

Faculty of the Future Conceptual Business Model

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Abstract: This paper aims to digitally transform a chosen organization and make it more efficient, better at productivity and performance finally into a profit center from a previously cost center. The organization selected for this paper is the Faculty of Economics and Management science. It is a well-known department of the University of ABC. For too long this university has been running its operations in the same way. To honor the philosophy of Continuous Quality Improvement, this paper will try to discover ways to improve the situation by eliminating the constraints which are faced by the university and the faculty as well as the transformation. The methodologies used for this paper are a literature review, interviewing both customers and employee, MAMPU and Malaysian Education Blueprint.

Keywords: Information systems, digital transformation, BMC, business plan, Government University, profit centre.

I. INTRODUCTION

A business case should be a type of science rather than an art. Lack of a business planning causes many projects to end just after the pilot project. It is because they were unable to fulfil their promise. ABC business case is critical for any company. The importance of business cases has been recognized over the past decade. Different authors have created different frameworks only to identify the main important ingredients of the business which is crucial. Nowadays it is important to include IT/IS in the proposed business case as technology can boost the performance of the business rather than just be a normal tool to get things done on a daily basis. Which is why digital transformation and business case development should be compliant with one another.

II. BACKGROUND OF THE CHOSEN UNIVERSITY

This research case study is concentrating on a faculty of a specific university located in Malaysia named University A. ABC is an exhaustive educational institute that offers scholastic projects in a combined approach. The Faculty of Economics and Management Sciences (FENMS) was one of the initial two faculty to be set up when the University ABC started operations in late 90's. In accordance with the University's vision and statements of purpose, it equips understudies with the information and abilities they have to confront in our undeniably difficult world by incorporating conventional economics, accounting, business and banking, and finance education with Islamic guidelines.

There are at present four divisions inside the faculty – the Department of Economics, the Department of Accounting, the Department of Business Administration and Department of Finance. In the initial stage, the faculty offered just a single undergrad program in Economics. Because of expanding interest on incorporated training, the Faculty of Economics and Management Sciences extended its undergrad offerings and started its first postgraduate program with the Master of Economics in 1988. At present, it offers undergrad projects and seven postgraduate projects to more than 3000 pupils. The faculty procures exceptionally qualified local and international academic staff with a remarkable reputation in instructing as well as in research and publications.

The faculty is additionally glad for its cutting edge multimedia labs, presentation labs, and operating system research lab, a general computer lab, an Internet application lab and a numerical and analysis lab. Classrooms are furnished with multimedia facilities to improve students' learning procedure. There is likewise a resource centre for undergrad and graduate students which is like a little library for individual and group studies. It has a decent gathering of government and organization reports and Islamic economic matters, finance, business, and accounting literature. The faculty tries to make sure that students are ready for the fundamental learning and Islamic qualities to confront the inevitable difficult world. English is the medium of guideline for every one of its projects. It offers students the one of a kind chance of coordinating ordinary and expert information with uncovered learning in all fields of studies. The faculty is currently all around well perceived, having employees in different specializations.

III. PROBLEM STATEMENT

This faculty of Economics and Management Science is a part of a bigger organization which is International Islamic University of Malaysia. This university, in recent years has been facing financial issues as it is a partial government institution and gets most of its funds from Malaysian government. It was stated in Malaysian Education Blueprint (2015), "Over the next decade, as costs continue to rise, Malaysia will need to deliver quality higher education to almost twice as many students." (p. 24). Since Malaysia is facing economic crisis, Lee (n. d.) in recent years the government has to lower the annual cost of the country. Which includes decreasing funds provided to the educational institutes. In result, ABC will most probably receive a reduced funding from the government.

This leads to the question, how will the university generate the remaining deficit of the total budget? The university needs to take steps to fulfil the financial gap. Faculty of Economics and Management Sciences can be considered as an outstanding establishment of the university and which is why it should contribute to the overall income to the university. But will it be enough considering the new circumstances? The faculty needs to evolve through the business and IT in order to transform the university and to help itself

IV. METHODOLOGY

The methodologies used in this paper in order to get information for fulfilling the objectives of this study include the following:

A. Literature review:

The primary methodology used for this paper is reviewing related articles and academic journals and relating them to this paper. Every single article or journal used to write this paper will be mentioned at the end of the paper in the reference section. This paper will try to relate to articles such as University of The Future, Malaysian Education Blueprint 2015-2025, megatrend, MAMPU in terms of IS planning, Business Model Canvas when it comes to the literature review and some others.

B. Benchmarking:

Benchmarking in this concept is comparing one organization to other organization who are in top of their game, the industry leaders, Dictionary (n.d.). Which will also be included in this paper. Other universities will be looked upon when it comes to comparison.

C. Interview:

For this paper, the IT Coordinator of Faculty of Economics and Management Sciences, ABC was formally interviewed. He revealed some important information of the faculty's situation. And shared some ideas for the future. Furthermore a few of the customers were also interviewed informally to get information about the customer's point of view.

D. The Four Lenses of Innovation:

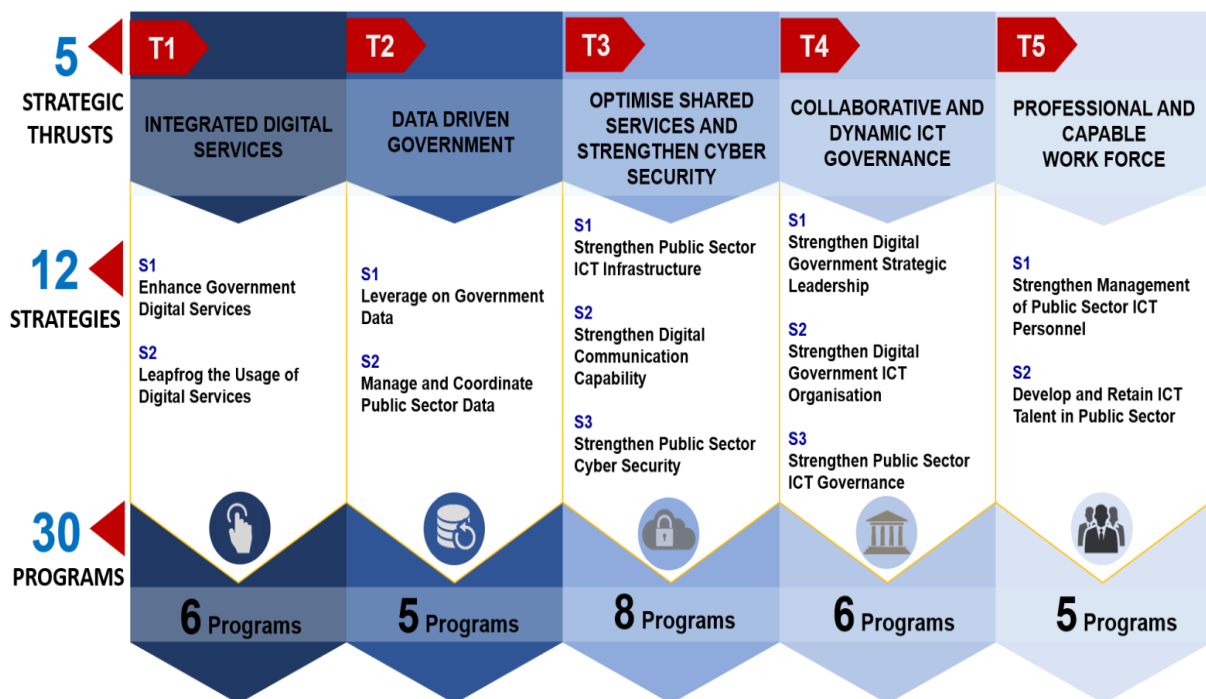
The methodology of four lenses of innovation has also been implemented. Is this faculty doing something conventional which is outdated, unnecessary, or just plain wrong? What are other university doing nowadays to move forward? How can this faculty identify and leverage its assets to its fullest potential by harnessing megatrends. What are the needs of the customers and the stakeholders of this institute? The answers to these questions will be further discussed in later on in the framework portion.

V. LITERATURE REVIEW

According to Ernst and Young (2012), there are five drivers of changes in organizations like these. And these are, democratization of knowledge and access, digital technologies, integration with industry, global mobility and finally contestability of market and funding. Knowledge is now available to everyone no matter where the place is. Digital technologies are changing the concept of learning and adding new lairs. Now technologies are going mobile from stationary form. People can access internet on the go as long as they have access to internet.

One of the biggest megatrends is the number of entrepreneurs rising in the global economy, Megatrends (2015). And the highest growth of entrepreneurs is in the age group in between 25 and 44 years old. This megatrend has to include Malaysian economy. As mentioned in Frost and Sullivan (2014), by the year 2025 about twenty-four million people of Malaysia will be eligible to join the labor force. This could mean a shortage of jobs across the nation. One of the ways to resolve this issue is to make more entrepreneurs in line with MEB Shift 1, and to do this we need business schools such as Faculty of Economics and Management Science.

To transform this organization into a business center a combination of strategies have to be implemented in several stages. When Malaysian government talks about transformation by implementation of strategic thrusts in MAMPU (2016) it mentions the following showed in figure 1:



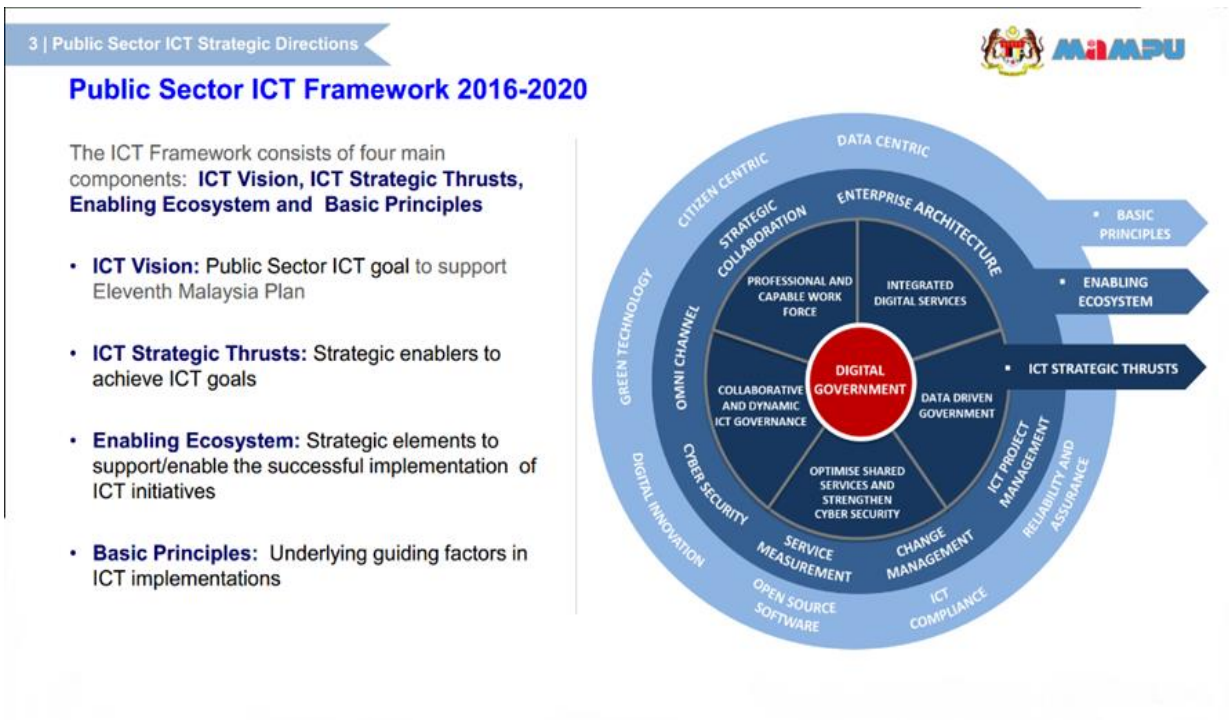
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Source: Malaysia Public Sector ICT Strategic Plan 2016-2020

Figure 1: Summary of Strategic Thrust Model

MAMPU stands for Malaysian Administrative Modernization and Management Planning Unit. The latest edition of its plan was published in 2015. MAMPU has a goal and it is to modernize Malaysia by transforming it. According to MAMPU website, it is responsible for six major roles as a catalyst for change in administrative and management services in the public sector

1. As the leader in developing ICT for the public service sector
2. As consultants in management organisation and ICT for the public service sector
3. As facilitator in the implementation of modernisation and transformation programmes in the public sector delivery system



Source: Malaysia Public Sector ICT Strategic Plan 2016-2020

Figure 2: Public Sector ICT Framework 2016-2020

4. As researcher in administrative modernisation and management planning for the public sector
5. And as promoter of government services to the public

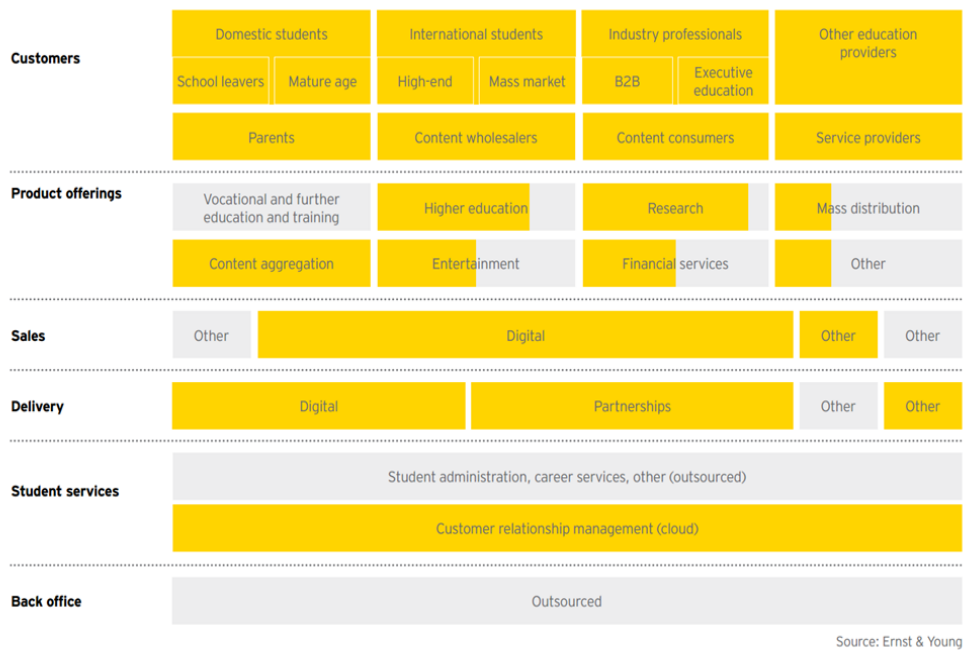
According to Ernst and Young, (2012), a university has a business model elements similar to the following figure 3:

Customers	Domestic students		International students		Industry		
Product offerings	Vocational and further education and training		Higher education		Research		
Education disciplines	Arts	Engineering	Science	Business	Medicine/health	Law	
	IT	Design	Other	Other	Other	Other	
Sales	Schools	Open days	Agents	Road-shows	Digital	Other	Other
Delivery	On campus				Digital	Partnerships	
Student services	Student administration		Career centre		Other	Other	Other
Back office	HR	IT	Finance	Legal	Other	Other	Other

Source: Ernst & Young

Figure 3: Current model — established universities
 Source: Ernst and Young, (2012)

According to Ernst and Young, (2012), a university should have a future business model elements similar to the following figure 4:



Legend Potential areas of focus for new models

Source: Ernst and Young (2012)

Figure 4: Potential future model — ‘Transformers’

These pair of diagrams indicates the actual offerings to the customers and the business model canvas. These information was taken from the IT Coordinator of Faculty of Economics and Management Sciences, ABC. We can do a benchmark by comparing the conventional values with what this faculty is offering in figure 5 and 6.A:

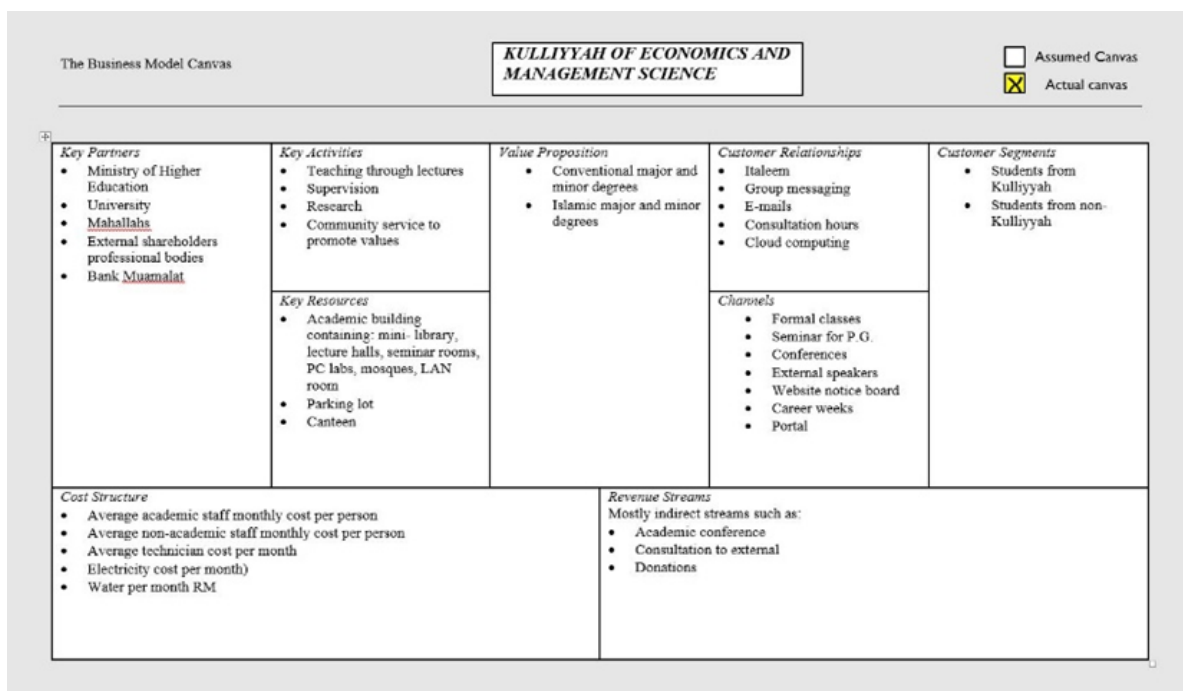


Figure 5: Actual Business Model Canvas

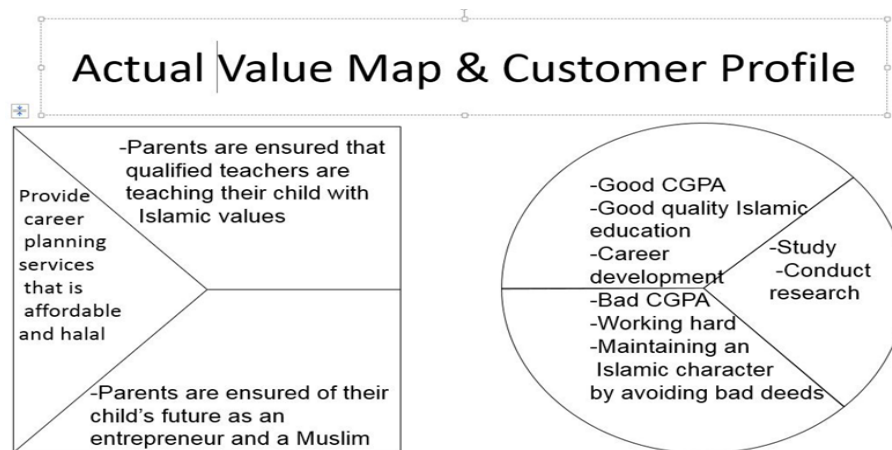


Figure 6.a: Actual Value Map & Customer Profile

Everything revolves around business. Whether a scientist just invented something revolutionary or a doctor finding a cure for a disease can be related to business as both of them have to get profit from their work. This is where business comes in. Business is about delivering value to the customer so that the customer chooses you over others who might be offering something similar. Business is about making money and no organization can run without money. But conducting business without a business case is like walking blind. A business case can be a short-term and a long-term plan for the business. In order to do that it identifies the crucial aspects and gives the owner an idea of what to concentrate on, Meertens, and Iacob, and Nieuwenhuis, (2011)

In older times organizations consists of people and the collection of tasks and processes. But as we advanced through time there was an addition to these two elements, which was technology. It revolutionized the business making it more lean and efficient while increasing effectiveness. Organizational digital transformation is the concept of either adding technology to an organization or upgrading the current technology along with the processes that come with it. It does not exclude people, as this concept includes making the people effective at using the technology. So that it leads to reduced cost, increased in productivity and reduces production time and is more reliable over a long period.

When it comes to business, it is very competitive out there. Which is why it is a do or die situation. If organizations want to survive in the long run, they must evolve and transform. European businesses are increasingly getting used to Internet technology to revolutionize value-chain activities. The Internet-based digital or electronic business (e-business) is known as one of the most substantial information technology innovations over the last decade, Geoffrion and Krishnan, (2003). It is estimated that more than 50% of European companies have adopted Internet Technology in attaining by February 2005, European Commission, (2005).

Regardless of the type of the company or business, transforming it digitally will be beneficial to that organization. Zhu, Dong, Xu and Kraemer, (2006) said, companies in the tourism sector in U.K. launched the LondonEye, an e-business initiative with various partners in the area, to provide a wide range of services to tourists, so as to improve customer service and enhance revenue generation. (p. 602).

To digitally transform any organization there will be some obstacle. One of the obstacle is the availability of internet. Though it is unavailable in some places and reception is bad in others it is getting better and better as time passes. Geoffrion and Krishna, (2003) said in his paper, the first cluster springs from the transformation of the digital economy's information infrastructure by unrelenting technological progress in computers and communications (especially the Internet, which we almost always take to include extranets and intranets). Year by year it becomes easier to collect store, process and communicate data, and to interconnect individuals and organizational units in various ways (p. 2)

Technology can help an organization such as a government school, college or a university from a cost centre to a profit centre. All it is needed is the initial support from us so that it can return the favour in the long run. And using this technology one day soon enough that institute will bring profit to its' stakeholders.

In MAMPU (2010) Malaysian government highlights the significance of educational and training sector business model. As it is divided into three function there are lots of information to derive from. This information needs to be constantly updated with different institutes such as Ministry of Health, JPA and MARA and JKM for different reasons. Which is why it is imperative that we need to come up with a business case which digitally transforms the organization while enabling the faculty to obtain such information and to be able to share it immediately.

VI. INITIAL BUSINESS MODEL

Based on the literature review, the initial business model of a university can look like the following in figure 6.b.:

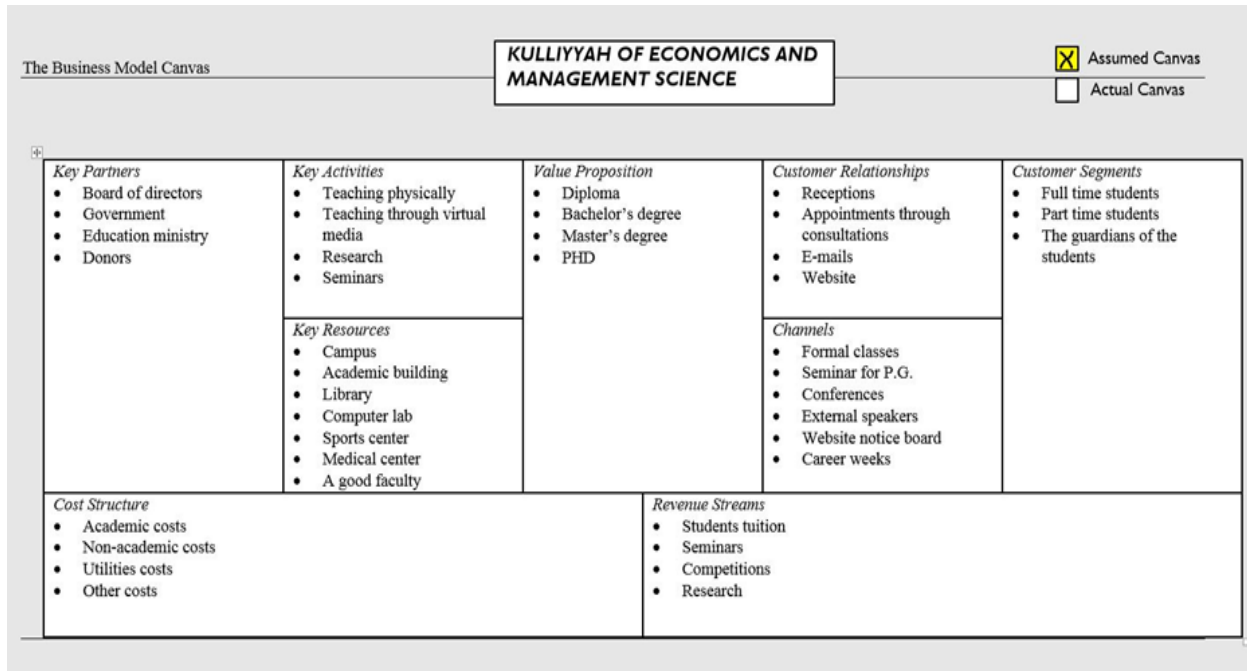


Figure 6.b: Assumed Business Model Canvas

Assumed Value Map & Customer Profile

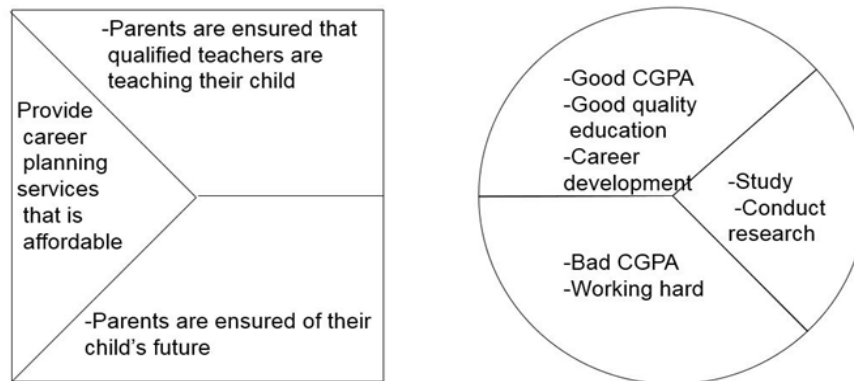


Figure 7: Assumed Value Map & Customer Profile

VII. FRAMEWORK

There is always room for improvement especially for an institute like this. As the university wants the faculty to generate its own costs the university needs to liberate its faculties in order for it to happen. The suggested methodology will have four steps. And they are: assessing current situation, cutting costs, increasing revenue and finally monitoring.

Assessing current situation: The faculty is currently unable to determine its costs, or at least the information is not widely available yet to everyone. Which is why no one knows the significance of the current situation. The suggested approach is that there should be better monitoring system installed in the faculty. Doing so it will become easier for everyone to grasp the situation.

Cutting costs: The next step will be to reduce the costs. For this to happen the faculty and the students must be aware of what to do, such as turning everything off after finishing class. Turning off anything which is not needed. There are lights turned on 24/7 every day of the year. Some of them can be turned off. Also introducing new technologies will help cut cost in the long run as the computers all over the faculty is outdated. These computers are running all day and consuming a lot of electricity. And instead of every classroom having an old tech desktop, teachers should be given a standardized simple laptop that they will bring to the classroom, laptops consume significantly lower power and more versatile. The Ethernet ports will only work on the teachers laptops making it impossible for the students to get access the wired network. The employees may need to be oriented briefly about the new process. Another improvement can be made by switching from old fashioned tube lights to latest technology featured LED light bulb, they last longer and consume very little power. Teachers are paid throughout the year. During short semester each year a lot of teachers are sitting idle, the faculty can help these teacher by finding better paying part-time jobs which is acceptable to them. By doing this the faculty does not have to pay salary to them for one-fourth of the entire year. Furthermore, there should be dedicated weeks for virtual classes, eliminating the need for conventional classes. And finally, slowly terminating final exams for economics, finance, and business students making the carry marks up to a hundred percent. Final exams cost a lot of money and this step can cut the costs significantly. But sadly the students from accounting department has to have finals as their courses are regulated by government. Another option would be orient all teachers to be able to teach all level one and two subjects, in doing so the faculty won't have to hire any part-time teachers whenever needed. Some of these concepts are very much plausible and would be able to cut the cost of this institute significantly.

Increasing revenue: The third step would be find ways to earn money. In this stage the faculty can share their teachers with outside private institutions where the faculty gets a share of what that teacher earned. There are some unutilized resources, especially during non-office hours and weekends. The faculty can start a marketing campaign that will help find interested parties to rent the facilities such as conference rooms. It is even possible to start up an off-campus program where the faculty opens up a private entity that offers degrees with exclusivity and better customer value. If we benchmark with University of Malaya, they already partnered up with University of South-Wales and made a new private institute named International University of Malaya-Wales. By following University of Malaya, this will be a full private wing of faculty of Economics and Management Sciences and since it will be private, it will receive less regulations from the government especially when it comes to setting the fees. And finally a short course offering to outsiders, which makes it easier for anyone from any age demographics to register in the faculty and take a few courses. A lot of people might want to know about a few different topic without completing a whole degree which will take years to complete. Implementing even some of these idea will help the faculty to reach its goals by generating more revenue and filling its quota for the university. After implementing the changes the improved business model and the value map and customer profile should look something like the following in figure 8, 9, 10 and 11:

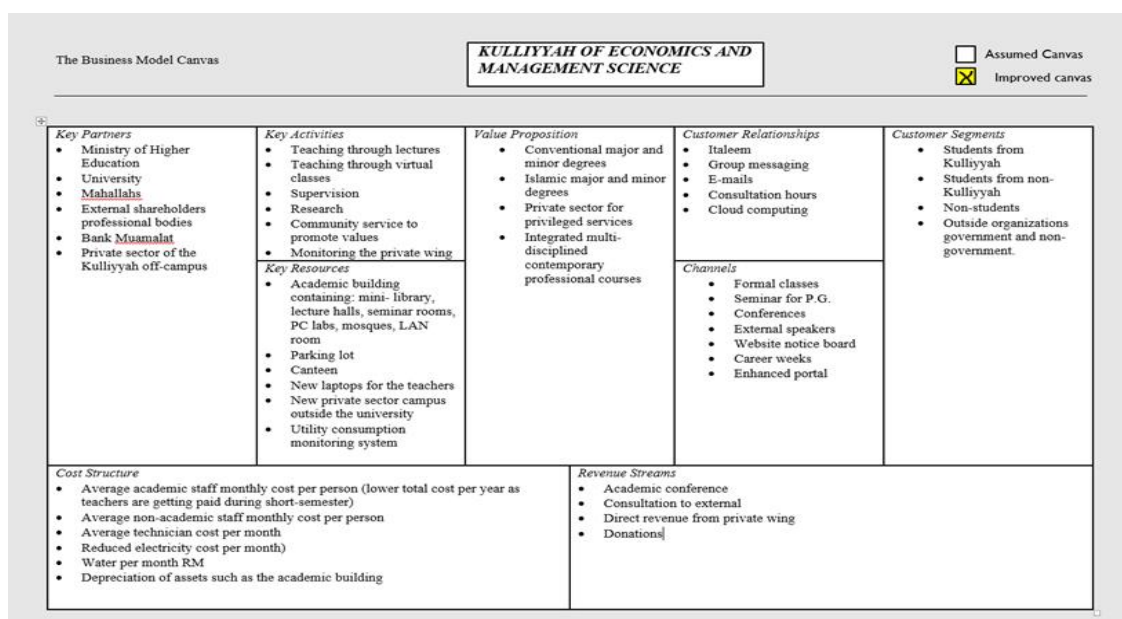


Figure 8: Enhanced Business Model Canvas

Value Map & Customer Profile for students

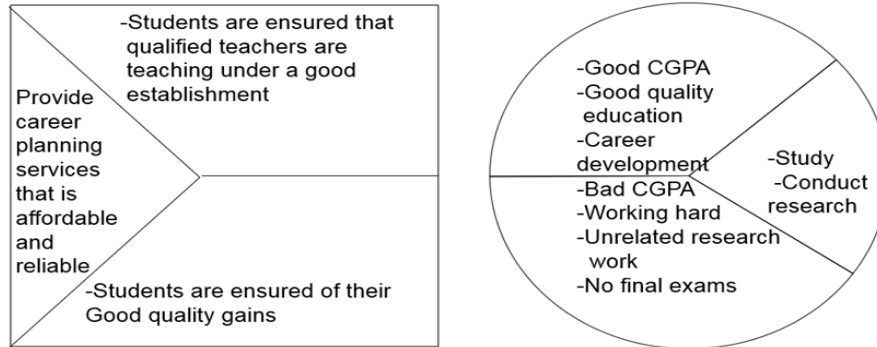


Figure 9: Enhanced Value Map & Customer Profile for students.

Value Map & Customer Profile for non-Students

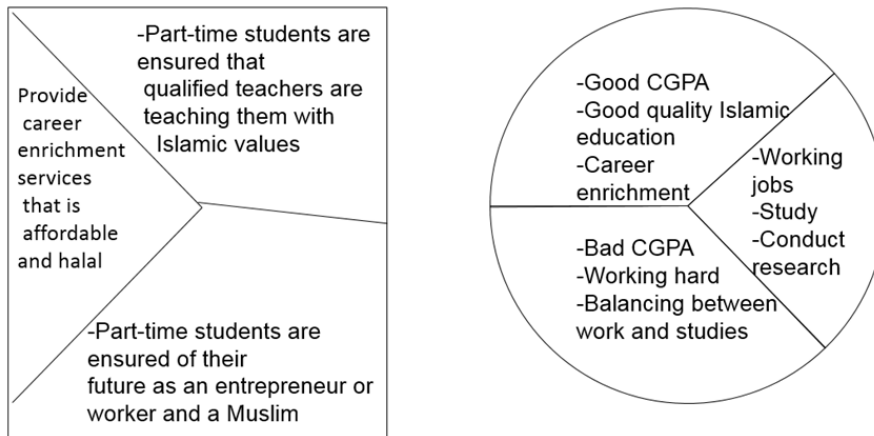


Figure 10: Enhanced Value Map & Customer Profile for non-students.

Value Map & Customer Profile for outside organization

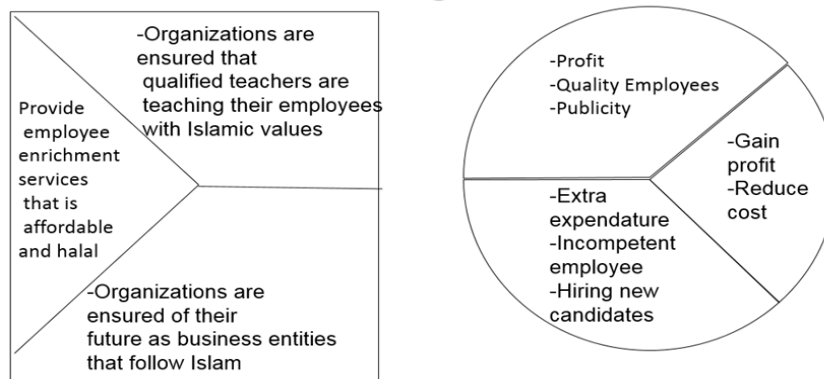


Figure 11: Enhanced Value Map & Customer Profile for Organizations.

- 1. Customer Segments:** This faculty will have four different types of customers. The first type is the students who registered under this institute and want to get degree from here. This includes four departments and multiple major and minor from each department. The second type is the students who are in other faculty but has some courses in their course structure from this faculty. Then, there will be non-students who just want to learn a few courses from the faculty but does not want to get admission as a university student this may include full time professionals. And finally, outside organizations who might be interested in sending their employees to the faculty for training.
- 2. Value Proposition:** Faculty of Economics and Management Sciences should offer both conventional and Islamic degrees which include integrated, multi-disciplinary, contemporary, and professional courses. This includes major and minors in both aspects. Furthermore, it should be able to offer a private wing service where they are being served by a different institute which is a different organization which will give them a better service against a bigger premium.
- 3. Channels:** The faculty should use several channels to transfer these values to its customers. And these should be conducted through conventional classes, various seminars for post-graduates and conferences which sometimes will be attended by external guest speakers, the website of the faculty and throughout career week where head-hunters from various companies come to seek talent. There will be an improved version of the current portal i-Taleem where there will be some data accessible to the general public.
- 4. Customer Relationship:** The faculty should keep its relation with the customers through physical means such as consultations by appointment. Furthermore, through digital means such as e-mails, group messaging and cloud computing service such as Google Drive, Dropbox and i-Taleem relationships are maintained with the customers.
- 5. Revenue Streams:** The faculty cannot make much direct revenue as revenues like the tuition fees are paid centrally to the university. Although there are some indirect revenue flowing throughout the organization such as academic conferences, workshops and courses for professionals, contract researches, and external consultations. Furthermore, it will have a private wing where it generates direct revenue from its customers in large quantities.
- 6. Key Resources:** Just like similar institutes this faculty has an academic building containing a mini library, lecture halls, mosques, PC labs, LAN room, and a cafeteria. But outside the academic building there is a parking lot. Also the private wing will be one of the most important resources of the faculty once it is established.
- 7. Key Activities:** The main key activities should be teaching students through lectures and supervision. Furthermore, there will be lots of researches being conducted as the faculty will concentrate more on research department. There may be some community services to promote values such as seminars and events. Finally the faculty has to monitor its private wing closely for a flawless journey.
- 8. Key Partners:** The key partner of the faculty is the university itself. The private wing will be an important partner. Then there is the Malaysian Ministry of Higher Education. There are also some people who make up the board of director who also happen to be the external shareholders. And there is Bank Muamalat, where most of the public transactions are being held.
- 9. Cost Structure:** The cost structure of this organization is not specified as some of the information is classified. But, it is possible to make an estimate that the academic and non-academic staff will be getting paid an average salary numbers are approximately 90 and 15. The lower tier staff is centralized. And the utilities are should be around RM 26,000 without the air conditioning systems included. But the lecturers will be seeking other jobs during the short semester. This means the annual cost for teachers will be reduced by 25%.
- 10. Value Map:** The customers of the organization which are the students, non-students and outside organizations are ensured that they are under qualified hands and they are additionally getting a boost of Islamic values along with their academic progress as well as they are insured of their future. The faculty provides career planning services that is affordable and halal.
- 11. Customer Profile:** As the customers of this department, their primary job is to study with the exception of non-students and organizations where their primary job is their actual job. And sometimes they will be conducting researches. As they do their studies well they will gain a good CGPA along with good Islamic education and knowledge furthermore developing their careers. The students will have to face with bad CGPA and working harder than usual. While the non-students will have to balance between work and study. Organizations will concentrate on increasing profits while cutting costs. Since there will not be final exams for most students they will be assessed by lots of assignments and some students

may think that they are not related to the coursework. And some students will still prefer the older method where there are final exams at the end of semester. Organizations might not be eager to spend more money to train their employees.

Monitoring: The final stage will be monitoring the key resources and activities. Making sure everything is going smoothly without any bottleneck. Analysing data and looking for further improvements that can further reduce cost or increase revenue of the faculty.

When the faculty stops doing things the old conventional way and starts doing things in the modern way only then it can see the glimpse of profit. Granted these changes are nothing small, implementing them one by one will not be difficult and will be fruitful in the long run. By implementing a change management system which monitors the whole organization and its systems.

VIII. SUMMARY & CONCLUSION

This paper targets to take a very close look at the ongoing situation of the Faculty of Economics and Management Science of the university ABC and convert it from a cost centre to a profit centre. Furthermore, the methodologies used for this paper were interview, literature review, Business Model Canvas and Value Map & Customer Profile, finally the four lenses of innovation. Hopefully to transform this institute into a university of future. The next step will be formulating & establish ICT SP for transformation.

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