

TRANSFORMATION OF UNIVERSITIES AND THE NATIONAL BLUE OCEAN STRATEGY: A CASE STUDY OF UNIVERSITI MALAYSIA TERENGGANU

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Abstract: Transformation and innovation of universities have become a necessity in a globalized world especially for newly established universities that seek a place in the increasingly competitive market. For Universiti Malaysia Terengganu (UMT), the challenge for transformation is greater as it is a relatively young university within the public university system in Malaysia. By means of the principles of Blue Ocean Strategy (BOS), UMT has determined the path towards excellence that uses its existing strength and capabilities. The academic, research and governance transformation initiatives that had been implemented included the restructuring of the faculties into discipline and sector focused schools; offering unique academic programs which are in line with the university's niche area of marine sciences and sustainable aquatic resources; and the transformation of the research groups and structures in order to further strengthen the technical and social innovation within the university's niche area. Initial findings showed improved performance and efficiency and consequently UMT is on track to achieve its target of being one of the respected university in the Asia Pacific region.

Keywords: Transformation, blue ocean strategy, university, sustainability.

Introduction

The scenario for higher education especially in the Asia Pacific region is rapidly changing. Among the emerging issues in higher education involve the usage of new educational technologies (such as the internet and social media); increasing customer and stakeholder expectations, globalization and internationalization of education, quality of education, budgetary matters and shifts in the student demographics. The role of universities in the development process of a country remains important especially in a globalized and interdependent world. Colleges and universities are not only central to the teaching and learning of its students but it plays a bigger role in contributing to a country's economic and intellectual well-being. With a competent and skilled human capital, a country's growth and development will be accelerated. The World Bank (1999) had underlined four key areas needed for a country to move into a knowledge-based economy namely; an appropriate economic and institutional regime, a strong human capital base, a dynamic

information infrastructure and an efficient national innovation system. Recognizing that growth and development of the country require sufficient and excellent human capital, the Malaysian government had embarked upon transforming the higher education sector into a hub of academic excellence.

Higher Education in Malaysia

The vision for the higher education sector in Malaysia is to become an international hub and a center of excellence for higher education. Malaysia has 20 public universities, 53 private universities and six foreign university branch campuses, 403 active private colleges, 30 polytechnics and 73 public community colleges in 2011. These higher education institutions offer a wide range of tertiary qualifications in many diversified fields.

The number of public universities in Malaysia has grown from five in the 1970s to 20 by the year 2006. Universities in Malaysia have grown in terms of staff and student populations.

In 2011, the total enrolment of undergraduate students in public universities in Malaysia was 508,256 students and the number of academic staff was 29,198 (Ministry of Higher Education Malaysia, 2012).

The Ministry of Higher Education in 2007 launched the first phase (2007-2010) of the National Higher Education Strategic Plan (PSPTN) and in 2011 launched the second phase (2011-2015) of the plan. The plan consists of 23 Critical Agenda Projects (CAP) within seven strategic thrusts which include: widening access and increasing equity, improving the quality of teaching and learning, intensifying research and innovation, strengthening of higher education institutions, intensifying internationalization, enculturation of lifelong learning, and reinforcing the ministry's delivery system. The main objective of the plan is to strengthen the universities to achieve excellence in teaching and learning and research and innovation.

In 2010, the Malaysian government initiated the Economic Transformation Program (ETP) that aimed at making Malaysia a high income country by year 2020. The goal of this plan is in line with Vision 2020 that was introduced in 1991 with the objective of achieving an industrialized nation status by the year 2020. An important prerequisite to attaining the goal of a high income, industrialized nation status is having a world-class education system especially at the tertiary level. ETP and the Government Transformation Plan (GTP) had addressed the need for a higher education environment that can foster the development of academic and institutional excellence in an attempt to secure Malaysia's position as a global education hub.

There are numerous challenges faced by public universities in Malaysia. Adaptive, creative and smart management requires the university leaders to be resourceful in facing these challenges. As a result of these challenges and also the demands from the various stakeholders, some of the university leaders have initiated various transformational agendas in their respective universities.

In Malaysia, the need for this transformation was felt by the universities but the degree of transformation that was embarked upon varies from minimal to comprehensive. The continuous transformation of universities will ensure a more holistic human capital development that will produce Malaysians that are intellectually active, creative and innovative, ethically and morally upright, adaptable and capable of critical thinking.

Malaysian universities have embarked on the transformation process to ensure that teaching and learning, research and publication will continue to thrive and strengthen the universities' contribution towards economic growth and prosperity. New knowledge created by the universities' research will spur new innovative products, create growth and speed the economic development of the nation.

Quality of academic programs, research and publication have been at the forefront of the debate on measuring the performance of universities. Among the performance measures that have been used are indicators, ratings and rankings (national and global) of universities. Malaysian universities have been wary of these rankings as it is felt that the metrics used in the rankings do not reflect the bigger picture of higher education in Malaysia. However, due to pressures from the government and various stakeholders, the rankings are taken seriously by the university leaders. To achieve good global ranking and reputation, Malaysian universities need to transform themselves to be a dynamic learning organization that has an innovative culture and seek to continuously improve and produce scientific breakthroughs and technologies.

Strategic Planning, Transformation and the Blue Ocean Strategy in Universities

Exercises in strategic planning began in the military whereby the plan of action is strategized to outmaneuver the enemy in any military operations. In the business sector, strategic planning began in the 1950s, however it lost

momentum in the mid 1970s but regained its importance in the 1990s. According to Gouillart (1995), the popular strategic planning model used in the 1950s was the SWOT model, in the 1960s the qualitative and quantitative models of strategy, in the 1980s the shareholder value model, the Porter model, core competencies model and market focused organizations, while in the 1990s, business transformation model was widely practiced (Gouillart, 1995). The newer strategic planning models focused on adaptability to change, flexibility, and the importance of strategic thinking and organizational learning.

Higher learning institutions are looked upon as a bastion of knowledge that will provide the impetus for communities and countries to continue to prosper. Knowledge and wisdom shared by academicians will enable societies to grow better and faster especially in a globalised world. Part of the knowledge that has been shared by academicians to the public and corporate sectors is in strategic planning. It is thus imperative for universities as a higher learning institution to lead in the transformation and strategic planning exercise and become a role model to other sectors of the economy.

Strategic planning in the corporate world differs to the strategic planning of universities. The difference lies in the time frame, consensus, value system, customers and context (Lerner, 1999). Thus for any strategic plan to be successful, it has to incorporate the issues and challenges that are important to the higher education sector. Especially important at the university is to have a participatory planning process where the various stakeholders are involved in the planning at every stage (Rowley, Lujan & Dolence, 1997).

Addressing the myriad of issues and challenges in higher education requires universities to develop an effective and dynamic strategic plan. The changing landscape of higher education requires Malaysian universities to face the concerns and challenges that include inadequate government funding and human capital, increasing demand for higher education,

ratings and rankings issues and the economic transformation in the country using new methods and approaches. University leaders need to be creative, adaptive and transformative in order to meet these increasing challenges.

Strategic planning helps universities to create a framework for determining the direction a university should take to reach its goal and to achieve the competitive advantage. A good strategic plan also enables universities to align its resources (physical and financial) and attain excellence in teaching and learning, research and development and innovative products and processes. The articulation of the vision and mission in the strategic planning process provides a common goal and fosters a sense of belonging and ownership towards the university (Lerner, 1999).

Most universities have developed their strategic plan based on existing, standard practices of the strategic planning process models. Usage of newer models of strategic planning such as the Blue Ocean Strategy has been few and far between. The Blue Ocean Strategy (BOS) developed by Kim & Mauborgne (2005) emphasized the benefits of value innovation and making competition irrelevant by swimming in the blue ocean. Successful implementation of BOS will ensure first-mover advantages, economies of scale, building reputation and user loyalty, and the ability to fund the search for the next Blue Ocean (Sheehan & Vaidyanathan, 2009).

In Malaysia, all the twenty public universities have a strategic plan that varies across the universities according to the time frame and pillars/initiatives being pursued. Most of the strategic plans pursued by the universities utilize the traditional models of strategic planning. As Universiti Malaysia Terengganu (UMT) underwent its transformation process and drawing up its strategic plan for the years 2013 through 2017, the university had used the BOS as a guide in developing its vision, mission, core values, strategic thrusts, programs and action plans (Komoo, 2012; 2013).

The Blue Ocean Strategy and Universiti Malaysia Terengganu's Strategic Plan

According to Becker (2008), the BOS is a growth strategy for an established organization or a start-up enterprise. BOS can thus be used as a guide for a university in planning for its future growth. Two of the important elements of BOS are increasing customers' value through differentiation and reducing costs. It is a sustainable strategy as it incorporates the whole system of utility, price and costs (Kim & Mauborgne, 2005). Applying the BOS to a university requires asking the question, How do a university make competition irrelevant and how to ensure the university is in the blue ocean instead of the red ocean where there is intense competition? Staying in the red ocean for a university means competing for the same students, offering similar programs and conducting research and innovation in identical fields as other universities.

Strategy Canvas for UMT

For UMT to successfully establish itself in the higher education sector, it is imperative that the university create a blue ocean that is relatively free of competitors. Kim and Mauborgne (2005) suggested constructing a strategy canvas that shows the known market space and what customers obtain from the existing market. A strategy canvas is a diagnostic framework to draw a blue ocean strategy. The horizontal axis shows the range of factors that a company competes on or invests in, while the vertical axis shows the offering level that buyers receive across all of these competing factors. The resulting value curve depicts the company's relative performance across its industry's factors of competition (Kim & Mauborgne, 2005).

To construct a strategy canvas for a university, the factors that affect the performance and determine the excellence of a university need to be identified. According to Salmi (2010), amongst the range of factors that the higher education sector competes on or is important in determining the success of a university include:

- o Able to attract the best talent;
- o Able to build its research strengths and has distinctive reputation and focus;
- o Able to generate innovative ideas, produces basic and applied research in abundance;
- o Produces competent and marketable graduates;
- o Operates within a global and international market;
- o Has diversified sources of income;
- o Has good infrastructure for teaching and research; and
- o Has first-class management team with strategic vision and implementation plans.

For this paper, the QS World University Rankings 2013 criteria were used as the strategic factors that determine the relative strength of universities. The criteria used measures the research, teaching, employability, facilities, internationalization, innovation, engagement and access of universities. Specifically, the strategic factors utilized for the strategy canvas were:

- o Academic Reputation
- o Employer Reputation
- o Faculty Student Ratio
- o Citations per Paper
- o International Faculty
- o International Students
- o Papers per Faculty
- o Inbound Exchange
- o Outbound Exchange

Based on the strategic factors given above, a strategy canvas for UMT was formulated as given in Figure 1. The horizontal axis depicted all the factors that were listed above while the vertical axis showed the relative strength across all the strategic factors for UMT and other public universities in Malaysia. A high value indicates a relatively higher strength and capability of the university in the strategic factor.

The curves drawn in the Figure 1 show the relative strength of UMT as compared to other public universities in Malaysia across all the strategic factors. The value curve for UMT as a whole showed that UMT will not be able to compete and will indeed be in the red ocean if the university strives to continue excelling in all fields. Given the amount of available resources, it is not possible for UMT to be in the blue ocean in all fields of research/study.

To find the blue ocean that is free of competitors, it calls for UMT to transform itself and seek new uncontested market space. Using BOS as a guide in the strategic planning process, the strategy canvas for UMT is as shown in Figure 2. During the strategic planning process, it was debated and accepted that UMT cannot excel in all fields of studies and research (Komoo, 2013). Using the strategy canvas, UMT was able to outline the strength of the university

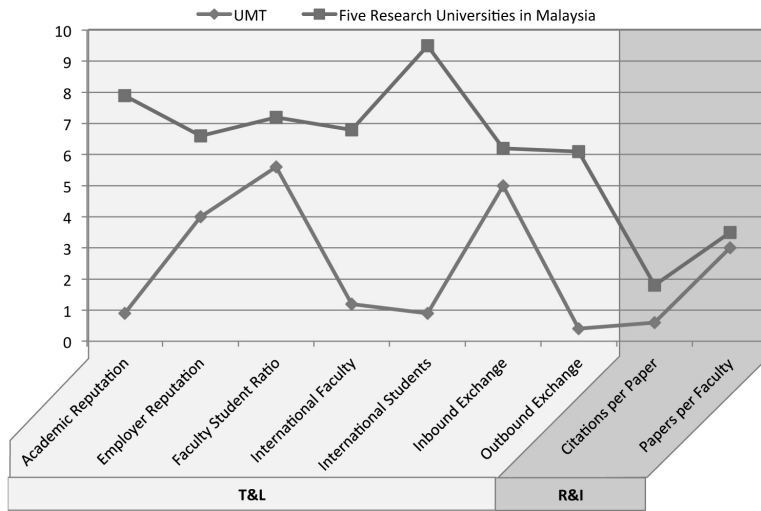


Figure 1: Strategy Canvas for UMT Prior to Strategic Planning instead of being in the red ocean and continuing to compete with the other universities, UMT need to re-strategize and find its own blue ocean

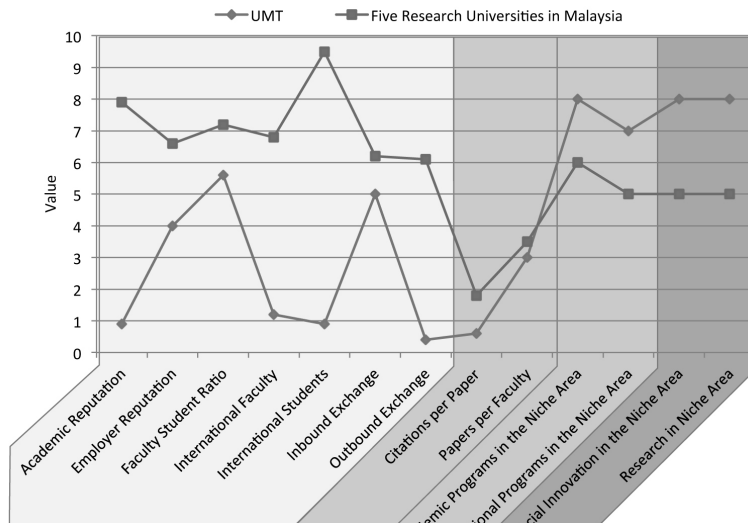


Figure 2: Strategy Canvas for UMT After Strategic Planning (Within the Niche Area of Marine Sciences and Aquatic Resources)

in the field of Marine Sciences and Aquatic Resources. Consequently, the niche area of the university was thus established.

Based on BOS, the vision of the university was defined to be: *A marine-focused university, reputed nationally and respected globally*. With the identified vision, the strategic plan was focused on making UMT an excellent university in the field of Marine Sciences and Aquatic Resources in both teaching and learning as well as research and innovation. The university itself is strategically located near the South China Sea, enabling it to take the advantage of the vast oceanic resources for teaching and research. In addition, the university was the first university to start a program of study in fisheries and is the leading university in Malaysia in the field of marine sciences and oceanographic research.

Using BOS through the strategy canvas, it was established that the strategic focus of the university should not be in all fields of studies and research but focused on the chosen niche. Accordingly, the strategy canvas showed that the university should centre its strategic planning on providing an *alternative* field of study that focuses on marine sciences and aquatic resources. The undergraduate academic programs offered in UMT within the niche area are: Fisheries, Marine Biology, Marine Sciences, Aquaculture, Maritime Informatics, Maritime Management, Nautical Science and Maritime Transportation and Maritime Technology. These academic programs are unique to UMT and thus place the university in an *uncontested market space* or the blue ocean. By providing an alternative to choices of available academic programs and taking advantage of its strategic location, UMT is able to serve in the blue ocean and to its non-customers. The university does not compete in the red ocean for students and is able to grow the higher education market by offering new academic programs within the niche area.

As the university's vision is to be known globally as a premier university in the fields of marine sciences and aquatic resources, the governance structure for the administration of the academic programs need to be re-examined

in order to ensure the success of this vision. The university had thus undertaken a massive transformation of the organizational structure in early 2013. The management of academic programs was previously administered under faculties, but with the restructuring, the programs were now placed under discipline focused schools. The newly established schools were able to strategize and synergize in similar fields of expertise which include marine sciences, maritime, oceanography and fisheries. The schools that were formed based on the university's specialization or niche was: School of Marine and Environmental Sciences, School of Fisheries and Aquaculture Sciences, School of Maritime Business and Management and School of Ocean Engineering. Transforming and merging the faculties into schools enabled the university to focus its resources on developing and enhancing new and existing academic programs that will propel UMT into becoming a reputed university in the field of marine sciences and aquatic resources.

In terms of research and development, research programs and projects in the university are closely tied to the development of the marine, oceans, rivers and lake ecosystems. All the three research institutes at UMT are related to the university's niche area. They are the Institute for Oceanography and Environment, Institute for Tropical Aquaculture and Institute for Marine Biotechnology. Complementing the research institutes are 11 Special Interest Groups (SIGs) or Special Research Groups (SRGs) and most of these research groups are also closely related to the niche of the university. The SIGs/SRGs that are tied to the university's niche are such as Sustainable Fish Stock/Fish Security, Green Aquaculture Technology, Sustainable Coral Ecology, Sunda Shelf Oceanography, Maritime Business Management, Maritime Logistics Research, Marine Biotechnology, Beach Erosion and Island as well as Peripheral Communities.

In terms of research facilities, UMT is equipped with research vessels and boats that will enable the university to aggressively pursue research in this niche area. Additionally, the

university has research stations that are focused on the chosen niche; Marine Research Station on Bidong Island, Turtle Research Station on Redang Island, Wetlands Research Station in Setiu, as well as Teaching and Research Port in Kuala Terengganu. Another research facility that was initiated under the university's research transformation program was the Kenyir Lake Research Institute. Kenyir Lake is the largest man-made lake in Southeast Asia and the close proximity of the lake to the university highlights an important role for UMT to play in the sustainable development of the lake.

By focusing the university's research based on the niche area, it will be easier for the university to acquire research funding in these fields. As the university's forte is in maritime and marine sciences, concentrating in these domains of research will accelerate the process of developing new research, innovation, knowledge transfer and social innovation. The field of marine sciences and aquatic resources are becoming increasingly important to Malaysia since the country has a total coastline of 4,675 kilometers (2,905 miles) whilst the fisheries and aquaculture sector continue to be an important sub-sector that contribute to the national economy in terms of the Gross Domestic Product, employment, foreign exchange and also is a significant source of protein supply for the country. Consequently, UMT will be able to contribute significantly in research, development and innovation in this field to ensure its future sustainability.

One of the strategic thrusts in the university's strategic plan is in accelerating the transfer of knowledge to the communities and industries. In line with these aspirations, the Center for Innovation and Knowledge Transfer was established and it was tasked with managing the knowledge transfer programs based on research findings and outputs. Through the center, UMT strives to contribute in the knowledge transfer program that is based on knowledge innovation (research findings), technological innovations (intellectual property and commercialization) and social innovation

(policies, best practices and increasing the prosperity of the community). Together with the Center for ECER (East Coast Economic Region) Research Network, the centers were tasked with organizing knowledge transfer programs and networking with industries in the east coast of Malaysia to help in the development of the community and economy based on marine and aquatic resources.

Four Actions Framework and the Eliminate-Reduce-Raise-Create Grid for UMT

In BOS, the four actions framework is used to give insights as to how an enterprise can reduce its costs, lift customer value and create new demand. The objective of the four actions framework is to reconstruct buyer value elements through reducing costs (through eliminate and reduce) and lift buyer value and create new demand (through raise and create). The grid drives companies to examine all the factors that are important in determining their success (Kim & Mauborgne, 2005).

In Malaysia, the costs of tuition and the salary schemes for academicians were developed by the government and are applicable to all public universities in the country. Thus in using BOS for UMT, the costs considerations were not too critical a factor and can be considered as a constant for all universities. Lifting the customer value and creating new demand are the key elements for UMT in strategically planning its future direction.

Table 1 shows the analysis of the four actions framework that indicates the Eliminate-Reduce-Raise-Create grid for UMT. The university needs to re-examine the existing academic programs and decide which programs are sustainable and able to drive the university's vision in becoming a well-known marine/maritime university. The programs that do not fit the strategic plans of the university should be reduced or eliminated. All new research and academic programs have to be aligned to the university's vision and concerted efforts to mold the academic programs in becoming excellent international programs that

Table 1: The Eliminate-Reduce-Raise-Create Grid for UMT

ELIMINATE	RAISE
<ul style="list-style-type: none"> Negative perceptions on marine sciences and aquatic resources 	<ul style="list-style-type: none"> Multi-disciplinary research in marine sciences and aquatic resources Awareness of the importance of marine sciences and aquatic resources
REDUCE	CREATE
<ul style="list-style-type: none"> Academic programs and research that are not related to the niche area 	<ul style="list-style-type: none"> New research and innovation in the niche area; Academic programs in the niche area International programs in the niche area Knowledge transfer in the niche area

will in turn open up new demand from local and international students.

Kim and Mauborgne (2005) outlined three characteristics of a good strategy; focus, divergence and compelling tagline. The construction of the Eliminate-Reduce-Raise-Create Grid for UMT helped the university in determining the important factors that should be the focal point in drawing up its strategic plan. The focus for UMT is in the niche area of marine sciences and aquatic resources and the emphasis on the university's niche area sets the university apart from the other universities in Malaysia. Additionally, the tagline for the university is "Ocean of Discoveries for Global Sustainability" positioned the niche area within the university's strategic profile.

Within the strategy canvas and the four actions framework, the university had outlined five thrusts that will be the focus of the programs and projects under the strategic plan. The five thrusts that were outlined were; Empowering Academic Talent, Excellence in Teaching and Learning, Accelerating the Transfer of Knowledge, Strengthening Research and Innovation, and Enhancing the University's Image. All these thrusts were listed with the objective of driving and leapfrogging the university to become a marine focused university which is reputed nationally and respected globally.

Conclusion

Based on the strategy canvas and the Eliminate-Reduce-Raise-Create Grid, the university drew a strategic plan that centers on the niche area of marine sciences and aquatic resources. This chosen niche will enable UMT to swim in the blue ocean of uncontested market. As this focus is unique to UMT, it will enable the university to stand apart and diverge from the research and academic programs that are currently being offered in other public universities in Malaysia. Focusing on the niche area will ensure that the university is not caught in the red ocean with its "competitors". The Blue Ocean Strategy is able to provide a strong and sustainable strategic vision for the university in its drive to become a respected university in the field of marine sciences and aquatic resources.

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