

A Study of the Future University

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Abstract— this article empirically examines recent and potential developments in the operations and role of the University in increasingly knowledge-based societies. Universities have recently begun transition from teaching to more research based activities, helping the society with knowledge that was earlier unavailable. Universities are more technologically advanced and more focused on providing their students with skills and tools for successful careers in the industry. The Muslim Ummah encourages this academic transition as a strategy to develop economically, socially and technologically. This transition has also brought significant changes in the medium and relationship between knowledge producers and users. It appears that the ‘future university’ is a phenomenon which can lead the Muslim Ummah onto a more developmental path, despite different beginnings and modes of education.

Index Terms— Business Model Canvas, Value Proposition Design, Entrepreneurial university, Research, Waqaf, Digital Platform

I. INTRODUCTION

There is empirical evidence that identifying, creating and commercializing intellectual property have become institutional objectives in various academic systems. Coming from different academic and national traditions, the university appears to be arriving at a common entrepreneurial format in the late 20th century. The entrepreneurial university encompasses a ‘third-mission’ of economic development in addition to research and teaching, though the precise shape this takes might vary such that different scenarios of academic development can be projected Readings, 1996. This paper argues that this shift arises from both the internal development of the university and external influences on academic structures associated with the emergence of ‘knowledge-based’ innovation. Entrepreneurial activities are undertaken with the objective of improving regional or national economic performance as well as the university’s financial advantage and that of its faculty.

Higher education is encountering unprecedented pressure for accountability from both internal and external constituencies. These constituencies include legislators, the

families of prospective students, accreditors, trustees, current students, faculty, and administrators—each wanting something quite different from the institution and each wanting the information for varying reasons and purposes. This pressure for accountability in higher education is actually nothing new; it has been a top concern for nearly 15 years. Today, however, the rising price of tuition is exacerbating the call for colleges and universities to demonstrate their effectiveness and to become more transparent about how resources are used” (Hawkins, in Katz, 2008).

II. PROBLEM STATEMENT

With the onset of the era of globalization, students now have the ability to choose and travel for their education especially in the cases of higher education. Although there are many universities based on the Islamic approach of teaching, they fail to compete with conventional universities across the globe. This is mainly due to the fact that there is lack of cooperation and collaboration between these universities. Another key problem that Islamic universities around the world face is finance and funds. Universities require large budgets for proper and effective functioning of their operations like teaching, research and administration. Islamic universities lag behind conventional universities in this regard. This article will provide an empirical insight on the problems faced by the Future University, one of the oldest universities, and how it can be reformed to tackle these issues effectively.

III. METHODOLOGY

This article is based on the literature review of earlier works by different authors who have worked on models for building a better university structures and functionality.

The research was conducted through interviews of 4 undergraduate students, 3 postgraduate students and 3 teachers of the University and other collaborative institutions. 8 out of the 10 interviewees (4 undergraduate students, 1 postgraduate student and 3 teachers) supported the idea of a future University which included entrepreneurial aspects in its working. They believed that a reform was required for the sustainable growth of the institution and proper operation in the future.

IV. LITERATURE REVIEW

Universities around the globe, which deal with different academic and national traditions, appear to be building a common entrepreneurial format since the late 20th century. There is empirical evidence that universities have regarded identifying, creating and commercializing intellectual property as major objectives in their academic agendas. The

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entrepreneurial university encompasses a 'third-mission' of economic development in addition to research and teaching, though the precise shape this takes might vary such that different scenarios of academic development can be projected (Readings, 1996).

This paper states that this change can be catalysed by both the internal development of the University and external influences on the existing academic systems that are related with 'knowledge-based' innovation. Entrepreneurial activities need to be undertaken with the aim to improve economic performance on the local and global levels, as well as, the university's financial status. However, many academics and others view the entrepreneurial paradigm as a threat to the traditional integrity of the university (Pelikan, 1992). Some critics believe entrepreneurialism should be resisted (Brooks, 1993.) or at least encapsulated in a special class of institutions of higher learning, fearing that an intensive pecuniary interest will cause the university to lose its role as independent critic of society (Krimsky, 1991). The separation of teaching, research and business activities becomes less sustainable: ironically, some have suggested this is akin to a return to the me-dieval ideal of a common academic format that meets both the cultural and material needs of society (Geuna, 1998).

Traditionally, the most suitable functions of an institution such as the University, which is dedicated to the public good, is considered to be the teaching of students and the publication of research. Additionally, industries which consider the development of academic institutions with entrepreneurial functions to be competitors, argue that universities should restrain their operations to the more traditional academic-industrial relations such as consultation.

However, as this paper will describe through a well-defined Business Model Canvas and Value Proposition Design, the momentum for the evolution of an 'entrepreneurial university' is essential for the sustenance and progress of the existing system of knowledge based society. The concept of a future entrepreneurial university comprises of a system that encompasses learning and research as academic goals, along with entrepreneurial operations for financial sustainability, through strong relations with other institutions, with various support groups such as government and industries. The separation of teaching, research and business activities becomes less sustainable: ironically, some have suggested this is akin to a return to the medieval ideal of a common academic format that meets both the cultural and material needs of society (Geuna, 1998). The assumption of an active role in economic development leaves existing academic missions in place, but it also encourages them to be carried out in new ways (Etzkowitz et al, 2000). Although industrial and academic systems may vary from each other in terms operations and functions and be in different levels of development, governments of the world need to focus on universities as potential resources, to enhance progressive environments and achieve the goal of a science-based economic development.

The future entrepreneurial university would include the following developmental processes and structures. The effect of the four inter-related processes has been to encourage the emergence of an entrepreneurial culture within academia.

Within the US, the academic scene has been, "... characterized by decentralization, market competition, and institutional pluralism" (Davis and Diamond, 1997). To be active, rather than merely formal innovation agents, universities must undergo a first academic revolution, the incorporation of research as an academic mission (Jencks and Riesman, 1968).

The implications of these stages are briefly described.

- Internal transformation

Conventional academic operations would be restructured and expanded to fulfil the requirements of the new functions. Learning would be expanded by and for the students who test their academic knowledge by facing real world challenges and acting as ambassadors for the university in established institutional spheres. For example, students will serve as interns in companies and industries where their brief apprenticeship would expand existing knowledge of the student through real life experiences.

- Trans-institutional impact

Industries and governments will assume the roles of intermediaries to manage any imbalances occurring between institutions with and without these entrepreneurial abilities. A new system of interconnected institutional spheres will be established in which collaborations and rules for interaction are more easily understood and implemented.

- Interface processes

The future University requires a developed and effective system for intelligence, monitoring and negotiation with its institutional collaborators, especially industry and government. Besides the top leadership of the university to interact with their counterparts from other institutional spheres, mid-level organizational connections will enable the university to identify congruence of interest and action between external organizations and their academic counterparts. Interface specialists will be responsible for making introductions, organizing discussions, negotiating contracts and all other aspects required to facilitate interaction with their counterparts and other partners such as government and industry. Within university's departments and centres, faculty and other personnel will be assigned with special responsibilities to analyse the commercial value of research and enhance interaction with external partners.

- Recursive effects

Additional to forging relations with existing organizations, the university as an entrepreneur will also develop and create new organizations. This may be executed in several forms such as formation of academic research firms, regional organizations or innovation firms. The existence of such capabilities and interfaces increases the probability for the creation of joint ventures and organizations with other universities, governments and industries.

The above characteristics are part of the future university which focuses on education, research and entrepreneurship.

V. THE BUSINESS MODEL CANVAS

A business model canvas is a chart or template to aid

organizations in planning strategies. It lists different elements of the business in different categories and provides a concise visual summary of the business. It aids managers to plan strategy, acquire resources and undertake activities to align to the organization's goals.

This article proposes a BMC for the Future University which upholds Islamic values and integrates modern technological facilities for the future. It adds to the status-quo with new ideas for further ventures as well as solutions to present problems. It will explain the various elements under the various categories of the proposed BMC.

Key Partners	Key Activities	Value Proposition	Customer Relationships	Customer Segments
<ul style="list-style-type: none"> International and Domestic Alumni Schools and high schools Industry Governments Parents 	<ul style="list-style-type: none"> Lectures Administration R&D Islamic content creation & integration 	<ul style="list-style-type: none"> Islamization of knowledge Integration with industry Research and Publication 	<ul style="list-style-type: none"> Recruitment Agents Marketing activities Career center Open Days Schools 	<ul style="list-style-type: none"> Students <ul style="list-style-type: none"> Domestic International Industry Professionals Islamic content Consumers Co-creation Donors Government Agencies Other education providers
		Key Resources <ul style="list-style-type: none"> Staff Student services Buildings and labs Back-office 	Channels <ul style="list-style-type: none"> Digital Partnerships <ul style="list-style-type: none"> Franchise Face to face 	
Cost Structure <ul style="list-style-type: none"> Fixed Cost Staff cost Student services cost Intellectual Properties fees Maintenance costs Shared Services 		Revenue Streams <ul style="list-style-type: none"> Tuition fee Research and book publishing Research centers External Funding Grants Government Funds Partnerships 		

Figure 1. BMC model [Ernst & Young, The University of Future]

UOTF Model

The Future University will take initiatives to develop into the best research university in India. It will undertake initiatives to improve its academic, operational and financial sectors.

One of its major initiatives is massive collaborations with other universities, industries and governments. These collaborations will influence the exchange of knowledge, the generation of revenue and broaden its cultural affluence. This collaboration will be a major step towards reaching top quality standards that are required for attaining high ratings and rankings.

The Future University also will take initiatives to develop its academics and non-academic aspects through developmental activities and training sessions. Staff and students alike will be trained for effective progress that the university wishes to achieve.

The university will also undertake many entrepreneurial activities to attain financial sufficiency and stability. As the university grows, it will require massive funding that is usually received through government grants and donations. However it will be starting entrepreneurial activities to provide for its massive budget and will also be collaborated with industries affiliated to the university. This will also be a platform for students to start their careers as seen fit.

The university will also be focussing on the Islamization of its academics to spread the message and teachings of Islam to its students and the others collaborated with the university.

University of The Future targets to reach the top position in India and the initiatives will be undertaken to achieve that goal.

• Key Partners

The BMC portrays various potential key partners for the university. These partners will be essential to the proper

working and effective achievement of the university's goals. They will act as support groups in financing and administration of the university.

1. Local and Global Islamic Universities- as the university is based on the principles and teachings of Islam, partnership with other Islamic universities will be vital for its successful achievement of its goals. This will build a more united Muslim Ummah, which will start with students who are the future leaders of the Ummah.

2. Agents- this partner can be coined as a liaison from the university to the students and work as marketers and advertisers for the university.

3. Content Wholesalers- could be related media and website counterparts who would promote the university to the world and aid to send their message to the Ummah, through advertisements.

• Key Activities

1. Workshops and Training- Students require training to develop skills required for their careers which can be provided by workshops which will be conducted by skilled professionals, with experience from the field.

2. Development and Enhancement- The principle aim of the university is to teach and inculcate modern knowledge in students with a focus on Islam and its principles.

3. Fundraising initiatives- The University will also have fundraising programs for various goals focussing mainly on the Muslims who are suffering across the globe in an attempt to better their lives.

4. Research and Development and Commercialization- Universities around the world conduct research on various fields aimed at developing the human society. Various aspects of life will be modified and improved to be better than before giving newer scopes for people. Commercialization is important as it brings in revenue and income for the institution which would further the progress for the university and the Ummah.

5. KTP & Disseminate Knowledge- the University will be an avid promoter of knowledge dissemination, which means to transfer and apply knowledge with and across various settings and will prevent the stagnancy that is commonly seen with knowledge.

6. Waqaf Financing Development- with the large amounts of revenue that the university will receive every year, it will be obligated to use the surplus money for the betterment of the Muslim Ummah. This can be easily done by Waqaf financing. The university can involve itself in mosques, schools, orphanages, charitable works around the world to help the suffering Muslims and bring about sustainable prosperity in their lives.

• Value Propositions

1. Digitalization of learning- The university intends to change the convention by introducing digital learning, through virtual classrooms where students can attend their lectures without having to attend physical classrooms, online lectures which will be available on the internet for anyone interested to learn from them and discussion forums, where students can discuss issues and contribute by sharing their

knowledge and ideas.

2. Massive collaboration- Besides educating students, the university looks to collaborate with other institutions, industries, developmental programs etc. It will provide a platform for change and development through collective endeavours.

• **Key Resources**

1. Digital Platform Maintenance- As the university plans on having an extensive digital education system, maintenance for this platform is required.

2. IT & infrastructure content- The contents of the digital platform or the library are significant resource when it comes to the learning process. Students, teachers and other users apply these resources to their education or working to benefit from the knowledge. These are resources of great importance for the university.

3. Cloud based CRM- Any successful organization requires feedback to improve and develop its operations and resources. The cloud based CRM can provide a media to collect feedback from the partners and the service benefactors of the university to improve its working, to ensure progress and effectiveness.

• **Customer Relationships**

1. CRM (cloud) - The University will maintain an efficient and modern CRM through cloud drives. Customers can provide their feedbacks and reviews online which are later examined by the management to make improvements

2. Administration (outsourced) - The University will hire administrators and auditors from external organizations to examine and evaluate their functioning and operations and provide detailed reports on the administration and finance of the university.

3. Waqaf Centre- Information can also be collected through waqaf centres to better the university's contribution to the society and the Muslim Ummah. The university requires knowing the potential fields it can contribute to and the ways it can improve its existing waqaf ventures. These waqaf centres can provide the best ideas and reviews for these ventures.

• **Channels**

1. Digital Partnerships-

a. Twinning- This is a partnership where the university collaborates with other universities on a very detailed level and it reflect the same ideals and vision to help each other achieve success.

2. Mobile Learning Lab- This is a new method that has come up with the advancement of technology where the university management move around places to collect information about their university and its operations making it another effective method to supervise the working nature of the university.

• **Customer Segments**

1. Waqaf Contributor- These contributors will be providing finance and other aid materials to the university as donations or gifts. They will be great asset as confidence

builders and external reviewers.

• **Cost Structure**

1. Outsourcing cost- This cost refers to the tasks appointed to auditors and external administrators and the costs incurred by them.

• **Revenue Streams**

1. Free short courses (freemium) - These are short introductory courses of the subjects taught in the university to pique the interest of prospective students.

2. Workshop and training fee- The University organizes training programs for its students as well as other participants, especially its collaborators and partners. These workshops and training programs will generate revenue from the fee.

3. Waqf Fund- These funds are from Islamic organizations to support the various activities of the university. These are done as a charity and are usually used to fund Islamic programs and research.

4. Free Education- This a method of raising awareness and also revenue in the form of providing education to students who are unable to pay for their own education.

5. Savings from outsource- The university will occasionally task external parties to conduct and conclude some its activities instead of hiring its own employees. These tasks have a short duration and avoidance of recruitment of new staff for these tasks can save a lot of funds.

VI. THE VALUE PROPOSITION CANVAS

Here we contribute one VPD model for International students before our survey has accomplished:

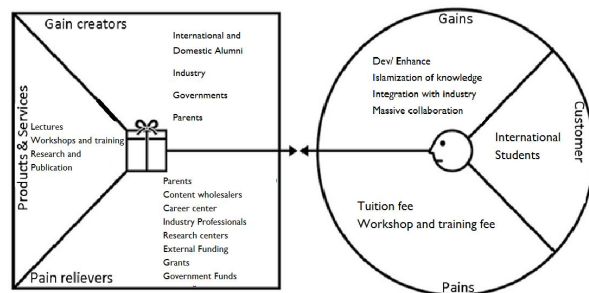


Figure 2. VPD model for international students [Ernst & Young, The University of Future]

The international students of the University have a lot to gain from the university. Their knowledge and skills will be developed through a very sophisticated and advanced learning process, which will promote Islamization. The university will have strong international links with industries to provide training and secure careers for these students through massive collaboration. These processes will be created by their parents, the government, industries and the alumni. The international will have to bear costs like tuition fees and workshop and training fees, which their parents, governments, industries and other channels will aid them with.

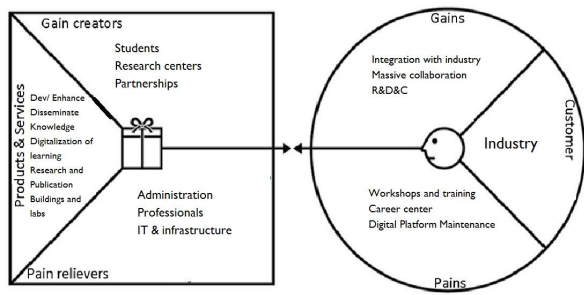


Figure 3. VPD model for industries linked [Ernst & Young, The University of Future]

The industries linked with the University will gain mainly from the research, knowledge and the digital platforms of the university. They will also receive trained recruits for their operations. However they will have to bear costs for training and maintenance of the career centers and the digital platforms. The administration and the IT departments of the university can be a big help in these regards. The integration with the industry will be creating a win-win situation for both the university and the industries.

VII. DISCUSION

The University is one of the oldest and most renowned centres of Islamic education. It requires sustainable and progressive developmental tools to prevent stagnancy. Proper utilisation of its resources, along with structural and operational reforms can help the university move towards a better and more financially secure future. This is essential for the university to serve the global Muslim Ummah more effectively and build a better and more educated society based on the principles and teachings of Islam.

FINAL BUSINESS MODEL CANVAS

Key Partners	Key Activities	Value Proposition	Customer Relationships	Customer Segments
<ul style="list-style-type: none"> International and Domestic Alimni Schools and high schools Local and global Islamic Universities Industry Agents Governments Parents Content wholesalers 	<ul style="list-style-type: none"> Lectures Administration Workshops and training Dev/Enhance Fundraising initiatives R&D&C KTP & Disseminate Knowledge Islamic content creation & integration Waqf Financing Development 	<ul style="list-style-type: none"> Idamization of knowledge Digitalization of learning Integration with industry Research and Publication Massive collaboration <p>Key Resources</p> <ul style="list-style-type: none"> Staff Student services Buildings and labs Back-office Digital Platform IT & infrastructure content Cloud Based CRM 	<ul style="list-style-type: none"> CRM (cloud) Admin (outsourced) Recruitment Agents Marketing activities Career center Waqf center Schools <p>Channels</p> <ul style="list-style-type: none"> Digital Partnerships <ul style="list-style-type: none"> Twinning Franchise Face to Face Mobile Learning Lab 	<ul style="list-style-type: none"> Students <ul style="list-style-type: none"> Domestic International Virtual Industry Professionals Waqf Contributor Islamic content Consumers Co-creation Donors Government Agencies Other education providers
<p>Cost Structure</p> <ul style="list-style-type: none"> Fixed Cost Staff cost Student services cost Outsourcing cost Intellectual Properties fees Maintenance costs Shared Services 	<p>Revenue Streams</p> <ul style="list-style-type: none"> Tuition fee Research and book publishing Free short courses (freemium) Workshop and training fee Research centers External Funding Waqf Fund 	<ul style="list-style-type: none"> Free Education Grants Government Funds Partnerships Savings from outsource 		

Figure 4. Final BMC model

RECOMMENDATIONS

This article studied the University empirically, based on the interviews of teachers and students of the university. Future researches should be more quantitative by the use of questionnaires and surveys to help understand the university's potential in bettering its operations.

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