

University's Entrepreneurial Ecosystem and Involvement of Students in Entrepreneurial Activities: A Case of Universiti Tun Hussein Onn Malaysia (UTHM)

FAUZIAH MISKAM, SITI SARAH OMAR, HARIS MD NOOR, ANIM ZALINA AZIZAN, MOHD YUSSNI HASHIM, NORSALEHA ALI, KHADIJAH MD ARIFFIN, AHMAED SALEH AHMAD AL-SHAMERI, FAZIAN HASHIM

Universiti Tun Hussein Onn Malaysia

*Correspondence: sarah@uthm.edu.my

ABSTRACT

The concept of the entrepreneurial ecosystem refers to the interaction between the various stakeholders of institutions and individuals to encourage implementation towards entrepreneurship, innovation and the growth of Small and Medium Enterprises (SMEs). Universities play an important role in the entrepreneurial ecosystem for entrepreneurship and forms a catalyst for economic growth and capacity building to enhance the innovation, creativity and competitiveness of a country. The objective of this study was to explore the involvement of UTHM students in entrepreneurial activities based on the university's entrepreneurial ecosystem in terms of financial assistance, infrastructure, education and training. The methodology employed for this study is a qualitative inquiry by using in-depth interview technique. The respondents consisted of 10 students and officers from the Centre of Business Entrepreneurship Development. The data were then being transcribed and analysed using thematic analysis. The results of this study showed that financial assistance, infrastructure, education and training is a very important ecosystem in increasing student involvement in entrepreneurship. The study also shows that there are inadequate infrastructure facilities to meet the demand of students for business. The lack of provision of loans also affected the level of student participation in entrepreneurship at the University.

Keywords: Entrepreneurial Ecosystem, University, Students

Article Info

Received 10 April 2020

Accepted 30 May 2020

Published 31 May 2020

INTRODUCTION

Entrepreneurship is said to be very important to produce more entrepreneurs with knowledge and skills in doing business (Hafidzin, 2011). An entrepreneurship is important to create a creative and innovative generation. Entrepreneurship activities contribute to the country's economic development (Hamdan et al., 2019). The university's internal attraction factors such as entrepreneurial exposure, university colleagues, entrepreneurship courses, past experience in entrepreneurship and entrepreneurial activities organized by universities are less attractive to students when choosing entrepreneurship career among students (Rosli, 2013). Entrepreneurship skills are among the essential skills that students should have, either from the level of primary or tertiary education (Gutiérrez & Baquero, 2017). The field of entrepreneurship is considered capable of generating human resources that can safeguard the country's economic, social and political stability as well as the foundation for human development (Warman, 2010).

An entrepreneurial ecosystem refers to an interaction that occur between various stakeholders such as institutions and individuals to foster entrepreneurship, innovation and growth of Small Medium Enterprises (SMEs) (Izham

et al., 2008). The entrepreneurial trait is said to be a solution to the problems that are happening to the country's economy and the catalyst for the economic development of a country (Dhaliwal, 2016). Entrepreneurship is also important to increase the number of skilled human resources and able to develop innovation and technology (Hafidzin, 2011). Career in entrepreneurship is one of the best jobs that can be undertaken by graduates to overcome unemployment (Esiebugie et al., 2018). Additionally, graduates need to think creatively as a job creator rather than looking for a job. As such, the government has organized various entrepreneurship programmes to enhance skills and create competitive advantages in the globalization era.

However, the entrepreneurship area has yet to be a career option for graduates (Hassan & Osman, 2007). Based on research conducted by Nasharudin & Harun (2010), limited knowledge about entrepreneurship entails limiting entrepreneurial activities and causing business activity to be less successful. Hence, efforts to plant entrepreneurship culture have been carried out through education and training at all levels ranging from primary level to higher learning institutions. Based on a study by Ibrahim & Ahmad (2006), the implementation of entrepreneurship skills development programmes at institutes of higher education is not a new agenda in our country. In general, entrepreneurship skills development programmes at public higher learning institutions have begun since 1989, aimed at exposing students to theoretical and practical business aspects.

Labour Statistics Malaysia (2015) found that the unemployment rate of the country rose by 0.1 percentage point to 3.1 percent in January 2015 from December 2014. Among the reasons contributing to the following problems is the difficulty for university students to get a job after graduation. This has prompted the government to encourage university graduates to choose entrepreneurship as their primary careers. Additionally, university students can be educated through the development of entrepreneurial ecosystems at higher learning institutions to reduce unemployment (Ismail et al., 2011). According to Prahalad (2005), entrepreneurial ecosystem is defined as an ecosystem that enables the different actors such as individuals, enterprise and the society to work together effectively in generating economic prosperity. Isenberg (2014) has proposed a model of Entrepreneurial Ecosystem which consists of nine domains of support to the entrepreneurs at the national level, namely; government policy, regulatory framework and infrastructure, funding and finance, culture, mentors, advisors and support system, universities as catalysts, education and training, human capital and workforce, and local and global market. Nevertheless, the concern of this study is narrowed down to focus on the ecosystem of a higher learning institution that covers only several domains listed above which will be discussed henceforth.

In their study, Pihie & Elias (2004) are of the opinion that the infrastructure will create communication links between the theory and the real world. Infrastructure is essential in supporting and facilitating effective learning processes. Sufficient infrastructure will enable students to engage in entrepreneurial activities. In addition, Talib & Jusoh (2012) have stated that capital and financial factors are seen as the most dominant in influencing the level of individual participation in entrepreneurship. This capital and financial aspect is crucial in determining the direction and pattern of individual engagement in entrepreneurship because without adequate capital and adequate financial, it will limit the individual to engage in entrepreneurship (Guerrero et al., 2018). Therefore, the objectives of this study are to explore the involvement of students from Universiti Tun Hussein Onn, Malaysia (UTHM) in entrepreneurial activities based on the university's entrepreneurial ecosystem in terms of financial assistance, infrastructure, education and training.

LITERATURE REVIEW

Entrepreneurship Ecosystem

Entrepreneurship is no longer a new thing for Malaysians. In fact, a career as an entrepreneur is increasingly becoming an option among current graduates. A career in entrepreneurship is also seen as one of the branches for individual self-esteem (Hashim et al., 2010). The term ecosystem entrepreneurship illustrates the situation in which individuals, institutions and communities are working together to enhance the generation of finance and economy (Roundy, 2017). Entrepreneurial elements are activities related to entrepreneur's activities and skills. Generally, the entrepreneurial element is the processes involved in forming the characteristics, attitudes, thinking methods and values of a student towards becoming an entrepreneur (Ministry of Education, 2011).

There are nine components of entrepreneurial ecosystems which are government policies, infrastructure, finance, culture, mentors, universities as catalysts, education and training, human capital and man power. These

components affect the entrepreneurial ecosystem (Reidolf et al., 2019). Figure 1 shows nine key elements that are important for the generation of entrepreneurial ecosystems. This is explained in more details below.



Figure 1: Entrepreneurial Ecosystem Components
Source: Isenberg (2014)

Government Policy (Ministry of Higher Education)

Phase 2 of the National Higher Education Strategic Plan 2011-2015, was focused on enlightening entrepreneurship education. The objective of this effort is to enhance entrepreneurship among all students who in turn will contribute to the country's economic growth. The Ministry of Education Malaysia has introduced the Entrepreneurship Development Policy of Higher Education Institutions as a step towards promoting the development of human capital in producing graduates with entrepreneurs' values (Ministry of Higher Education, 2011).

Infrastructure

According to Pihie & Elias (2011), infrastructure will create communication links between theory and the real world. Infrastructure is essential in supporting and facilitating effective learning processes. Furthermore, with the availability of infrastructure provided by higher education institution, it will further facilitate learning and application of entrepreneurial values among students (Porter & Graham, 2019). Indirectly, students are exposed to the real situation of doing business and not just in class room theory.

Funding and Finance

A very important and critical element in any business is capital. An entrepreneur will usually face problems for capital financing (Khan et al., 2017). Capital is the net value of a business or company that will be used to increase the value of that business or company (Hasril & Norasmah, 2010). According to Ibrahim & Ahmad (2006), the capital can consist of cash, inventory and equipment. Entrepreneurs need to understand clearly the forms, types and sources of funding that are needed to finance their business. A business can fail if an entrepreneur does not have enough capital.

Culture

Cultural aspects are important in entrepreneurial ecosystems (Dell et al., 2019). The attitude of "giving first before you get" need to be embedded in society in the beginning. This is the sharing of knowledge culture by expanding the experiences and expertise of knowledge. Dare to failure attitude is also important to entrepreneurs in accepting any risk. Entrepreneurs should not be ashamed when they fail (Chua & Bedford, 2016). An entrepreneur should be able to convince others about his new ideas. They also should be able to influence the financial institution's partner to invest capital in order to execute his new business idea or business plan in reality (Ooi, 2013).

Advisor, Mentor and Supporting System

An advisor is an individual who provides guidance, support and assistance in a professional manner. At the universities, the mentor is usually the senior lecturers who have more experience and can be role models. The mentee, assisted by the mentor, needs help in self-development, development, research, teaching and learning, innovation and career enhancement (Mohd. et al., 2002). Mentors, with their ability, can use appropriate teaching approaches such as presenting oriented training, skills or teamwork development training (Izham et al., 2008).

University as mechanism

In this context, the Ministry of Higher Education (MOHE) believes it is significant for universities, polytechnics and community college students to be exposed and can be applied with entrepreneurial values and skills that include leadership, innovation, creativity, resilience, competitive, self-reliant, risk taking and ability to identify and open new opportunities (Ministry of Higher Education, 2011). MOHE has launched the Higher Education Entrepreneurship Development Policy aimed at promoting a more organized and holistic entrepreneurship education and development among higher education institutions (Zain et al., 2015).

Training and Education

Training programmes and educational levels play a role in ensuring the survival of an entrepreneur's business (Jabeen et al., 2017). According to Hashim et al. (2010), the best training category consists of motivational, business and entrepreneurial skills. Furthermore, according to Darby (2013), an entrepreneurship basic knowledge should be present in every student because through this knowledge, it can be used as a guide when students enter the job market as an employee or self-employed. Through education and training, the number of individuals involved in entrepreneurship can increased.

Human Resources and Man Power

Warman (2010) believes that human capital quality is the most critical element in achieving national missions. Therefore, human capital development will be the main thrust of development during the period of the Ninth (9th) Malaysian Plan. Human capital development will be implemented holistically encompassing the acquisition of knowledge and skills or intellectual capital including entrepreneurial capabilities and science and technology knowledge. This effort will be strengthened to develop a knowledgeable, skilled and innovative human capital to drive a knowledge-based economy. Emphasis will also be given to the development of human capital with attitudes and progressive thinking (Rosli, 2013).

Local and Global Market

The Assistant Minister of the Ministry of Tourism, Datuk Talib Zulpilip, has suggested that Malaysia who is practising an open business concept after a long time, could provide a space for entrepreneurs and local businesses to expand their business globally if it has a strong business platform in the local market (Hashim et al., 2010).

Entrepreneurship Development in Malaysia

After independence, the Malaysian government recognizes the importance of entrepreneurship to individuals, communities and countries and how entrepreneurship can contribute to national peace. Since then, the government has been focusing on entrepreneurship. As a result, today we can see everyone is encouraging and supporting the development of entrepreneurship in Malaysia. The government encourages entrepreneurship development and recognizes entrepreneurship as they contribute to the national economic development (Darby, 2013). In today's environment, entrepreneurship is important as it acts like a catalyst for economic change and development (Dhaliwal, 2016). The role of entrepreneurship in economic development is not only to increase per capita production and income levels, but also to change the business structure and society (Feldman & Storper, 2018). This change is accompanied by growth and increase in spending (Ooi, 2013).

Entrepreneurship Education in Malaysia

The Malaysian government has been focusing on new target groups in entrepreneurship education; they are students from both the public and private higher institution through a programme called Graduate Entrepreneur Development Programme. This programme was sponsored by Ministry of Entrepreneur Development of Malaysia (MeCD) and was implemented at all public universities and five private universities. The main objective of this programme is to change students' mindset to engage in entrepreneurial career and at the same time overcome unemployment problems among graduates (Nasharudin & Harun, 2010). Every university plays an important role in producing competent graduates who are willing to be placed either locally or international employment sector. Most of the issues that are related to graduate employability has always been closely linked to graduate marketability and skills. For these particular reasons, MOHE has taken several strategic actions to ensure all

graduates have the qualities and characteristics to fulfil the market demand. In addition to providing higher education opportunities to qualified candidates, MOHE is also responsible for ensuring that each graduate has high marketability and workability values (Rosli, 2013). Recently, a new enhancement programme organized by the ministry, called the 3EP (Enhancement Entrepreneurial Educators Program), which started in August 2016, has brought a new wave to the teaching of entrepreneurship to all public universities in Malaysia. This effort not only intended to produce graduates with highly entrepreneurial skills, but also graduates who could create jobs rather than looking for jobs.

Campus Entrepreneurship Ecosystem – Centre of Business and Entrepreneurship (CBER)

As one of the public universities that is well known in engineering and technology area, UTHM is not left behind in responding to the transformation of the nation's higher education program. UTHM is committed to support and provide entrepreneurship activities among students as highlighted by the Ministry of Higher Education in it shifts to produce a holistic, entrepreneurial and balanced graduates as one of the country's critical agendas. Therefore, a substantial number of various events and interesting activities was planned and conducted. These would include events like sale carnivals, booth, futsal tournaments, aerobics, cultural performances, tele-matches and the *Pancaindera* Concert (Portal UTHM, 2015).

The establishment of the UTHM Business and Entrepreneurship Centre (CBER) was the result of the Institutions of Higher Learning (IPT), Entrepreneur Development Policy. The policy aims to encourage and strengthen entrepreneurship development in higher education institutions. Thus, it enables entrepreneurial activity to be implemented in university with organized and holistic programmes, especially to produce quality students with entrepreneurial thoughts, traits and values. It was in line with government policies that encourage all universities in Malaysia to generate their own income to cover 30% of university's management costs. Each University should also be more proactive in conducting income generating activities (UTHM Business and Entrepreneurs Club, 2015).

RESEARCH METHODOLOGY

Research design is a focused method on how a research is conducted (Marican, 2005). This research, is conducted in within UTHM, one of the public universities in Malaysia. This study has obtained ethical approval from the university authorities, with no conflict of interest. It has adopted interview techniques, which were recorded with the use of voice recorder, as data gathering tool to obtain detailed information from the respondents based on the research objectives. This study did not involve any other research instruments. Language used during the interview was Malay Language, it was then being translated into English for publication purposes. This study has taken approximately six (6 months) to be successfully carried out following the systematic research process. All data gathered were analysed using qualitative methodology. According to Anderson (2006), qualitative research is a strategy that commonly stresses on the data of words compared to numbers which were gathered and analysed and it serves to explore subjective phenomenon rather than the objective fact. In-depth interviews were conducted with 10 students and one (1) officer from CBER. The respondents were chosen purposively with certain criteria, that is students who own a business that are registered with CBER, whether or not they are renting kiosk from CBER or participating in the training programs organized by CBER. The students were not willing to disclose their background information.

One of the advantages of qualitative method is that, the researcher is able to get quick and direct response from the respondents. The interview sessions were recorded using a voice recorder with the duration between thirty (30) to forty (40) minutes for each interview at various locations such as the university café, etc. Structured interview instrument was adopted for this purpose. These conversations, including the question and answer session, were limited to the questions surrounding the research area and objectives. The interview was guided by the interview guide or interview protocol. This protocol has been practised by the author during the interview session. Among the protocol practised were; identifying self, identity and purpose of research; overview briefing on the intended questions to be asked during the interview; assuring confidentiality of respondents; ensuring comfortable environment during the interview session; and dictating and recording of conversation with the consent of the respondents.

After each interview session, transcription of interview data was done by typing all the responses in Word document. The transcriptions were then cross-validated with the respondents to avoid any addition or deletion and

omission of important points during the interview. After the completion of data collection, all data were analysed using Miles and Huberman (1994) Method of Data Reduction, Data Display and Drawing Conclusion. Data collection is gathering data from respondents that are related to the research objectives only, Data Display is displaying data in various form for easier comprehension and analysis, which can be either visualised in terms of tables, graphs, diagrams or percentages etc. Finally, the last stage is drawing conclusions from the emerging data. It is basically to come up with the conclusion of study after going through a careful deliberation of the research findings. While performing data display stage, the researcher also adopted thematic analysis in identifying themes and sub themes of the study. This process was done manually and no technical software was utilized. The data reached a point of saturation when the researcher identified the same key words, themes and ideas and responses from the respondents.

FINDINGS and ANALYSIS

Basically, there are four (4) broad themes that have been identified based on the themes identified in the interview sessions with all respondents. They are financial assistance, facilities and infrastructure, training and education and the benefits of involvement. The interview data with main respondents i.e. the students; have also been triangulated with the interview with the officer of CBER.

Theme 1: Financial Assistance

Table 1 shows the sub-themes of the responses from the respondents. The most obvious finding is that majority of the respondents use their own pocket as the capital to start-up their business. Besides, they have insufficient financial capital to run their business. They also claim that, *"We need financial support from CBER, because this will help us tremendously in managing our business"* (Respondents 4 and 9). Other respondents said that *"I believe, when CBER provides some kind of loans to students, the number of students who are willing to become entrepreneur will definitely increase"* (Respondent 5).

When the officer of CBER was asked about this situation and how the office could help to facilitate this issue, she claimed that,

"Obviously, no financial help and loans are provided to students by our centre, the financial aid we receive from the Ministry is actually to facilitate the entrepreneurial programmes for the whole university. As for 2014, we received RM100,000 from the ministry and the entrepreneurship club has received RM4000." (CBER Officer)

Table 1: The Sub-themes for Financial Assistances

Sub themes	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10
Sub theme: Financial Assistances										
Self	√			√	√	√	√	√		√
Friends		√								
Family			√							
Relatives									√	
Sub theme: Problem with Financial										
Lack of financial capital	√		√			√	√	√		√
Lack of saving for capital		√								
Subtheme: Initial Capital										
<RM1000	√									
RM1000-RM2000		√					√		√	√
RM2000-RM3000			√	√		√		√		
>RM3000					√					

Theme 2: Facilities and Infrastructure

Table 2 shows the sub themes for facilities and infrastructure, namely location, source of information, reasonable price of kiosk rental and also suggestions for improvement required by students with regard to the facilities available. All students agree that the kiosks or premises provided by CBER where they run their businesses are located at strategic locations in the university. However, only three out of total respondents expressed that the locations are central to students' attention. When being probed further, the respondents claim that the locations has to be located at the centre of students' activities. This issue has been validated by the officer who said that the kiosks are placed at students' business centre, nearby automated teller machines, banks and library. With regard to the sources of information, most respondents mentioned that they received any updates or news about business opportunities at the university from their friends and social media. Only one respondent said that he or she obtained the information from CBER (Respondent 7), Notice Board (Respondent 5) and Advertisement (Respondent 10). Most pointed out that, *"To me, I prefer social media as medium of communication and dissemination because it is very easy and fast to reach the intended target audience"* (Respondents 1,2,3,4,7,8 and 9). This concern has also been asked to the officer, and she claimed that, *"The centre has used several mediums for promoting the vacant of kiosks, we use facebook, blog, notice board and advertisement"* (CBER Officer). Another significant finding with regard to the facilities and infrastructure is that, majority of the respondents asserted that the price charged for the kiosks rental fee is reasonable and cheap thus allowing them to make more profit form the business.

Table 2: The Sub-themes for Facilities and Infrastructure

Sub themes	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10
Sub theme: Location										
Strategic Location	√	√	√	√	√	√	√	√	√	√
Center of Students		√				√	√			
Sub theme: Source of Information										
CBER							√			
Friends	√	√	√			√		√	√	
Social Media			√	√	√		√	√		
Notice Board					√					
Advertisement										√
Sub theme: Price of Kiosk Rental										
Reasonable	√	√	√	√		√	√	√		√
Sub theme: Improvement for Infrastructure and Facilities Require by Students										
Require Maintenance	√									
To suffice the incomplete facilities		√				√	√		√	
To provide more kiosks			√	√	√		√			√

Theme 3: Training and Education

Table 3 shows the subthemes for training and education namely the entrepreneurship subject, factors of involvement and the benefits of involvement. All respondents asserted that they could apply the entrepreneurship subject they have learned in their business classes. One of the respondents said that *"The subject has taught the concepts of entrepreneurship and the practicality of the business, because we were given hands-on assignment to start-up our very own small kiosks and/or selling things online or offline"* (Respondent 1). Another respondent added that,

"My friends and I were so excited to come to the entrepreneurship programmes and events organized by CBER as we were taught many practical skills in business, and this is a golden chance to us"
(Respondent 5).

Besides, several respondents claimed that they are so happy as they have the chance to visit and network with the government agencies which are beneficial to them.

With regard to the involvement of students in participating the programmes and trainings offered by CBER, findings revealed that the level of involvement is considered medium level. This might be due to many students

who might not be interested or might not be well-informed about the events. The CBER officer has mentioned that the students' participation in the programmes are relatively not really high. The responses received from the respondents show that self-interest is the main reason for their involvement, followed by financial assistances and facilities/infrastructure provided by university and CBER. Training and education programmes and profit-oriented scored the lowest. For the benefits of involvement, the five most important themes identified in this study are to develop courage, to improve weaknesses, to gain experience, to become self-discipline and to get knowledge. One respondent mentioned that,

“For me, having business and at the same being a student is really challenging, but it teaches me how to manage my time properly so that, I would earn money as well as my Degree” (Respondent 6).

Besides that, another respondent has highlighted a theme on being courageous as she pointed out that,

“Being an entrepreneur while doing my degree has taught me to have courage in everything I do, I will become more courageous to face the challenges in the business environment when I graduate” (Respondent 5).

Table 3: The Sub-themes for Training and Education

Sub themes	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10
Sub theme: Entrepreneurship Subject & Training Programs										
Application of knowledge	√	√	√	√	√	√	√	√	√	√
Theories and Practicality		√	√	√		√	√	√	√	
Chances of Networking with External Agencies		√	√					√	√	
Sub theme: Factors of Involvement										
Self-interest	√		√			√	√	√		√
Training and Education Programs		√					√			
Financial Assistances	√	√			√	√				√
Facilities and Infrastructure		√	√	√		√		√		
Profit-Oriented				√				√		
Subtheme: Benefits of Involvement										
To gain knowledge	√							√		
To gain experience		√	√			√				
To improve weaknesses				√			√			√
To develop courage					√	√			√	√
To develop self-discipline				√				√		

DISCUSSION

Financial Assistance

This is the most critical and important element in an organisation as a start-up capital. An entrepreneur usually will encounter the issue of getting financial support for start-up capital (Khan et al., 2017). Capital is the total value that a company needs to use, in adding value to their business operation (Daut et al., 2015). This much indicates the importance of financial support in an organization. Result from the interviews conducted on students and CBER UTHM staff finds that most of the students are facing financial constraint and need financial support through capital loan to start-up a business. CBER involvement and support to provide financial assistance will able to attract and increase student participation in entrepreneurship programmes or activities.

Infrastructure and/or Facilities

According to Pihie & Elias (2011), infrastructure creates communication between theory and the real world. Infrastructure facilities is important in supporting and ensuring the smooth sailing of an education process. This is due to the fact that adequate infrastructure helps students' involvement in entrepreneurial activities (Porter & Graham, 2019). It is clear that adequate facilities affect students' level of involvement. The research findings

revealed that most students are interested to be involved. However, the limited number of available kiosks provided by CBER does affect the number of students venturing into business in UTHM.

Education and Training

Education and training are able to increase the number of individuals involved in entrepreneurship (Jabeen et al., 2017). Apart from that, education and training have to play the role in shaping entrepreneurial culture amongst students in to generate prosperity and growth in the national economy (Darby, 2013). The research findings revealed that CBER strives to offer encouragement by engaging students with entrepreneurial activities. Findings from the interviews conducted with CBER reveals that the organization has planned various activities and programmes in providing students with the education and training on entrepreneurship. Thus, CBER has strived to gain students' interest to be involved in entrepreneurship. It is clear that this effort shows positive effects on students and their involvement in entrepreneurship at UTHM.

CONCLUSION

This empirical study attempts to explore the entrepreneurship ecosystem and UTHM students' involvement in entrepreneurship. This study initially started based on the issues regarding the critical unemployment rate which continuously increases in recent years. The researcher came up with the idea that involvement of students in entrepreneurship programmes could be one of the best solutions to this problem. On the contrary, the issues that were derived from the entrepreneurship ecosystem such as infrastructure and financial support seemed to have deterred the involvement of students in entrepreneurship activities. Interviews have been conducted with students and one officer of CBER. However, the result is limited for UTHM students only. It can be used as the basis for other researches in entrepreneurship. Another important limitation of this study is that the ecosystem limits to only financial, infrastructure and training education, it does not reflect the whole ecosystem as proposed by Isenberg (2014).

The outcome of this study is expected to provide useful benefits to students to be more inclined to engage in entrepreneurial activities by using the entrepreneurial ecosystem at UTHM fully. In addition, CBER can also improve and enhance entrepreneurial ecosystems to provide students with the opportunity to continue engaging in entrepreneurial activities while providing various facilities to students. CBER could also think about tapping the other ecosystem in the campus that would enhance and encourage students involvement in entrepreneurial activities, such as on the dimension of advisor, mentor and supporting system to the students who have portrayed their potentials to become successful entrepreneurs. Internally, this can be done to identify mentor-mentee relationship between entrepreneurial lecturer with this particular student. Externally, to identify the alumni of UTHM who are successful entrepreneurs in the current business environment nowadays to provide advice and support to the students. With this, students would gain much more benefits from the relationships.

Besides, embedding entrepreneurial culture has to be done since the Year One of their studies. Every course and/or lecturer will have to embed entrepreneurial traits and skills in their teachings to enrich students. Results also show a number of improvements being suggested by the respondents to CBER. Among others are: Increase the number of available kiosks; provide financial assistance for students to start their business; variate and expand programmes that can increase students' interest; initiate entrepreneurship networking programme amongst local and international universities; and provide a "Student's Mall" to attract students involvement in entrepreneurship. The business lots are rented to the university's students only. Finally, this study is expected to provide an overview of the students' involvement in entrepreneurial activities in UTHM, thus contribute as a ground for other universities to embark on similar research. In addition, the findings of this study are also expected to stimulate national effort by the Ministry to manage efficiently all entrepreneurial activities in higher learning institutions.

REFERENCES

- Amran, N. (2015). *Perangkaan Utama Tenaga Buruh Malaysia*, Januari 2015, 3(68), 1–5.
- Anderson, J. D. (2006), *Imperial COE, Superintendent of Schools*.
- Asmawi Hashim, Zuraidah Zainol, & Suzyanty Mohdshokory. (2010). *Kecenderungan Graduan Untuk Menceburi Bidang Perniagaan Sebagai Kerjaya*, 6–11.
- Azlizan Talib & Hamzah Jusoh. (2012). Penyertaan Komuniti dalam Bidang Keusahawanan LuarBandar . Kajian di Daerah Kubang Pasu , Kedah Community Participation in Rural Entrepreneurship : A Study in Kubang Pasu ,Kedah. *Prosiding Kebangsaan Ekonomi Malaysia Ke VII*, 2, 738–749.
- Azman Ismail, Kamsiah Hasbullah, Rizal Abu Bakar, & Mohamad Hashim Othman. (2011). Kesan Pemindahan Pengetahuan, Kemahiran DanKebolehan Ke Atas Amalan Komunikasi Dalam Sistem Mentoring Di Institusi Pengajian Tinggi Awam . *Malaysian Journal of Educators and Education*, 22, 133–160.

- Retrieved from [http://www.usm.my/education/publication/JPP_AZMAN_ISMAIL_ART_9_\(133-160\).pdf](http://www.usm.my/education/publication/JPP_AZMAN_ISMAIL_ART_9_(133-160).pdf) Berdasarkan Kepada Perspektif Belia Orang Asli di Selatan Malaysia, 18.
- Bpk, Kementerian. Pendidikan. Malaysia. (2011). *Buku Panduan Elemen Keusahawanan*. Kementerian Pelajaran Malaysia, 1–58.
- Chua, H. S., & Bedford, O. (2016). A qualitative exploration of fear of failure and entrepreneurial intent in Singapore. *Journal of Career Development*, 43(4), 319-334. VOL VI, NO. I, 2020
- Darby, S. (2013). Perhimpunan Usahawan Bumiputera 2013: *Agenda Transformasi Ekonomi Bumiputera Tan Sri Nor Mohamed Yakcop*, Convention Centre Bukit Kiara, Kuala Lumpur, 1–12.
- Dell, K., Lythberg, B., & Woods, C. (2019, February). Cultural-spatial contexts: understanding entrepreneurial ecosystems from an Indigenous world view. In *Australian Centre for Entrepreneurship (ACE) Research Exchange Conference*, 2019.
- Dhaliwal, A. (2016). Role of entrepreneurship in economic development. *International Journal of scientific research and management*, 4(6), 4262-4269.
- Esiebugie, U. M., Adudu, C. A., & Richard, A. T. (2018). Entrepreneurship Education and Unemployment Reduction in Benue State, Nigeria. *JEP*, 9(33).
- Feldman, M., & Storper, M. (2018). Economic growth and economic development: Geographical dimensions, definition, and disparities. *The New Oxford handbook of economic geography*, 143.
- Guerrero, M., Urbano, D., Cunningham, J. A., & Gajón, E. (2018). Determinants of Graduates' Start-Ups Creation across a Multi-Campus Entrepreneurial University: The Case of Monterrey Institute of Technology and Higher Education. *Journal of Small Business Management*, 56(1), 150-178.
- Gutiérrez, J. G., & Baquero, J. E. G. (2017). New cross-proposal entrepreneurship and innovation in educational programs in third level (tertiary) education. *Contaduría y Administración*, 62(1), 239-261.
- Hafidzin, H. B. (2011). Hasniza binti hafidzin 2011., 24(2). Ke Arah Kelestarian Penghasilan Modal Insan Negara. Hamdan, A., Khamis, R., Reyad, S., Badawi, S., & Hassan, A. (2019, September). Entrepreneurship and Economic Growth: Literature Review. In *International Conference on Innovation and Entrepreneurship* (pp. 350-XXIV). Academic Conferences International Limited.
- Ibrahim, Y., & Ahmad, N. (2006). Keusahawanan dan Daya Saing Usahawan Melayu di Sektor Pelancongan. *Jurnal Pengajian Melayu*, Jilid 17, 16–33.
- Jabeen, F., Faisal, M. N., & Katsioloudes, M. I. (2017). Entrepreneurial mindset and the role of universities as strategic drivers of entrepreneurship. *Journal of Small Business and Enterprise Development*.
- Kelab Keusahawanan dan Perniagaan UTHM laman muka buku (atas talian) dari <https://www.facebook.com/groups/kkdt.uthm>
- Khan, M. K., Zhao, X., Akram, U., Hashim, M., & Kaleem, A. (2017). Crowdfunding: An Innovative Approach to Start Up with Entrepreneurship. In *Proceedings of the Tenth International Conference on Management Science and Engineering Management* (pp. 1293-1304). Springer, Singapore.
- Marican, S. (2005). *Kaedah Penyelidikan Sosial*. Edisi Pertama Petaling Jaya: Prentice Hall Pearson Malaysia
- Mohd Hasril, A., & Norasmah, O. (2010). *Meninjau Keperluan Pendidikan Keusahawanan*
- Mohd Hassan Mohd Osman. (2007). Faktor-faktor yang mempengaruhi kejayaan usahawan kredit mikro di Negeri Johor, 1–122. Dari <http://eprints.utm.my/5815/1/75002.pdf>
- Mohd Izani Mohd Zain, Azwarni Herni Che Noh, & Pegawai-Pegawai Perhubungan Awam Jabatan, Agensi, I. (2015). “Pelan Tindakan Pengajian Tinggi Negara Fasa 2 (2011-2015) Mencetus Transformasi Pengajian Tinggi, Unit Komunikasi Korporat, Kementerian Pengajian Tinggi, 2, 4–5. Dari http://www.mohe.gov.my/portal/images/utama/penerbitan/bitara_jun_2011.pdf
- Mohd Izham Mohd Hamzah, Jamil Ahmad, & Rosima Alias. (2008). Perbandingan keperluan aspek keusahawanan dengan lain-lain aspek kemahiran generik dalam memenuhi pasaran kerja mengikut persepsi majikan dan pelajar institusi pengajian tinggi swasta di Malaysia.
- Mohd, T., Hamid, Y., Ismail, N. A., Hamimi, A., Tharim, A., Akademik, P., Perak, M. (2002). *Pelaksanaan Program Pementoran Berstruktur UiTM (Perak)*.
- Norfadhilah Nasharudin & Halimah Harun. (2010). Aspirasi Kerjaya Keusahawanan dalam Kalangan Pelajar Institusi Pengajian Tinggi Awam. *Jurnal Pendidikan Malaysia*, 35(1), 11–17. <http://doi.org/10.1177/1069072710385547>
- Ooi, Y. K., Habshah, B., Shuhymee, A., Pengajian, H.P., Perniagaan, P., & Perniagaan, K. (2013). Persepsi Pensyarah Untuk Mengajar Kursus Keusahawanan: Satu Kajian Empirik Di Universiti Utara Malaysia. *Nd International Seminar on Quality and Affordable Education* (Isqae), 89–93.
- Pihie L, Z. A., & Elias, H. (2011). Keupayaan Usahawan Bumiputera Melaksanakan Kemahiran Keusahawanan: Satu Kajian Kes. *Pertanika J. Soc.Sci. & Hum.*, 12(1) Portal Universiti Tun Hussein Onn Malaysia (atas talian) dari <http://www.uthm.edu.my/v2/>

- Porter, W. W., & Graham, C. R. (2016). Institutional drivers and barriers to faculty adoption of blended learning in higher education. *British Journal of Educational Technology*, 47(4), 748-762.
- Prahalad, C. K. 2005. *The fortune at the bottom of the pyramid: eradicating poverty through profits*. Saddle River, NJ: Wharton School Publishing. P65.
- Reidolf, M., Küttim, M., Michelson, A., Rozeik, H., & Kallaste, M. (2019). Applying the concept of entrepreneurial ecosystems in Estonia. *Zeitschrift für Wirtschaftsgeographie*, 63(2-4), 134-145.
- Rosli, F. B. M. (2013). *Pembudayaan Keusahawanan Ke Arah Mempengaruhi Kecenderungan Menceburi Bidang Keusahawanan Dalam Kalangan Bakal Graduan Di UTHM*
- Roundy, P. T. (2017). Social entrepreneurship and entrepreneurial ecosystems. *International Journal of Social Economics*.
- Sarimah Che Hassan, Norlizah Che Hassan, & Nor Aisyah Buang. (2010). Penguasaan kemahiran insaniah (kemahiran keusahawanan) dalam kalangan guru sekolah di Malaysia. *Proceedings of The 4th International Conference on Teacher Education; Join Conference UPI & UPSI Bandung, Indonesia*, 8-10 November 2010
- Warman, S., Roddin, R., Esa, A., Awang, H., Mohamed, M., & Rahman, A. A. (2010). Penerapan Kemahiran Keusahawanan Dalam Kalangan Pelajar Di Politeknik. *Persidangan Kebangsaan Pendidikan Kejuruteraan Dan Keusahawanan*, (September), 206–211.
- Wp-, S. (2014). *Growing and sustaining entrepreneurial ecosystems: What they are and the role of government policy*.