

# Revealing an open secret: Internal challenges in creating an entrepreneurial university from the lens of the academics

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**Abstract**—The recent development in the educational landscape has seen an increased demand being placed on higher education institutions to play an active role in economic development and income generation via the formation of “entrepreneurial universities”. This study aims at understanding the perception of the academics towards the mission of creating the entrepreneurial university in the context of a research university. The underlying complexities in achieving this mission are extracted from a series of semi-structured interviews with the academicians from various faculties. The findings revealed conflicting views pertaining to the movement towards this new mission. In addition, the internal challenges towards the creation of the entrepreneurial university are also discussed.

**Keywords**- *Entrepreneurial university; Academics; Internal challenges; Government; Entrepreneurship.*

## I. INTRODUCTION

It is recognized that the most important challenge for Malaysia is now to increase the level of enterprise creation and continue to cultivate a strong culture of entrepreneurship in every sphere of the Malaysian society. This new development has also impacted the education landscape since universities are said to have a special role in the entrepreneurial ecosphere. The repositioning of higher education strategic policy has seen a greater emphasis given to universities in producing graduates with entrepreneurial mindset and capabilities and increasing the number of graduate entrepreneurs besides nurturing entrepreneurial academics and researchers.

Within this context, entrepreneurial universities are required to undertake one other mission--apart from teaching and knowledge advancement (research)--that is knowledge transfer and commercialization activities for income generation via entrepreneurial initiatives. Universities are now encouraged to promote entrepreneurship among students and academics as well as to embed entrepreneurial thinking and practices within the curriculum, co-curriculum and research activities. For instance, the Entrepreneurial University Award has been introduced in 2012 to act as a catalyst for the creation

of a conducive environment and a holistic entrepreneurship development in local HEIs [3]. This award is also meant to recognize the HEIs with excellent achievement in terms of promoting entrepreneurship education and entrepreneurial development in their institutions.

It is based on this premise that the current study is undertaken to explore the more fine-grained issues pertaining to the creation of the entrepreneurial university ideal within the context of a research university that is currently in the stage of the entrepreneurial trajectory. Specifically, the research aims at providing deeper insight into the views of the academic community regarding the new paradigm of the entrepreneurial university.

## II. LITERATURE REVIEW

Entrepreneurial university has now become a part of a legitimate approach for the economic and social development. The conventional mission of the university was initially concentrated on the transfer of knowledge and advancement of the knowledge through basic research. Together with teaching and research, the entrepreneurial university adopts the third mission of contributing to economic development [6]. This development path includes the self-sufficiency and self-dependency of the entrepreneurial universities, which ultimately will reduce governmental expenditure. Conceptualizing the issue, governments are pushing universities to embrace the paradigm of the entrepreneurial university given the various external pressures which include “massification” of higher education, employability issues, challenges of globalization, and internationalization strategies of universities [2]. Keeping pace with this approach of the government, some of the university managements are budging away from a long-established organic approach towards a more interventionist top- down push approach [2]. This shift by the university towards this third mission is alleged by few academic disciplines as a menace to the main purpose of a university which is, teaching and research [6]. Furthermore, scholars assert entrepreneurial university as a twist of the purpose of the research university [7]. On the contrary, a study

views the entrepreneurial university in terms of the new role of carrying out entrepreneurial activities which encompasses and extends the research university [1].

According to the literature, the activities within the entrepreneurial university can range from a broad spectrum of “soft” to “hard” initiatives as shown in Fig. 1 below [6]. Based on the description, an entrepreneurial university is a complex structure which goes beyond the basic tenets of a research university. It has been expected that entrepreneurial university will facilitate the transfer of knowledge and technology across the industry, develop industrial park, regional and local engagement, creation of public value etc. [2]. In addition to that entrepreneurial university is said to generate financial advantage to the universities and its faculties [5].

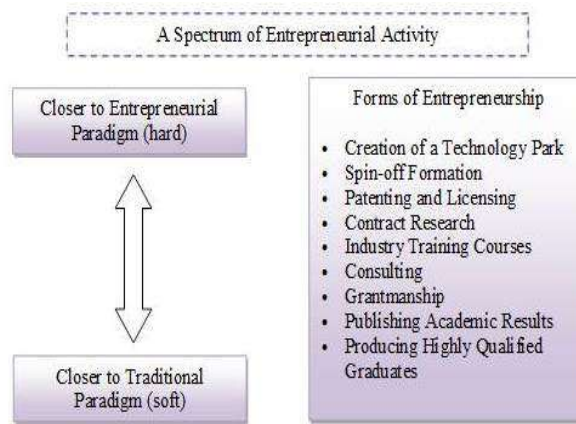


Figure 1: Entrepreneurial university spectrum of activities

Many researchers and scholars are now advocating the entrepreneurial university concept for both the internal development of the university and in response to the external influences on the academic structures [10]. Recently, a study highlighted the fundamental characteristics of an entrepreneurial university as shown in Fig. 2 below [2]:



Figure 2. Universities as Entrepreneurial Organisations

Despite the increased interest in the entrepreneurial university agenda, it has been highlighted that there are a few pressures relating to this which are: the capability of university laboratories for basic research, changes in legislation relating to the ownership of university IP rights, decrease in university funding etc. [6]. A study affirmed that developing an entrepreneurial university is not as simple as it may appear from a comprehensive perspective [8]. Without strong and effective leadership, the transformation towards an entrepreneurial university may not be materialized [10]. Specifically, according to the literature, operationalization of entrepreneurial paradigm at the departmental level may hold complexities and tensions [9].

There are some challenges to entrepreneurial university faced by developed countries which is known as European Paradox. This paradox has been attributed to: (a) lack of entrepreneurial spirit among scientists; (b) poor intellectual property rights to university inventions; (c) differing legal systems between nations that inhibit cross border technology transfer. In general there are other internal and external factors which limit the materialization of the entrepreneurial university. Major internal factors include: limited time due to classes or administrative work; limited financial resources; lack of infrastructure; delay in fund management; and lack of skilled personnel. In addition to that major external factors are: increasing capital costs; inadequate government funds; difficulty in private sector collaboration; dearth of expert research and development personnel; lack of supplementary services to support research and development [10]. These challenges are said to be applicable in both developed and developing countries. Having noted that, the scholars argue that the contextual difference may lead to more challenges towards entrepreneurial university, with a greater pressure for those of developing ones [4].

As a developing country, Malaysia is increasing spending in research and development though it's not as similar as developed countries. Considering this, scholars infer that there are great challenges to academic leaders in fostering entrepreneurial university in Malaysia [10]. Therefore, Malaysian entrepreneurial universities may face several issues and challenges. The fundamental issues exist for creating entrepreneurial university is, attracting fund from the private sector and willingness of private sectors to pour expenditure into universities for research. Along with these, other presumable challenges are: standing up to local role along with gearing up international role; addressing conflict between the role of disciplines and the role of inter-disciplines; addressing the conflict between academic freedom, curiosity-driven 'fundamental' research versus directed, user-driven, 'applied' research; managing closer relationships with the government and industry; handling the issue regarding conflict of interest and conflict of commitment; deciding between centralized versus decentralized management of the university-industry boundary; selecting the appropriate commercialization model

for technology transfer offices. It is in view of these challenges that the present study is undertaken to understand the underlying challenges facing a university in a developing country in the transition from a traditional university into an entrepreneurial one.

### III. METHODOLOGY

In order to obtain answers to the research question, a qualitative research method was employed. Semi-structured interviews were conducted on an individual, face-to-face basis. A series of interviews were undertaken to obtain a clearer picture of the present and emerging issues particularly those that are uniquely inherent in the Malaysian environment pertaining to the creation of entrepreneurial universities. Altogether, ten academicians were involved in this first tier of the data collection. To draw out their meaningful feedback and insights into their concern on the creation of an entrepreneurial university, the informants were asked to express their view on transforming local HEIs into entrepreneurial universities. The data collected from the sample were then transcribed and analyzed based on themes in order to determine emerging patterns that will enable better comprehension of the challenges in creating entrepreneurial universities.

### IV. FINDINGS

From the interview, several themes were extracted that represents the challenges highlighted by the academicians in regards to transforming local HEIs into entrepreneurial universities. Embedding “entrepreneurial flair” into the university appears to create emotional tension among the academicians especially when the connotation of entrepreneurship is often equated to the creation of a new venture and income generation. Based on this, the following challenges are identified:

#### *Theme 1: Role overload for academicians*

An in-depth discussion on the entrepreneurial university ideal has revealed that ‘tension’ arises among the academicians pertaining to the role overload brought about by the introduction of a new mission to the university. Role overload occurs when academicians perceived that there are too many roles they have to engage in at one time. In this case, the informants perceived that the role of an academic and researcher and for some, administrators, have already posed a lot of burden to them. With the new role of becoming an academic entrepreneur, their key issue arises as to how the academics could resolve the balancing between maximizing contribution to teaching, knowledge advancement (research), and income generation (entrepreneur).

#### *Theme 2: Derail from the original purpose of university existence*

It is not surprising that some key informants mentioned that the role of the university is not to “do business” but to “support business”, which reflects the fundamental understanding of the nature of HEIs. According to some

informants, entrepreneurship initiatives within the university may not generate lucrative income to the university since only a handful of the universities in the world could make money out of their entrepreneurial activities (i.e., Stanford, MIT, and University of California). The risk is the loss of time allocated for teaching and basic research which will derail the original purpose of the university existence. Instead, the university should act as a conduit to create entrepreneurial awareness and mindset instead of focusing on the income generation activities.

#### *Theme 3: Absence of a unified entrepreneurship culture*

Findings from the in depth interview revealed that there are major drawbacks in the current entrepreneurial ecosphere within universities. There appears to be a lack of entrepreneurship culture from the start of the research right up to producing the outcomes as inputs that will go into the industry. Many researchers are not market driven—they are keen on doing research, but do not really understand the market needs. Researchers were also said to lack market knowledge and prefer to pass the commercialization work to the ‘real’ entrepreneurs. It is acknowledged that inculcating an entrepreneurial and innovative culture is not an easy task and “top-down” approach may not be as successful as “bottom-up”

#### *Theme 4: Unattractive incentive mechanisms*

Amongst the major issue plaguing university researchers are the unattractive package of incentives to push researchers to embark on entrepreneurial initiatives. For the extra works required and the lack of certainty in making sure that the research output will eventually reach the next level of innovation value chain, there is no clear pathway of the kind of rewards that they will get. Even if it does, equity holding, royalty allocation, licensing fees and transfer of intellectual properties continue to be the source of dissatisfaction among interested researchers.

#### *Theme 5: Absence of entrepreneurial role model and expert*

The other major challenge is the lack of entrepreneurial model and expert in entrepreneurship to assist commercialisation activities within university. For the advocates of entrepreneurial university agenda, they highlighted that the main reason for the lack of success in innovation and commercialization initiatives is the absence of entrepreneurial role model and expert, as in many universities in Taiwan and Korea. Proper training is therefore required to train and equip the academicians with entrepreneurial skill and competencies to allow entrepreneurial university concept to take root and flourish.

### V. CONCLUSION

Clearly, the adoption of the third mission, which is economic development via entrepreneurial initiatives within HEIs, is not without challenges and risks. The right balancing between teaching, research and entrepreneurship is crucial to

ensure the smooth transition between the traditional universities into entrepreneurial universities. The internal process within the university needs a lot of tightening up especially in responding to the issue of incentive mechanism and promotional system. Importantly, the challenge for the top management is also to curb the resistance to change among the opponents and provide clear mission and direction to them by highlighting the need to respond entrepreneurial in today's dynamic and challenging environment. The presence of a unified entrepreneurial culture, entrepreneurial role model and experts are of pivotal importance.

In summary, the initiative towards transforming local universities into entrepreneurial universities is faced with various challenges. Whilst it is good if the university could offer a solution to existing industrial problems or ways of satisfying future demands, universities should also help to churn out good fundamental research with potential for applications to solve present problems and develop future technologies.

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