research Design and Methods: A Systematic Review of Research Paradigms, Sampling Issues and Instruments Development. *International Journal of Economics & Management Sciences*. *6*(2), 4.

Sekaran, U., & Bougie, R. (2016). *Research Methods for Business: A Skill Building Approach*. John Wiley & Sons.

Taherdoost, H. (2017). Determining Sample Size; How to Calculate Survey Sample Size. *International Journal of Economics and Management System. 2*, 237- 239

Talpey, S. (2018). Malaysian Higher Education Institutions: Shaping an Entrepreneurial Agenda. *The International Journal of Information and Education Technology*. *1*(2), 163.

United Nations. (2018). *E-Government Survey 2018: Gearing E-Government to Support Transformation Towards Sustainable and Resilient Societies*. New York.

USIM Departments. (2019). Development and Facilities Department, Bursar Department, Centre for Graduate Studies, Division of Academic Management, Tamhidi Centre, Out Campus Student Office, Student Housing Centre, International Student Society, Out Campus Student Secretariat (OCSS), Marketing and Admission Department.

USIM "Financial Report". *USIM Annual Report* (2018).

Van der Linden, W. J. (2016). *Handbook of Item Response Theory, Volume Three: Applications*. (Chapman & Hall/CRC Statistics in the Social and Behavioral Sciences). Chapman and Hall/CRC.

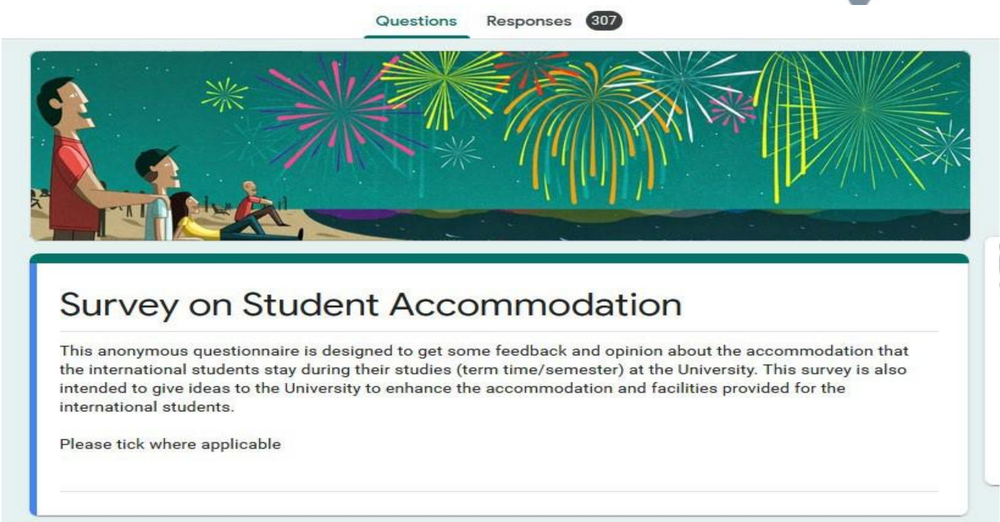
Vázquez, J. L., Aza, C. L., & Lanero, A. (2016). University Social Responsibility as Antecedent of Students' Satisfaction. *International Review on Public and Non-profit Marketing. 13*(2), 137-149.

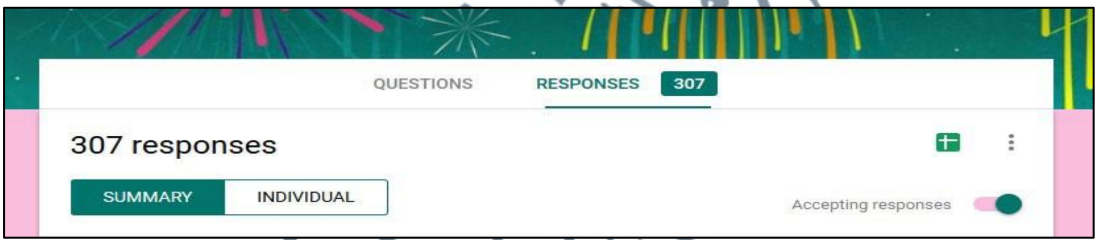
Yáñez, S., Uruburu, Á., Moreno, A., & Lumbreras, J. (2019). The Sustainability Report as an Essential Tool for The Holistic and Strategic Vision of Higher Education Institutions. *Journal of Cleaner Production. 207*, 57-66.

APPENDICES

Appendix 18: Survey on Student Accommodation

SURVEY ON STUDENT ACCOMMODATION





Thank you for participating in this survey.

This survey is designed to get feedback and opinion from the international students of USIM. The purpose of the survey is to explore international students' requirement and expectation on the university's student accommodation. This survey is also intended to give ideas to the University's Management to enhance the accommodation and facilities provided for the international students.

In this survey there are two sections. In Section A, there are two (2) questions for demographic which is gender and level of studies. Meanwhile in Section B, four (4) questions pertaining the students' expectation for their accommodation during their studies in USIM.

SECTION A

Instructions: Tick (/) and fill in the blank space provided.

DESCRIPTION		**TICK (/)**
Gender	Female	
	Male	
Level of Studies	Bachelor's Degree	
	Master	
	PhD	

SECTION B

Instructions: Choose one of the five answers given. Tick (/) your answer on the provided number.

1-Strongly Disagree 2-Disagree 3-Neutral 4-Agree 5-Strongly Agree

		1	**2**	**3**	**4**	**5**
Type of accommodation I prefer to stay during my studies	Single room					
	Twin sharing					
	Dormitory					
Facilities that I would like to have in this accommodation provided by the University	Air conditioner					
	Fridge					
	Sofa set					
	Single bed					
Preferred rental fee in Ringgit Malaysia (RM) per month for the accommodation provided by the university	RM 350.00					
	RM 400.00					
	RM 450.00					
	RM 500.00					
Preferred location to stay during my studies in USIM	Acacia Avenue					
	Sutera Indah					
	Others					

Appendix 19: Result Findings Finance Case Study (CASE 4)

Reliability

International Student Expectation

Cronbach's Alpha	N of Items
.894	4

Frequencies

Statistics

		Gender	Level of Studies
N	Valid	307	307
	Missing	0	0

Frequency Table

Gender

		Frequency	Percent
Valid	Male	82	25.0
	Female	225	75.0
	Total	307	100.0
Total		307	100.0

Level of Studies

		Frequency	Percent
Valid	Bachelor’s Degree	77	25.1
	Master	80	26.1
	PhD	150	48.9
	Total	307	100.0
Total		307	100.0

Single Room

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	107	34.9	34.9	34.9
	Strongly Agree	200	65.1	65.1	100.0
	Total	307	100.0	100.0	

Twin Sharing

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	36	11.7	11.7	11.7
	Disagree	16	5.2	5.2	16.9
	Neutral	25	8.1	8.1	25.1
	Agree	186	60.6	60.6	85.7
	Strongly Agree	44	14.3	14.3	100.0
	Total	307	100.0	100.0	

Dormitory

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	133	43.3	43.3	43.3
	Neutral	148	48.2	48.2	91.5
	Agree	7	2.3	2.3	93.8
	Strongly Agree	19	6.2	6.2	100.0
	Total	307	100.0	100.0	

Single Bed

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	2.0	2.0	2.0
	Disagree	3	1.0	1.0	2.9
	Neutral	17	5.5	5.5	8.5
	Agree	107	34.9	34.9	43.3
	Strongly Agree	174	56.7	56.7	100.0
	Total	307	100.0	100.0	

Sofa Set

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	42	13.7	13.7	13.7
	Disagree	12	3.9	3.9	17.6
	Neutral	90	29.3	29.3	46.9
	Agree	41	13.4	13.4	60.3
	Strongly Agree	122	39.7	39.7	100.0
	Total	307	100.0	100.0	

Fridge

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	47	15.3	15.3	15.3
	Neutral	97	31.6	31.6	46.9
	Agree	72	23.5	23.5	70.4
	Strongly Agree	91	29.6	29.6	100.0
	Total	307	100.0	100.0	

Air Conditioner

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	25	8.1	8.1	8.1
	Disagree	36	11.7	11.7	19.9
	Neutral	94	30.6	30.6	50.5
	Agree	88	28.7	28.7	79.2
	Strongly Agree	64	20.8	20.8	100.0
	Total	307	100.0	100.0	

RM 350.00

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	12	3.9	3.9	3.9
	Disagree	2	.7	.7	4.6
	Neutral	33	10.7	10.7	15.3
	Agree	145	47.2	47.2	62.5
	Strongly Agree	115	37.5	37.5	100.0
	Total	307	100.0	100.0	

RM 400.00

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	24	7.8	7.8	7.8
	Disagree	12	3.9	3.9	11.7
	Neutral	83	27.0	27.0	38.8
	Agree	108	35.2	35.2	73.9
	Strongly Agree	80	26.1	26.1	100.0
	Total	307	100.0	100.0	

RM 450.00

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	48	15.6	15.6	15.6
	Disagree	14	4.6	4.6	20.2
	Neutral	91	29.6	29.6	49.8
	Agree	82	26.7	26.7	76.5
	Strongly Agree	72	23.5	23.5	100.0
	Total	307	100.0	100.0	

RM 500.00

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	83	27.0	27.0	27.0
	Disagree	14	4.6	4.6	31.6
	Neutral	93	30.3	30.3	61.9
	Agree	14	4.6	4.6	66.4
	Strongly Agree	103	33.6	33.6	100.0
	Total	307	100.0	100.0	

Sutera Indah

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	18	5.9	5.9	5.9
	Neutral	25	8.1	8.1	14.0
	Agree	182	59.3	59.3	73.3
	Strongly Agree	82	26.7	26.7	100.0
	Total	307	100.0	100.0	

Acacia Avenue

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	33	10.7	10.7	10.7
	Disagree	18	5.9	5.9	16.6
	Neutral	25	8.1	8.1	24.8
	Agree	182	59.3	59.3	84.0
	Strongly Agree	49	16.0	16.0	100.0
	Total	307	100.0	100.0	

Others

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	200	65.1	65.1	65.1
	Neutral	107	34.9	34.9	100.0
	Total	307	100.0	100.0	

	N	Minimum	Maximum	Mean	Std. Deviation
Type of accommodation I prefer to stay during my studies					
Single Room	307	4	5	4.65	.477
Twin Sharing	307	1	5	3.61	1.157
Dormitory	307	1	5	2.28	1.221
Facilities that I would like to have in this accommodation provided by the University					
Single bed	307	1	5	4.43	.807
Sofa set	307	1	5	3.62	1.392
Fridge	307	1	5	3.52	1.329
Air conditioner	307	1	5	3.42	1.178
Preferred rental fee in Ringgit Malaysia (RM) per month for the accommodation provided by the University					
RM350.00	307	1	5	4.14	.919
RM400.00	307	1	5	3.68	1.136
RM450.00	307	1	5	3.38	1.319
RM500.00	307	1	5	3.13	1.583
Preferred location to stay during my studies in USIM					
Sutera Indah	307	2	5	4.07	.762
Acacia Avenue	307	1	5	3.64	1.147
Others	307	2	3	2.35	.477

Appendix 20: Table for Determining Sample Size based on Desired Accuracy with Confidence Level of 95%

	Variance of the population P=50%					
	Confidence level=95% Margin of error			Confidence level=99% Margin of error		
Population Size	5	3	1	5	3	1
50	44	48	50	46	49	50
75	63	70	74	67	72	75
100	79	91	99	87	95	99
150	108	132	148	122	139	149
200	132	168	196	154	180	198
250	151	203	244	181	220	246
300	168	234	291	206	258	295
400	196	291	384	249	328	391
500	217	340	475	285	393	485
600	234	384	565	314	452	579
700	248	423	652	340	507	672
800	260	457	738	362	557	763
1000	278	516	906	398	647	943
1500	306	624	1297	459	825	1375
2000	322	696	1655	497	957	1784

Source: (Taherdoost, 2017)

Appendix 21: Session with International Students (24 January 2019)

Appendix 22: Meeting Session with The University's Management Committee Chaired by The Deputy Vice Chancellor (Students Affairs & Alumni) Pertaining Issue: on Upgrading Residential Colleges for International Students (31 January 2019)

Appendix 23: Presented the Project to USIM's Top Management Chaired by the Vice Chancellor (*Jawantankuasa Pengurusan Universiti*) (19 February 2019)

Appendix 24: USIM's Residential Colleges

Residential College 1

Residential College Sutera Indah

Residential College Acacia Avenue

Residential College Nilam Court

Residential College Pandan

Source: Housing Centre of USIM (2018)