The University of the Future: A Conceptual Study in Malaysia

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Abstract— The purpose of this research is to transform the current state of Universities into strategic initiatives that can utilize technology into University of the Future that lead to better development of the country. In this research, qualitative approach was selected involving the use of questionnaires distributed to the respondents. The sampling technique used in this research was simple random sampling where participants are chosen randomly by chance. This study was intended to answer two research questions. Firstly, do value proposition design (VPD) help to identify customer needs and wants from the University and secondly, how to transform the University of the Future using business model canvas (BMC). Based on the finding, the customer profile and the value map in VPD have help to identify and overcome problem faced. Besides, the information collected from VPD will be used to improve BMC to further improve the University of the Future. Thus, this study gave implications to design strategic initiatives for higher education especially Universities in using BMC and VPD and also to utilize the technology in this globalization era

Index Terms— **Business Model Canvas University of the Future, Value proposition design**

I. INTRODUCTION

Nowadays, education sector is rapidly transforming due to globalization and advancement in technology. Innovation has helped to share knowledge worldwide with lesser cost compared to the previous decades. Besides, Universities are competing with other private providers if they did not change their strategy to digitalize knowledge transfer to students. Students currently are dependent on technology and can get easy access to Internet and thus Universities has to take the opportunity to get connected with the students. It is difficult for Universities to survive if they are too dependent on government funding. Thus, Universities has to find ways to create new sources of funding and create better tools to spread education worldwide. Information can now be access with ease in the evolution of Web2.0 and it should be utilized to create better society.

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II. PROBLEM STATEMENT

The cost of pursuing to higher education and entering Universities is regarded as expensive and most students are in debt after graduated. Students are paying thousands to enrol for a course and the quality is said to be lower than expected which result in high unemployment. Therefore, technology must be incorporated with learning to produce holistic graduate that can apply theory and practicality in the real-job situation. Online platform is able to connect students globally and enable easy access of resources. Hence, Universities must create strategic plan to overcome these problems which will uphold the education prestige in the future which will lead to better development of the country.

III. LITERATURE REVIEW

The demand for higher education will continue to rise with greater population and advancement in technology. Hence, globalization will lead universities to operate in-line with latest technology to further enhance the growth of knowledge. According to Ernst and Young (2012), digital technologies will enable real time student feedback and accessibility in remote and regional areas that will transform education delivery. Barber, Donnelly and Rizvi (2013) stated that, students can experience better interactions through group videoconferencing regardless location. In addition, this is supported by the National Education Technology Plan (2010) which stated that, students performed better on average through online learning conditions compared to face to face instructions. According to Anyangwe (2012), in terms of accessing lectures and supplementary material, student with Internet connection can get education for free. Meanwhile, Christensen and Eyring (2011) claimed that, institutions that fail to use online learning will be difficult to grow and are losing more students due to cost disparity between traditional model and technology driven model.

Technology should be utilized to enhance better channel for higher education. Stephens (2013) also proposed virtual learning environment that aid in facilitates distance and independent learning. Abdul Rahman Ahmad Dahlan (2013) proposed conceptual MyMukim2Cloud Collaborative System using the advances in cloud computing and mobile applications. This will open up more customer segments which will include industry professionals as they have time convenience to access materials and lectures globally. It is also supported by Sohail Inayatullah (2001) that the education nature is changing dramatically focusing more to being virtual compared to campus focused. Previously, universities are text focused and they are slowing changing to customer and students focus to create better value proposition. Meanwhile,

Chareonwongsak (2000) suggested that, it is important to create relationships network of Universities through information technology for survival mechanism. Failure to partner and collaborate with other universities might weaken their position in the future.

Higher education should enhance its contribution to the development of the whole education system, notably through improved teacher education, curriculum development and educational research. According to Abeles (2011) mentioned that the increasing the needs of the work force have pushed the requirements for education from primary school, to secondary school and now to the tertiary education which is the higher education. He added that certification through course completion and degrees are becoming less important than ability to demonstrate competency since employers are shifting to productivity. University of future have to play the main role in producing the qualities of graduates especially with the rise of technology advancements nowadays. However, there are some challenges that higher education need to face with like lack of funding. Due to that, it is difficult for them to provide the infrastructure and facilities to the students especially when the technology is becoming more advance, but, they did not have the enough fund to provide the latest technology and equipment to students. Hence, it is very important to identify innovative partnership with local and International Corporation to diversify of income sources that will compensate for the reduction in funding council budgets. Abdul Rahman Ahmad Dahlan (2011) proposed that the collaboration between Government, University and Industry (GUI) at a standard online platform to transfer knowledge and information.

According to Matthews, Hoult, Nairne and Ashenden (2011), core funding for community-university partnership is likely to enable universities to develop and sustain an effective infrastructure or conducive environment to engage with communities. Not only that, the funding will help higher education in developing and upgrading their research publications that will rank the university ranking in international. Etzkowitz, Webster, Gebhardt and Terra (2000) mentioned that publication of research and production of graduates are held to be the most appropriate roles for an institution dedicated to the public good. Meanwhile, Chareonwongsak (2000) suggested that the University of Future need to increase the channels for research whereby scholars and researchers of the future will no longer be restricted to one specific institution.

IV. METHODOLOGY

To come out with the value proposition design (VPD), we have conducted survey and interview to the selected respondents consists of local students, international students and privates' employees. We have conducted survey to 20 local students and 20 of international students which are 10 undergraduates and 10 postgraduates. While, 10 undergraduates and 10 postgraduates of international students. 20 of employees included private and government. 10 of lecturer form private and government universities. Thus, the total of respondents are 70 persons. From the survey and interview, we get the result what they have gain from the university and what they have been through during the student life. Meanwhile, for the employees, we asked them what are the pains and gains from the collaboration with the universities and also from the lectures' perspective. We also come out with the hopes and recommendations from them for the University of Future to the next generations' advantage.

V. INITIAL FRAMEWORK (BMC)

Universities nowadays cannot depend much on government funding and they need to find ways to generate their own income. According to O'Neill (2015), entrepreneurs use Business Model Canvas (BMC) which acts as graphic designer to draft important elements of their business. Thus, this paper will use the concept of BMC to transfer the current model of universities into the University of the Future. There are nine building blocks that need to be examined to create values and better structure of sustaining University of the Future.

A. Customer Segments

Customer segment is the most crucial that is to define different group of people or client that organisation aim to be serve. Some organisation prefers to target mass market while others prefer niche market to focus. According to Inayatullah (2001), Universities now tend to globalize and have students from all over the world either attend the physical campus or virtual campus. In the University of the Future, our target group should be diversified. We aim to have domestic and international students which are already available in the market. Besides, we intend to target industry professionals to enter our universities so that knowledge transfer can occur to practice theory into practical application and syllabus is aligning with the industry expectation and requirement. Lecturers also will be part of our customer segment as they play major role in delivering lectures and knowledge. Lastly, we are aiming to target Private Corporation to be part of our customer segment to invest in education and universities can help to produce better graduates for the corporations.

B. Value Proposition

After identifying the customer segments, universities need to deliver services that can create value to customer segment. It is the universities objectives to solve customer's problem and need. In the Universities of the Future, we aim to further enhance our research and publications to transform knowledge into better findings. Apart from that, collaboration with industry is also part of our value proposition. We expect to gain and share knowledge with industry professionals to produce better outcome. Based on research by Ernst & Young (2012), media companies are able to enter the university sector through new technologies either in partnership or potentially in their own right. Example of the new model is the Massive Open Online Courses (MOOCs) which are in early stage. In the advancement of technology, our strategy is to utilize digital technology to upgrade our current system so that courses can be conducted online such as videoconferencing and others. Besides, to sustain our reputation, we strive to have higher university ranking in the world so that students will be more convinced on the quality content. Lastly, we will ensure that our graduates are employed after graduated so that it will worth their effort spending time and money to complete the course.

C. Channels

Channel is one of the important medium to communicate and reach customer to deliver the values. In the University of the

Future, we still remain the concept of on campus so that students can still go for lectures face-to-face. In addition, to enhance the channels, we use digital system to communicate lectures from virtual technology. According to Barber, Donnelly and Rizvi (2013), transformation needed is the improved quality of online through technology and design and the calibre of instructors that some MOOCs offer. Hence, students can access to lectures globally at their time convenience especially for working people. Moreover, global interactive system is upgraded to answer all queries immediately and all information regarding courses is also uploaded. We aim to have partnership with other international universities to exchange knowledge and improve quality content of all courses.

D. Customer Relationships

Relationship with customers is crucial to retain and establish trust on both parties. Since not every student can afford to pay the fees, we aim to help the poor students by giving scholarship that we will get from our key partners. Based on Ernst & Young (2012) research, expansion of knowledge will transform societies by creating opportunities to increase standards of living. However, sponsored students must maintain the requirement standard of the university. Besides, we will organize open days to attract more customer segments especially local and international students to enrol on the courses. Lastly, we establish relationship with agents to help expand our networking and attract more customer segments.

E. Revenue Streams

In order to generate income for the university, several methods have been identified so that we are not too dependent on government funds. Based on research by Ernst & Young (2012), public institutions will increasingly be run like corporations. The first method of revenue streams is from the private-public partnership. The university as public entity plans to partner with the private organisations to add the revenue alternative. Private organisation will help to provide the funds and the university will try to supply quality graduates for the industry needs. We will also try to approach zakat institution to sponsor our poor students who do not afford to pay the fees. Besides, some of our online content and facilities will be charged to be access. For example, extra reference book and materials will have certain service charge. Lastly, our income will come from the tuition fees from student to pay the lecturers and services provided by the university.

F. Key Resources

The University of the Future Key Resources will include physical and Information Technology (IT) infrastructure. Physical infrastructure will include faculty buildings, library, sport complex, student facilities and others. According to Anyangwe (2012), education can be accessed by anyone with Internet connection for free either accessing lectures or supplementary material. Thus, we added some IT infrastructure to support the digital technology implemented to upgrade the university. We ensure that systems operate perfectly and wireless connection is easy to access in the campus. Besides, our key resources are lecturers and staffs. Lecturers are the back-bone of the university where they are the key person to deliver lectures and conduct classes. Other staffs will help and facilitate the students. Lastly, the back-office also plays a major role to ensure smooth operational side of the university.

G. Key Activities

The university main key activity is research and publication. Research can further enhance the education system and thus the university strive to upgrade on the quality through more publications. Teaching will still be maintained but practical application will be upgraded by collaborating with industry professionals so that students can relate theory in class and practical in real-job situation. Moreover, we provide service to the industry by placing lecturers to conduct internal training and workshop in the company itself. This is parallel with research by Ernst and Young (2012), the relationship between University and Industry plays multiple roles namely as customer, partner of higher education institutions and also as a competitor. Lastly, we also focus on marketing so that the public will recognize the competitive advantage of this university and to further generate the revenue to support the operation.

H. Key Partnership

The University of the Future planned to have collaboration with international university and institution so that we can share and exchange content and materials for students so that knowledge can be more diversified and holistic. This is supported by research done by Barber, Donnelly and Rizvi (2013) which stated that, it is profoundly important to make decisions about partnership with other universities globally and other major businesses. Besides, we will have partnership with zakat institution to give funds for our poor students who do not afford to pay the tuition fees. Private Corporation also will contribute by giving fund as part of social responsibility towards the society. In addition, the university will provide high-quality of students to work with the private corporation. Besides, government will continue to play their role in supporting the university and build more assets for long-term development. Lastly, we will utilize our alumni to contribute back to the university by helping to expand the networking.

I. Cost Structure

There are several costs that need to be covered by the university. The main cost is staff cost which include lecturers and operational staff salary. Besides, there are back office cost to process student application and welfare. However, according to Ernst and Young (2012), the back office and university administration should be significantly leaner than it is today to reduce the ratio of support staff compared to academic staff. In addition, since the university is going for online courses, there are online maintenance costs that need to be covered. Lastly, outsourcing cost is also considered as we use agents to help promoting the university to public and students.

VI. Value Proposition Design (VPD)

Value proposition is important in planning strategies to deliver customer wants and needs. There is a rise in competition and rapid changes in market which causes difficulties for organisations to sustain and they will lose if fail to deliver value that customers require. Thus, value proposition design is used to understand the patterns of value creation and avoid wasting time with ideas that does not work well with the organisation. In the value proposition, there are two diagrams that are customer profile and value map. Customer profile focuses on customer segment to identify customer wants and needs and it is divided into jobs, pains and gains.
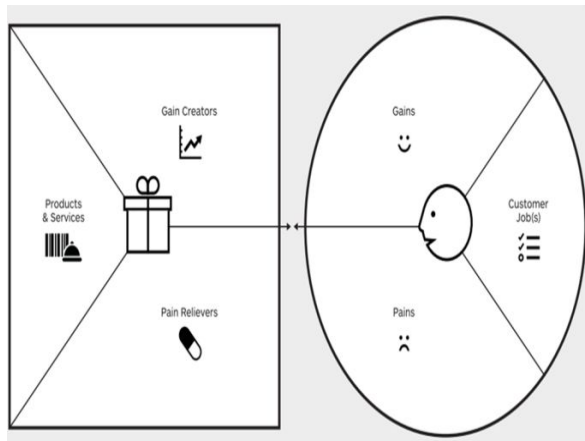
Figure 1 Value Proposition Model

VII. INITIAL BUSINESS MODEL CANVAS (BMC)

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
1. International collaboration 2. Zakat institution. 3. Private corporation 4. Governments. 5. Alumni	1. Research. 2. Teaching and practical application. 3. Internal training & workshop 4. Marketing	1. Research & publications 2. Cooperation with industry 3. Digital technology 4. World university ranking 5. Job employment	1. Scholarship 2. Open days 3. Agents	1. Domestic students. 2. International students. 3. Industry professionals. 4. Virtual students 5. Private corporation
	Key Resources 1. Physical & IT infrastructure 2. Lecturer & staff 3. Back office		**Channels** 1. On campus 2. Digital 3. Global interactive system 4. Partnership	
Cost Structure 1. Staff cost 2. Back office cost 3. Online maintenance cost 4. Outsourcing cost			**Revenue Streams** 1. Private-public partnership 2. Zakat 3. Online content & facilities 4. Tuition fees	

VIII. BEFORE INTERVIEW

	Private Corporation	Lecturer
Customer Jobs	i) Funding ii) Recruitment	i) Teaching ii) Administrator iii) Research.

Gains	i) Consultant ii) Specialist transfer	i) Experience ii) Knowledge
Gain Creators	i) Enhancing talent and fostering innovative.	i) Teaching ii) Training
Pains	i) Competitiveness ii) Lack of experience	i) Lack of equipment and facilities ii) Location iii) Time constraint
Pain Relievers	i) Reputation ii) Innovation and talent	i) Flexibility ii) Video-conferencing iii) Funding
Product & Services	i) Job opportunities ii) Identifying the skills	i) Journal and article ii) Good students

	Industry Professional	Local & International Students
Customer Jobs	i) Better decision-making ii) Improve skills iii) Improve business performance	i) Efficient Learning ii) Localization iii) Socialization
Gains	i) Useful information ii) Achievement iii) Application	i) Advanced material ii) Mobility iii) Shared communication
Gain Creators	i) Updated information ii) Skills-assessment iii) Practical format	i) Collaboration ii) Internet access iii) Updated material
Pains	i) Quality content ii) Time constraint iii) Material	i) Long duration ii) Language iii) Not relevant

Pain Relievers	i)International collaboration ii)Time-convenience iii)Global access	i) Short duration ii) Practical language iii)Relevant
Product & Services	i)Online course ii)Consulting services iii)Content sharing	i)Online course ii) International network iii)Practical tools

IX.   ANALYSIS AND FINDINGS

	Private Corporation	Lecturer
Customer Jobs	i) Funding ii) Recruitment and selection iii) Collaboration	i) Teaching ii)Administrator iii) Research. iv) Consultant and Shariah advisor
Gains	i) Consultant ii) Specialist transfer iii) Industry advisory	i) Experience ii) Knowledge iii) Managing people skill
Gain Creators	i) Enhancing talent and fostering innovative.	i) Teaching ii) Internal training iii) Researcher and specialist
Pains	i) Lack of experience and expertise ii) Lack the most important skills and competencies iii) Building reputation	i) Lack of equipment and facilities ii) Location iii) Time constraint iv) Management conflict v) Mis-communication
Pain Relievers	i) Reputation ii) Innovation and talent	i) Flexibility ii) Video-conferenci

		ng distance. iii) Funding iv) Town hall session v) Student consultation
Product & Services	i) Job opportunities ii) Identifying the required skills sets. iii) Technology and R&D provider	i) Journal and article ii) Good students

	Industry Professional	Local & International Students
Customer Jobs	i)Enhance knowledge ii)Career advancement iii)Apply methods	i)Job opportunities ii)Improved skills iii)Relevance
Gains	i)Create ideas ii)Improve results iii)Apply with confidence	i)Collaboration with industry ii)Applicable knowledge iii)Online material
Gain Creators	i)Help shape ideas ii)Latest technology iii)Convenience tools	i) Real industry experience ii)Relevance iii)Shared resources
Pains	i)Quality content ii)Time constraint iii)Material constraint	i)Expensive fees ii)Too theoretical iii)Quality content
Pain	i)International	i) Free courses

Relievers	collaboration ii)Time-conveni ence iii)Global access	ii)Online visual format iii)Partner network
Product & Services	i)International network ii)Global access publication iii)Alignment with industry needs .	i) Free online courses ii)Blended international lectures iii)Content sharing

X. FINAL BUSINESS MODEL CANVAS (BMC)

XI. FINAL FRAMEWORK (BMC)

Based on the survey, interview and value proposition design, we have come out with the final Business Model Canvas (BMC) whereby it has some improvement compared to the initial framework of BMC for the University of Future.

A. Customer Segments

For the latest customer segments, we want to replace virtual students with the public knowledge transfer and aim to have Private Corporation and lecturers. It is because of our strategy to involve a lot of collaboration with the private corporation especially with the big and well-established companies (Professor David Eastwood (2015) "Our challenge is to become a leading global university", Brochure of Shaping Our Future: Birmingham 2015). While we aim to have lecturers as our customer segments due to their expertise in the certain field. Hence, we need to keep all those excellent lecturers because of their knowledge, skill and experience in education field that will strengthen the higher education. We are thinking to replace virtual students with the public knowledge transfer because we target to get involved in any public service centre-sponsored volunteer activities that will be planned by the University for the Better Outcomes. We want to provide more benefits to the communities and also provide free education that will be explained further in value proposition. (Professor Michael Farthing (2013) "Making the Future 2013-18", Planning Framework University of Sussex.

B. Customer Relationship

We have added several of customer relationship which are Islamic entrepreneurship education and specialist transfer to our customer segments. Entrepreneurship education means we are going to have the ongoing education and training for the students even after they have graduated instead of just exposing entrepreneurship classes to students. Rather than having the normal entrepreneurship education, we would like to do something different which is more Islamic and we want to encourage the entrepreneurship that followed the Shariah principles. University is the suitable place to teach student to launch their own business once they have graduated due to the high levels of unemployment. We can work in partnership with student-entrepreneur-and institutions such as the Small Business Entrepreneurship to teach full course, share the experiences with students, conduct market research, obtain financing and create viable business. Besides that

Specialist transfer is due to the partnership that we have with the private corporation. To be partnered with the private corporation, university have to give benefits to them in returns such as has access to a talent pipeline that will ensure their competitiveness. Normally, they want to identify the talented student with the required set of skill to work for them while university need to train students in fields where they can find jobs and performed well.

C. Value Proposition

We plan to add some values which are advance career, collaboration with high impact income and debt-free education. For the undergraduates, their purpose of study is to find the suitable job for them, meanwhile, for postgraduates, they aim to get the better career since their purpose to further study is to gain more knowledge and improve their skills, so that they can apply their skill in the organization (CSU Career Directors, 2011). Other than that, we want to collaborate with high impact income for instance the big company like Petronas, Sime Darby, Khazanah, and Bank Negara to get the fund and provide scholarship to the students. We decided to offer debt-free education to help students earn their education. We offer the students debt-free education in exchange for participating in the work program especially for the talented students but not able to pay for the education fees. With the help of student labor, university is able to function with fewer staff than normal in areas such as maintenance, cafeteria and office help.

D. Channels

Our latest channel is alumni. We want to use alumni relations as our channel to serve for our customer segments especially for the students and also Private Corporation. We want to boost alumni allegiance with star quality by inviting them to

share their student life back then and also sharing their working experience to motivate the students' spirit. We plan to push online fundraising with alumni portals and blogs allowing the members to use e-mail, check in with each other and create a lifelong relationship with their alma mater. By building an alumni database and keeping personal connections with graduates, we hope to receive generous donations from the members and also from the organization outside.

E. Revenue Streams

For our revenue streams, we try to generate more our revenue by providing more services such as internet business, faculty consultation services and free model. We want to encourage faculty with specialized expertise to offer their services to local or national businesses regarding the research and business propositions. We also can provide our Shariah advisory to the organization that want to strengthen the Shariah principles in their businesses. While, we aim to do internet business by creating a private website hosted on the university's server and sell advertising on it. The advertisers must provide a service to the students with special discount and also open it to the business outside to advertise their products or services since university is one of the potential hub for marketers and producers. Through this strategy, university can generate some income to the university. We also aim to provide free model for students and also public to access our content and academic resources.

F. Key Activities

The university main key activity is research and publication. However, we target to add mass videoconference as our key activities. Since videoconferencing supports two-way video and audio communication, it eliminates the need to travel for a meeting, a seminar or a conference, so, we want to provide a conducive learning environment for our students and lecturers in multiple remote locations with a synchronous learning experience similar to being in the same room as the faculty. This technology allows for students at one of these sites to attend classes held on different campus. There are a lot of advantages by implementing mass video-conference for instance students can take classes not offered at campus, lecturers do not have to travel to distant sites and can communicate interactively with students in more than one location at the same time, classes can utilize the latest multi-media computer technologies in combination with videoconferencing, and students can share the experience of guest speakers in a different city.

G. Cost Structure

Our cost structure is also to cover for the student services cost in terms of the facilities such as the equipment, Wi-Fi services and the digital content for journal and books.

H. Key Partners

For the latest BMC, we replace our partners with Zakat institution with the waqf because waqf can be our main source of funds for educational establishment and educational support. Waqf plays a very important role in Muslim societies. It has grown steadily since its beginning and has benefited the people and defrayed public expenses (Stibbard, Rusell and Bromley, 2012). Since we want to implement the debt-free education for certain of students, waqf can be used for student scholarship particularly for those who are poor for their accommodation and meals. Depending on the income that is available, it can also provide salaries for lecturers and other staff. Besides that, our outsourcing partners also consist of our agents that we recruited to in charge for the students' entrance. Malaysian of Higher Education (MOHE) is also one of our important partners whereby they will provide scholarship for the students for the lecturers as well. The MOHE will provides financial assistance for suitably qualified lecturers from Malaysian Universities to pursue higher education qualifications at overseas institutions. Other than that, they will set the standards for all the public universities regarding the teaching standards and the content of teaching.

XII. SUMMARY

In general overview, this research had identified the problems and challenges of higher education nowadays. Then, we come out with business model canvas that described the characteristics of the current universities and the final business model canvas for the University of the Future. The final business model canvas is to represent the demands from the students and also community, at the same time, it is to improve the universities' performance and ranking in global. We had developed some assumptions for value proposition design before conducted the interviews with the chosen respondents. Both of the results are inter-related. Based on the final value proposition design, we had recognized the gains, pains and what the respondents want for the University of the Future towards next generation to produce more of intellectual people and upgrade the universities' achievement.

XIII. CONCLUSIONS AND RECOMMENDATIONS

In conclusion, this research answered the research questions and has successfully fulfilled the research objectives. The research reveals that VPD has helped to understand customer wants and needs from the University. Besides, BMC also has created better strategy to further develop the University of the Future. Thus, this study has significant impact to design strategic initiatives for future universities to utilize the advancement in technology in this globalization era.

Finally, future research is recommended to search for better alternatives and drivers for change that can better improve the quality of future universities. They can also do deeper study on the evolution of the university business model such as hybrid model to better transform the current model for better improvement. Lastly, future research should increase the sample size and the sample size should be dispersed to larger geographic area so that the result will not reflect only certain geographic area.

XIV. REFERENCES

[1] Almoatazbillah Hassan, "The Value Proposition Concept in Marketing: How CustomersPerceive the Value Delivered by Firms – A Study of Customer Perspectives on Supermarkets in Southampton in the United Kingdom", International Journal of Marketing Studies, 2012.

[2] E.Anyangwe, "The university of 2020: predicting the future of higher education," 2012.

[3] M.Barber, K.Donnelly, S.Rizvi, "An Avalanche is Coming: Higher Education and Revolution Ahead," Institute for Public Policy Research, 2013.

[4] C. M. Christensen, H. J. Eyring, "The Innovative University: Changing the DNA of Higher Education from the Inside Out", Institute for Public Policy Research,

2013. Available: http://www.amazon.com/The-Innovative-University-Changing-Education/dp/111806348.

[5] Ernst&Young, "University of the Future: A thousand-year-old industry on the cusp of profound change," 2012.

[6] K. Chareonwongsak, "Reshaping universities for the future", Foresight, Vol. 2 Iss1, 2000, pp. 113 – 123.

[7] Blenheim, Chaui, "Challenges of the university in the knowledge university, five years after the world conference on higher education,"UNESCO Forum Occasional Paper Series, 2003, Paper No.4.

[8] Etzkowitz, Webster, Gebhardt, Terra, "The future of the university of the future: evolution of ivory tower to entrepreneurial paradigm", 2000.

[9] Nelson & Strohl, "Universities 2030: Learning from the past to anticipate the future", Global Higher Education and Research (GHEAR) project Worldwide Universities Network, 2013.

[10] Matthews, Hoult, Nairne, Ashenden, "Collaboration Between Universities: An effective way of sustaining community-university partnerships", International Journal of Community Research and engagement, 2011, pp.119-135.

[11] Professor David Eastwood, "Our challenge is to become a leading global university," Brochure of Shaping Our Future: Birmingham, 2015,pp.1-22.

[12] Professor Michael Farthing, "Making the Future 2013-18, "Planning framework University of Sussex, 2013.

[13] Stibbard, Rusell, Bromley, "Understanding the waqf in the world of the trust,"2012, Vol 8, No 8, pp. 785-810.

[14] Shabana Hassan,"Role of Waqf in Enhancing Muslim Small and Medium Enterprise (SMEs) in Singapore", 8th International Conference on Islamic Economics and Finance.

[15] Monzer Kahf, "The Role of Waqf in Improving the Ummah Welfare", International Seminar on Waqf, 2003.

[16] Simon Stephens,"Using the past to predict the future: What futures are documented forHigher education?", 2013, On the Horizon, Vol. 21 Iss 4 pp. 323 – 332.

[17] Sohail Inayatullah,"Challenging the Feudal Mind: Alternative Futures for the University", 2001, On the Horizon, Vol. 9 Iss 2 pp. 6 – 9.

[18] CSU Career Directors, "Purposeful Partnership for Student Career Success",Students, 2011,Affairs and Academic Affairs Collaboration, pp. 2-14.

[19] T.M. O'Neill, "The business model canvas as a platform for business Information Literacy Instruction",2015, Reference Services Review, Vol. 43 Iss 3 pp. 450 – 460.

[20] National Education Technology Plan, "Transforming American Education: Learning, USDepartment of Education", 2010. Available: http://www.ed.gov/sites/default/files/ netp2010.pdf.

[21] Available: http://www.theguardian.com/higher-education network/blog/2012/aug/24/higher-education-in-2020. What's on the cards for Higher education in 2020? Photograph: Joe Pepler / Rex Features.

[22] A. Osterwalder, Y. Pigneur, "Google Business Model Canvas", 2010. Available: http://informationstation600.weebly.com/cost-structures.html.

[23] 101 Smart Revenue Generator (and money-saving ideas),2006. Available: https://www.universitybusiness.com/article/101-smart-revenue-generators-and-money-saving-ideas.

[24] W. Maria, Getting Real in The Real World: The Latest in University –Business Partnership, 2014. Available:http://www.skilledup.com/insights/getting-real -in-the-real-world-latest- in-university-business-partnerships.

[25] S. Rick, General Revenue: 47 Ideas for Raising Funds for your College fromUnusual Sources, 2011.Available: http://www.universitybusiness.com/article/general-Revenue

[26] K. Jimmy, Role of Video Conferencing in Higher Education, 2014. Available: http://www.educationviews.org/role-video-conferencing-higher-education.

[27] A.R. Ahmad Dahlan, H.M. Dahan, M.Y. Mohd Saman, "The success factors ingovernment information sharing (GIS)-Empirical findings from the Malaysians naturaldisaster management context", 2014, 5th International Conference on Information andCommunication Technology for the Muslim World, ICT4M 2014.

[28] M. R. Hasan, G. Moses, S. Maulid, A.R. Ahmad Dahlan, "Collaborative information system: Connecting the government, university, and industry", 2011, Innovation and Knowledge Management: A Global Competitive Advantage - Proceedings of the 16th International Business Information Management Association Conference, IBIMA 2011.