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A Study of Entrepreneurial Mindset through the Dual Sided Role as Service Seeker and Service Provider among University Students

Mohd Zaidi Abd Rozan* and Masoumeh Zibarzani

Department of Information Systems, Faculty of Computing, Universiti Teknologi Malaysia (UTM), Johor Bahru 81310, Johor, Malaysia

ABSTRACT

The growth of entrepreneurship throughout the globe has forced policy makers to reconsider their plans. Universities have been pushed to change their missions and enforce their transition into entrepreneurial academia. When enterprise awareness is formed in students, they are preferably to develop entrepreneurial mindset and behave in enterprising and entrepreneurial ways such as to form new venture creation. Main question is, do our graduates possess the right entrepreneurial mindset to pursue entrepreneurship? This study explores the demand for services that enable such transitions from two points of view of service seeker and provider. A qualitative study was conducted among the undergraduate students in Universiti Teknologi Malaysia (UTM). The results shed light onto the mindset of students. The majorities are not recognizing themselves as creative and resourceful, and are still caught up in their student mindset and status-quo. However, there is small portion that had ideas to start their own businesses but still unclear. This finding helps the university to evaluate their entrepreneurial efforts.

Keywords: Entrepreneurial mindset, entrepreneurial university, new academia

INTRODUCTION

The world of business and global economy has undoubtedly changed drastically as results of entrepreneurial revolution (Singer, Amorós, & Arreola, 2015). Over the last two decades, entrepreneurship has emerged into the most powerful economic force. Following this, a similar increase in the field of entrepreneurship education has formed. It is now evident that entrepreneurship, or at

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E-mail addresses:
mdzaidi@utm.my (Mohd Zaidi Abd Rozan)
zibarzani@gmail.com (Masoumeh Zibarzani)
* Corresponding author

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least some facets of it, *can* actually be taught (Kuratko, 2005). Professionals agree that entrepreneurs are made, not born. Drucker (1985) said, "The entrepreneurial mystique? It's not magic; it's not mysterious, and it has nothing to do with the genes. It's a discipline. And, like any discipline, it can be learned". Astin and Astin (2000) stressed out that the importance of creating an institutional climate that facilitated and reinforced individuals in their collective efforts towards the transformation. They emphasized that it was the role that higher education played in this manner and thus could not be neglected.

It stresses out the role of activities that focus on a more "micro" approach on characteristics of the entrepreneurs (Kriewall & Mekemson, 2010). Such tradition is concerned with the *entrepreneurial mindset* (EM) as stated by (Davis, Hall, & Mayer, 2016), "…defined as the constellation of motives, skills, and thought processes that distinguish entrepreneurs from non-entrepreneurs". The mindset is essential to entrepreneurial success. There are several studies introducing EM indicators to identify personality variables that may have a potent impact on entrepreneurial variables. The indicators are categorized into Personality traits (such as Self-Confidence, Action Orientation, Risk Acceptance, Need to Achieve, readiness for venture) and skills (such as Persistence, thinking/looking from a Higher Order, Idea Generation, Originality, Execution, User oriented thinking) (Ashourizadeh, Chavoushi, & Schøtt, 2014; Ngek, 2015; Reid & Ferguson, 2010, 2011). The accumulation of the EM indicators is defined to be thought to promote entrepreneurial discipline (Davis et al., 2016; Mwasalwiba, 2010).

In the midst of this, universities are also engaging their students in the world-of-work. The practice is usually through a set of mechanisms, including work-integrated learning. The major effort has been dedicated to undergraduate education. Universities consider the value placed on educating citizens who can engage and successfully contribute to the growth of the society in their mission statements (Cress, Astin, Zimmerman-Oster, & Burkhardt, 2001; Roberts, 2003). Although teaching skills to students through co-curricular and academic programs is a recent trend, the most trend is to reach entrepreneurial academia through such programs (Davis et al., 2016; Siegel & Wright, 2015). The recent developments in the curricula and programs devoted to entrepreneurship growth and development, and new-venture creation have been remarkable. The number of universities or educational institutions that offer courses related to entrepreneurship has grown.

The emerging perspective on academic entrepreneurship has challenged the universities. The traditional rationale for academic was that it would teach the most recent knowledge to the students, collaborate in research to create relevant knowledge and contribute to the body of science, establish collaboration with industry to enhance the commercialization of university research and also serve as a source of revenue for the

university (Etzkowitz, Webster, Gebhardt, & Terra, 2000). Therefore, they focused mainly on metrics of university technology transfer activity, such as, patents, licenses and start-ups/spin-offs (Hisrich & Smilor, 1988; O'Shea, Allen, Morse, O'Gorman, & Roche, 2007). While some institutions were really successful in showing great numbers of such metrics, the metrics was inefficient (Rothaermel, Agung, & Jiang, 2007).

The most recent view of the universities approaches towards entrepreneurial is summarized in Table 1, which was adapted from (Siegel & Wright, 2015). The most recent viewpoints have broadened out the rationale to the wider social and economic benefits to the university ecosystem. The key elements facilitating entrepreneurship to the university ecosystem are: (1) incubators/accelerators that provide support in terms of property-based institutions; (2) entrepreneurship courses and programs in multiple colleges/schools; (3) the establishment of entrepreneurship centers; (4) 'surrogate' entrepreneurs who stimulate commercialization and startup creation in campus; and (5) a rapid increase in support of various aspects of entrepreneurial ecosystem, including student business plan competitions, leadership and business skill development programs.

This shift concerns a wider contribution to society and at the same time, includes a greater emphasis on teaching (Drucker, 1985). This has induced a move towards indirect aspects of academic entrepreneurship, such as, social ventures and start-ups launched by students, transfer of knowledge to existing businesses (Åstebro, Bazzazian, & Braguinsky, 2012). Research findings showed that entrepreneurship courses are not sufficient to provide skills or mindsets (Özşahin, Askun, & Yıldırım, 2011) and universities should go beyond and above for creating entrepreneurs that can contribute to economic growth (Knockaert, Ucbasaran, Wright, & Clarysse, 2011). Previous studies affirm the actual implementation of strategies in entrepreneurial practice do not meet the desired outcomes, and this affirms the gap in the studies on successful implementation requirements (Kaufmann,

Table 1
Traditional and emerging perspectives on academic entrepreneurship

Theme	Old perspective	New perspective
Why	To generate direct financial returns	To provide a wider social and economic benefit to the university ecosystem
What	Academic spin-offs; licensing; patents	Student and alumni start-ups; entrepreneurially equipped students; job creation in the local region or state
Who	Academic faculty and post-docs	Students; alumni; on-campus industry collaborations; surrogate entrepreneurs
How	Technology Transfer Offices (TTOs); science parks	Accelerators; Entrepreneurship garages; student business plan competitions; collaborative networks with industry and alumni; employee mobility; public–private 'incubators'

Fessas, & Diensberg, 2008). On the other hand, the significance of stakeholders' relationships in entrepreneurship research is well acknowledged (Hayter, 2013). Current research assets the role of value co-creating to understand how the universities strategically and operationally, enhance their services in entrepreneurial mindset promotion (Shams & Hans Ruediger, 2016).

What is less clear from this growing body of literature is what drives successful promotion of entrepreneurial mindset among students in academia. Although education programs provide opportunities to exercise responsibilities, and start one's own business (Peterman & Kennedy, 2003), the issue remains on how to encourage the development of the roles through a teaching program (Robertson, Collins, Medeira, & Slater, 2003). Peterman and Kennedy (2003) portrayed that that people who had low awareness of entrepreneurial experience had more need to entrepreneurial education before starting a new business. In this regard, the concept in mind is the entrepreneurship behavior. Entrepreneurship behavior is a broader concept that also includes traditional skills and efforts associated with a particular form of business activity (Pihie & Sani, 2009). The concept of entrepreneurship behavior is relate to personal characteristics such as being able to recognize the opportunities and willingness to change.

Despite all the efforts put in the study of how should the academia prepare, plan and respond to the entrepreneurial growth of student, there is practically no study that investigates the essence of needs and demand form the viewpoint of students. This, in turn, could be of high importance to the planners and policy makers in establishing of the proper plans and action.

Therefore, this study sets out to investigate the presence of entrepreneurial mindset among the students via investigating the demands of entrepreneurial promotion.

Aim of the Study

Considering the issues that the education sector in Malaysia is facing, it is a crucial time and actions should be taken. The financial fragility demands for the attention of government and policy maker to focus on effective use of human capital and entrepreneurial development. In 2014 alone, the employability rate for graduates in Malaysia was only 68.85%, and 44.6% graduates in 2013 were getting a salary less than RM1500 (USD370) per month (Ministry of Higher Edcation [MOHE], 2015). With these issues discussed, there is a critical need to empower graduates into becoming entrepreneurial and innovative.

Entrepreneurial University should provide an atmosphere that synergizes the concept of Enterprise and Entrepreneurship, which will lead to the growth of Innovation. It essentially starts from the capacity to build and manage skills that can maximize the effective use of human capital. Next comes the co-curricular and academic leadership and entrepreneurial development programs. This will encounter the challenges that include student employability, enhancing student experience, practically implementing

enterprise and entrepreneurship education, designing new pedagogy, exploring new employment pathways, engaging with industries and so on.

That being said, many counterparts have devoted their resources to engage in promoting activities to their workforce. Universiti Teknologi Malaysia (UTM), for example, has devoted tremendous effort in transforming its academia in line with the National Higher Education Strategic Plan (PSPTN). Establishing a *New Academia Learning Innovation (NALI) Model*, the university hopes to reach entrepreneurial academia. NALI is a new approach "comprising student-centered and blended learning philosophy, multiple learning modes and materials towards achieving entrepreneurial academia." It comprises the concept of blended learning, a combination of active and systematic strategy with the use of digital teaching materials in class. Its pedagogy/andragogy includes case study teaching, problem- based learning, scenario-based learning, peer instruction, service learning, Conceive-Design-Implement-Operate (CDIO) practices, outcome-based education, high-impact educational practices (HIEPs). In addition, it provides Job Creation program to which students are able to register as the co-curricular course.

Despite all the efforts, the challenge of complete academic awareness for entrepreneurship remains. In addition, it has become important to identify the best service types and skill sets to provide. While it can be argued that some acceptability has been attained, there are critical challenges in the current state of entrepreneurship education at this university. The major question is how the students, who are the receiving party of the services, perceive that the services should be provided? What they seek, how they want to get it, and what is the core benefit of the service they would prefer? This article focuses on identifying a dual sided role of university's students as seeker and service provider. Except for a single paper (Harfsheno & Rozan, 2012), the question have not been asked nor studied. The exploration would open up a better understanding on the readiness for the creation of different student ventures among UTM students. Meanwhile, their entrepreneurial mindsets are gauged as they should include recognizing themselves as a creative and resourceful person that generate multiple ideas, concepts and solutions in response to identified problem and opportunities (Quality Assurance Agency [QAA], 2012). This study will contribute significantly to research, which would make new discovery that modifies, agree or probably refute to the current Entrepreneurial University attempt. Entrepreneurial University is a term used to refer to a university that has transformations due to the reduction in the university funding from government sources and the emergence of a competitive market for education and research (Etzkowitz, 2003). The practical outcomes are the realization of new venture creation with the real-world engagement of multiple stakeholders, mainly student, enterprises and universities and this could improve the status quo for all parties.

Besides, student will gain reasonable working experience while in campus and prior to graduation that could be included as their portfolio.

METHODS

This study was developed by investigating student as the unit of analysis. A Qualitative approach was chosen. The selection is due to the exploratory approach of this research. Since the study seeks to provide insights into the problem or helps to develop ideas, a qualitative research is the best suitable method. In doing that, a semi structured approach was used to give more freedom while keeping the structure of study at the control, and user story tools were the strategy used to explore different types of student offers in UTM.

The primary source of data for this study was structured interviews. The researchers developed a protocol for structured interviews with respondents. The data collection used guided interviews. An initial protocol of questions was developed, based on two perspectives of service seeker and provider. An open-ended questionnaire was designed to collect the answers to Three (3) questions from two points of view (i.e. Six questions) so that the perspectives of the two groups could be compared and contrasted (Table 2). The additional background information was asked at the end of the questionnaire. To ensure the validity of the study methodology, the question protocols, raw data, research process and findings were reviewed by experts in the field who were not directly associated with the study.

Table 2
Data collection protocol

Service **Seeker** Perspective	Service **Provider** Perspective
As a …….	As a …….
I want to (**seek/find**) ……	I want to (**seek/find**) ……
So that ……..	So that ……..

RESULTS

Selection of Participants

Participants in this study were students at the undergraduate level at Universiti Teknologi Malaysia. The selection was random and the subjects were acquired on campus, either in classes or dorm rooms. The interview forms were given to the subjects in printed format and after a briefing, they were given time to answer the questions. The questions and answers were both written in English. A total number of 254 responses were documented.

Qualitative Analysis

Data demographics showed 63% of the respondents were female. All the respondents were undergraduate and local students (aged between 18 and 25) and stayed in campus hostels. The program of study was versatile and comprehensive.

The qualitative data gathered, was later entered into NVivo 11 and analyzed utilizing it. All valid responses from participants were considered for data analysis. Frequency of mention of each word was the basis of content analysis. Terms with similar meaning were grouped into categories using inductive coding by triangulation (Thomas, 2006). The data was later evaluated to see if words should be classified into categories. Frequency of mention of words, were calculated without considering if words were provided by the same participant or by different participants. The remaining of data was mapped to the most appropriate overarching. The codes generated in the inductive coding process were later classified under a higher level of codes. These codes, so-called first-order codes, are generated deductively and based on the notion of the questions asked in the interviews. The first-order codes are summarized in Table 3.

Table 3
Higher order codes

The Codes	Roles/Ventures	Service Type
Viewpoints	Seeker Provider	Seeker Provider

Each of the codes at each category is treated from two views, reflecting namely service seeker and service providers' point of view. The viewpoint of provider would lead to formation of a service. This view point would be expected to portray the actual perceptions of the provider towards the service they provide and their intentions to provide it. The seekers' viewpoint, on the other hand, is expected to reveal the requirement in the services the respondent is seeking to the satisfaction level. So, the codes that were established based on the notion of the questions, and the answers to them became the second-order codes.

The researchers met on many majority of cases (89.4%) during data collection and analysis that respondents tended to imagine a single service and took roles of seeker and provider to respond to it. Once all transcripts had been coded, the researchers read the transcribed interviews several times. It was to grasp a sense of the overall data. Meanwhile, memos, notable short phrases, issues and keys words were recorded to facilitate the further analysis. These themes allowed careful analysis of the responses to interview questions and the contrast of closely related and overlapping responses from two points of view. Next, the notes and memos helped to elaborate concepts worth recording as codes and by this analysis, the content meaning was reduced to core concepts (Kvale, 2007). Once the researcher finished the person-by-person analysis, entire body of data was interpreted and counter-ranked based on the core concepts identified. During this process, the nuances in the different points of view were considered. Then, the researchers established the comparisons between two points of view and selected quotations to illustrate the various points. However, the researchers met difficulty to determine whether thematic saturation had been achieved by examining the strength of data

linked to second-order themes. That is the summarized stat of data in codes depicted a rather unexpected pattern of response. This pattern which will be discussed later, persuaded the researchers not to analyze the data more in depth and rather focus on the portraying the codes and the remaining meaning behind it, determining any apparent additional information lies in the results of coding. The coding summary is included in Table 4. Note that Career Improvement is subcategory of Education Improvement and IT & Facility are under Facility. The highest rank is annotated in bold.

Table 4
Coding results

Roles/Ventures			Service Type		
Codes (Concepts)	Seeker	Provider	Codes (Concepts)	Seeker	Provider
Arts	1 (0.39%)	12 (4.72%)	Consultation	0 (0%)	12 (4.72%)
Customer	1 (0.39%)	6 (2.36%)	Education Improvement	**89 (35.04%)**	20 (7.87%)
Dependent Jobs	4 (1.57%)	23 (9.06%)	Career Improvement	74 (29.13%)	19 (7.48%)
Family & Personal	6 (2.36%)	13 (5.12%)	Facility	31 (12.2%)	10 (3.94%)
IT & Games	5 (1.97%)	26 (10.24%)	IT & Game	11 (4.33%)	14 (5.51%)
Passion	3 (1.18%)	13 (5.12%)	Personal Improvement	28 (11.02%)	16 (6.3%)
Religion	0 (0%)	4 (1.57%)	Political	1 (0.39%)	0 (0%)
Independent Jobs	8 (3.15%)	27 (10.63%)	Real Business Ideas	15 (5.91%)	24 (9.45%)
Sports	14 (5.51%)	51 (20.08%)	Service Quality	1 (0.39%)	10 (3.94%)
Student	**219 (86.22%)**	**66 (25.98%)**	Training	15 (5.91%)	**67 (26.38%)**
Volunteer	2 (0.79%)	26 (10.24%)	Volunteering	2 (0.79%)	38 (14.96%)
			Work In Area Of Study	3 (1.18%)	8 (3.15%)

Roles Assumed

When it comes to assuming the role of service provider and seeker, 11 categories of roles were documented based on the transcripts. Despite the aim of the study and interview, the majority of students did not assume the role of an actual service provider or seeker. Rather, it was observed that the majority (86.22% as seeker and 25.98% as the provider) viewed themselves as students. The students in this category had used the term 'Student' to respond to the question "As a" (e.g. "*As a mechanical engineering student, I want to be more efficient and knowledgeable*"). This means even when asked to think of a service, students are not able to imagine themselves as anything other than a student. The second majority of students spoke about the activities that support their passions. This includes sports in their spare time (5.51% as seeker and 20.08% as the provider) and other passions such as Arts (0.39% as seeker and 4.72% as the provider) or other passions (1.18% as

seeker and 5.12% as the provider).). This category of students was willing to provide trainings for the passion they followed or take part in sports teams for hours after class (providers) or were seeking such trainings or teammates to play with (seeker) (e.g. "*As a football player, I want to provide coaching so that everyone [knows the] rules of football [game]"*). Surprisingly, a number of students talked about family roles or personal issues (2.36% as seeker and 5.12% as the provider) which is not the actual service (e.g. "*As a daughter, I want to go back to my home every weekend*").

All this implies the fact that the subjects of the interview (undergraduate students at Universiti Teknologi Malaysia) have not clearly shifted the mindset of a student who is served in an institution towards an active work force, ready to start a service providing business. The witness to this induction is the number of students who was able to really take the role as a service provider (10.63% as an independent provider and 9.06% as a dependent one). This minority group was able to think of themselves as an active work force that will work in a company, or start their own business. This shows that they have started to evolve a mindset beyond a student's. While, the remaining of the students were still caught up in the challenges of being a student, and their ambitions were limited to educational concerns. It also can be concluded that students have not a clear comprehension of what they should seek in terms of service and what defines a service.

Service Type as a Provider

In line with the aim of this study, researchers asked the respondents to explain what they would provide. The types of services talked about as a provider in the responses is an indicator of entrepreneurial mindset of respondents. Researchers expected a range of services that have potentials of starting a business or the improvements to a business. Quite the contrary to our expectations, researchers noticed a rather different range of responses to the question. Majority of respondents (46.46%) were hype to offer training services. This included tutoring to classmates and short courses (15.35%) to help them have a good education (e.g. "*As a quite good student in mathematic subject I want to [give] small tuition classes*") and enthusiastic consultation and guidance to new-comers (4.72%) (e.g. "*I want to [give] advice and guideline to my junior about my learning experience in my 2nd and 1st year*"). This is in line with the results for the role of 'Student' assumed by the respondents as the seeker (cf supra). Few of these respondents (7.48%) talked about the same concept, but only with a slightly different aim which was to prepare the students for their future career and prepare them to enter the job market (e.g. "*I want to make high points so that I can easily get a job*" or "*I want to share my knowledge with my junior to improve my experience in teaching*"). 26.38% of respondents were happy to offer non-educational tutoring (such as "*swimming coaching*", "*teach the knowledge of playing FIFA*", "*grooming coaching*"). This mindset, too, did not fulfill our expectations.

The next category in terms of the number, are respondents who were ready to provide volunteering activities (14.96%). 11.42% wanted to provide physical and electronic facilities. This included Internet support, bus and motorbike transfer in campus, study areas and tables and sports complex in campus.

At the end, it is worth mentioning that 9.45% of respondents had the right idea in their mind and were willing to provide a service that, if not unique, was interesting enough to work on it. This comprises a total of 24 subjects who were interested in expand an idea into a business. This category is the ultimate corner stone focus of this study. 9 respondents were interested in food-related businesses ranging from opening a restaurant to a hawker food truck. The other popular idea (5 respondents) was delivery services for diverse types of service such as food and laundry. Two subjects wanted to open a tuition center. The other business ideas were observed once and are as follows: Set up a dairy product stall, Start their own business, Become a prominent and independent seller, Construction consultation, Online knowledge pooling platform, Open cyber café, Open a club, Import electronic audio rig component, and Provide design services.

Service Type as a Seeker

Quite similar to the provider's view, most of the respondents were looking for trainings. Educational trainings and tutoring (35.04%), career improvement trainings (29.13%) were the most frequent, and 5.91% of respondents asked for the in-campus trainings that could improve their abilities at non-educational activities and skills. The second majority of respondents were seeking better facility (16.54%) (Such as "*faster and reliable internet connection*", "*a better lab*", "*in-campus reliable and cheap transport*"). 11.02% of respondents were seeking personal improvements and services that can provide such improvements (e.g. "*I want to find the easy way to make my brother happy and ways to get along with him easier*").

Surprisingly, only 5.91% of subjects had the right idea of the service seeking and responded in accordance the question with a real business idea or service improvement plans. However, the majority of these respondents (8 out of 15) were interested in learning about business management, and entrepreneurial skills and did not specify any service or idea of business. The few other respondents were seeking the skills, they felt necessary to start their business that they mentioned in answer to questions from the provider point of view. One respondent sought bundle shop; one wanted to learn the skills to become a barber; the other wanted to learn about design and interface to become a designer and the other about the way to handle the engineering equipment.

DISCUSSION

The main goal of this study is to set out to investigate the presence of entrepreneurial mindset among the students via investigating the demands of entrepreneurial promotion. Here, we explored the types of services that would expose better understanding on

the readiness for the creation of different student ventures among UTM students. The services were scrutinized from two points of view namely service seeker and service provide, identifying differences, to elaborate more information about the services. Also, the queries about service were designed in a way to capture the position of the respondents in regard to the service, what they see essential about the service and what they see as the cornerstone of the services. Furthermore, the aim of the respondents in seeking or providing the services was asked. The data was later analyzed using qualitative methodology, to define these concepts, and provide a rich understanding.

However, the analysis revealed a surprisingly unexpected response pattern that influenced the path of analysis dramatically. To tackle the patterns, researchers started to scrutinize the data inductively, each respondent at a time, to grasp a generic view of the data. Later, the general concepts in the data were extracted and the data was ranked accordingly.

The results lead to findings that are as follows:

- Perspectives based on roles showed the respondents had very limited scope of their potential. The roles that respondent assumed as service seekers and service providers is a depiction of this. It was found that majority of students assumed the role of a student. That latter was evident in the type of the service they demanded. Most of the services were related to educational developments and related trainings. The second group that sought further only dreamt about working in the same area of their study and get hired. The missing part here, is the thinking out of the box. It can be a result of the air-gap between university and labor market, especially the entrepreneurial market. The university should bridge this gap with networking possibilities and events that explore the possibilities beyond the graduation.
- Majority of students have not developed the mindset of an entrepreneur. The few students who had ideas of starting a business lacked innovation drastically. It happened not only for those who had talked about a service related to education, but also for those that talked about other types of services. The small portion of the respondents who had an unclear idea to start their own business or improve an existing process for the aim of increasing functionality and profitability, talked about the ideas that were of little margin importance in terms of business value and economic potential. Furthermore, there was only one respondent considering a technical business opportunity. The business ideas that they had were already tried and had no innovation element it them. In addition, the profit margin

to the ideas was very limited that eliminated any chance of further development to the idea. Great ideas and innovations that can attract the venture capitalists should have a noble feature. It basically means to look outside of existing problem solving methods and to see how others are not solving problems. This might imply the lack of innovative mindset among students at the undergraduate level, which is a skill that can be triggered and developed by the policies, programs and workshops in university.

- Even more surprising, the majority of the respondents have not developed the mindset of a workforce and are still caught up in the student mindset. It was evident, once again, that the entrepreneurial mindset is not at the desired levels among undergraduate students.
- Finally, the urge to promote the entrepreneurship among the students is well felt. Although the university has started plans to make a change in this matter, there are quite a number of issues that still need to be tackled. This study and future studies in this regard can help to identify the existing gap. Further studies are required to propose proper approaches to address the issues.

The findings fit with the previous studies that tried to explore the extent of entrepreneurial mindset among undergraduate students (i.e. same population) (Harfsheno & Rozan, 2012). The results of the study showed less than 10% of respondents could roughly be categorized as those of a notable entrepreneurial tendency. The results are not surprising when considering that the plans to promote the entrepreneurship among the students of UTM are still new and yet to reach maturity.

Implications

When viewed through the lens of university managers and strategic planners, the findings and discussion of this study led to the following conclusions and recommendations:

The university units that are in charge of job replacement, together with the curriculum developers should pay more attention to the implantation of innovative mindset, and recognition of opportunities of entrepreneurship other than job replacement in students' minds. It is to increase the knowledge of students to the possibilities they can explore that requires a different set of skills. Meanwhile, the plan to transfer these skills to the students can be established as well (e.g. virtual clusters).

The immaturity of business ideas among students' demands for further exposure and trainings. Existing entrepreneurial trainings should help the small portion of the respondents who had an opaque idea to work on them, polish it into a feasible and profitable idea. It also can be coupled with physical resources and financial supports.

CONCLUSION

Based on the findings, it was found that the entrepreneurial mindset among the respondents of study is relatively minimal. More effort should be focused on developing their entrepreneurial mindsets by recognizing themselves as a creative or resourceful person and someone who can translate ideas by thinking beyond their status quo as students. Also, the study suggests to further drill down into a more specific population of students and alumni who have already attempted to start their business. They could be selected regardless of the success or failure of their business. The type of business is not differentiating to this study. Also, the population of graduated students who have entered the job market, and work can be considered. The comparison of the responses between these two categories can provide interesting information as well.

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