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, Ahmed Saleh Ahmed Al-Shameri, and Fazian Hashim

Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, 86400, Parit Raja, Batu Pahat, Johor,

*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 form 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 Universiti Tun Hussein Onn Malaysia (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 using an in-depth interview technique. The respondents consisted of 10 students and officers from the Centre of Business Entrepreneurship Development. The data were then transcribed and analysed using thematic analysis. The results of this study showed that financial assistance, infrastructure, education and training is a very important ecosystems 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 15 Feb 2020 Accepted 30 March 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). Entrepreneurship is important to create a creative and innovative generation. 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 careers 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).

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 ability to develop innovation and technology (Hafidzin,

2011). 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.

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.

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 career. According to Prahalad (2005), an entrepreneurial ecosystem is defined as an ecosystem that enables different actors such as individuals, enterprises and society to work together effectively in generating economic prosperity. 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 the financial aspect is crucial in determining the direction and pattern of individual engagement in entrepreneurship because, without adequate capital and adequate finances, 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.

BACKGROUND OF STUDY

Entrepreneurship Ecosystem

Entrepreneurship is no longer a new thing for Malaysians. 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 the entrepreneur's activities and skills.

There are nine components of entrepreneurial ecosystems which are government policies, infrastructure, finance, culture, mentors, universities as catalysts, education and training, human capital and manpower. 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 detail 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 Higher 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 entrepreneurial 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, the availability of infrastructure provided by higher education institutions, it will further facilitate learning and the application of entrepreneurial values among students (Porter & Graham, 2019). Indirectly, students are exposed to the real situation of doing business and not just to classroom theory.

Funding and Finance

A very important and critical element in any business is capital. An entrepreneur will usually face problems with capital financing (Khan et al., 2017). 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" needs 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. Mentors, with their ability, can use appropriate teaching approaches such as presenting-oriented training, skills or teamwork development training (Izham et al., 2008). 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).

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. (2008), the best training category consists of motivational, business and entrepreneurial skills. Furthermore, according to Darby (2013), entrepreneurship basic knowledge should be present in every student because this knowledge 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 increase.

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).

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 national economic development (Darby, 2013). In today's environment, entrepreneurship is important as it acts as 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 an 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 public and private higher institutions through a programme called Graduate Entrepreneur Development Programme. This programme, sponsored by the Ministry of Entrepreneur Development of Malaysia (MeCD) and implemented at all public universities and five private universities, aims to change students' mindsets to engage in entrepreneurial careers and at the same time overcome unemployment problems among graduates. TEKUN provides a loan programme to help graduates who have completed their studies, or have worked and are interested in starting a business but lack capital (TEKUN Nasional, 2018).

Every university plays an important role in producing competent graduates who are willing to be placed in either the local or international employment sector. Most of the issues that are related to graduate employability have 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 fulfill 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 was 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 t 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 supporting and providing entrepreneurship activities among students as highlighted by the Ministry of Higher Education in its shifts to produce holistic, entrepreneurial and balanced graduates as one of the country's critical agendas. Therefore, a number of events and interesting activities were planned and conducted including sale carnivals, booths, futsal tournaments, aerobics, cultural performances, tele-matches and concerts.

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 universities 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 the university's management costs. Each University should also be more proactive in conducting income-generating activities (UTHM Business and Entrepreneurs Club, 2015).

METHOD

Research design is a focused method on how research is conducted (Marican, 2005). This research is conducted 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 a voice recorder, as a data-gathering tool to obtain detailed information from the respondents based on the research objectives. This study did not involve any other research instruments. The language used during the interview was the Malay Language, which was then 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. 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 is registered with CBER, whether or not they are renting kiosks 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 the qualitative method is, the researcher is able to get quick and direct responses from the respondents. The interview sessions were recorded using a voice recorder with a duration between thirty (30) to forty (40) minutes for each interview at various locations such as the university café, etc. A 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 a comfortable environment during the interview session; and dictating and recording of a conversation with the consent of the respondents.

After each interview session, transcription of interview data was done by typing all the responses into a 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 forms 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 the study after going through careful deliberation of the research findings. While performing the 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 keywords, themes and ideas and responses from the respondents.

FINDINGS AND ANALYSIS

Basically, there are four (4) broad themes that have been 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 the 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 entrepreneurs 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)

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

Table 1: The Sub-themes for Financial Assistance

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.

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		1			$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	1	
Center of Students		1				√	$\sqrt{}$				
Sub theme: Source of Information											
CBER							1				
Friends	$\sqrt{}$	V	$\sqrt{}$			√		√	V		
Social Media			$\sqrt{}$	$\sqrt{}$	√		$\sqrt{}$	√			
Notice Board					√						
Advertisement										V	
Sub theme: Price of Kiosk Rental											
Reasonable	√	V	√	√		√	V	√		V	
Sub theme: Improvement for Infrastructure and Facilities Require by Students											
Require Maintenance	√										
To suffice the incomplete facilities		V				V	V		V		
To provide more kiosks			$\sqrt{}$	$\sqrt{}$	V		$\sqrt{}$			V	

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 the total respondents expressed that the locations are central to students' attention. When being probed further, the respondents claim that the locations have 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 the students' business centre, nearby automated teller machines, banks and the 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 the 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 of 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 the 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 from the business"

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.

Sub themes	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10
Sub theme: Entrepreneurship Subject & Training Programs										
Application of knowledge	1	√	1	√	1	1	√	1	1	1
Theories and Practicality		$\sqrt{}$	1	V		1	V	V	V	
Chances of Networking with External Agencies		1	V					V	V	
Sub theme: Factors of Involve	ement									
Self-interest	V		V			V	V	V		V
Training and Education Programs		V					V			
Financial Assistances	V	$\sqrt{}$			1	1				1
Facilities and Infrastructure		$\sqrt{}$	1	V		1		V		
Profit-Oriented				V				V		
Subtheme: Benefits of Involve	ement									
To gain knowledge	V							√		
To gain experience		$\sqrt{}$	V			V				
To improve weaknesses				V			V			1
To develop courage					V	V			V	V
To develop self-discipline				V				V		

Table 3: The Sub-themes for Training and Education

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;

"My friends and I were so excited to come to the entrepreneurship programmes and events organised 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 in the programmes and training 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 student's participation in the programmes is relatively not really high. The responses received from the respondents show that self-interest is the main reason for their involvement, followed by financial assistance and facilities/infrastructure provided by the 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, improve weaknesses, gain experience, become self-disciplined and get knowledge. One respondent mentioned,

"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).

Another respondent has highlighted a theme of being courageous as she pointed out,

"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).

DISCUSSION

Financial Assistance

This is the most critical and important element in an organisation as 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 its business operation (Daut et al., 2015). This indicates the importance of financial support in an organization. The result from the interviews conducted with students and CBER UTHM staff finds that most of the students are facing financial constraints and need financial support through a capital loan to start up a business. CBER involvement and support to provide financial assistance will be 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 are 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 a role in shaping entrepreneurial culture amongst students 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 reveal that the organization has planned various activities and programmes in providing students with 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 AND RECOMMENDATIONS

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 to 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 is limited 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 on the campus that would enhance and encourage students involved in entrepreneurial activities, such as the dimension of advisor, mentor and supporting system for the students who have exhibited their potential to become successful entrepreneurs. Internally, this can be done to identify mentor-mentee relationships between entrepreneurial lecturers 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 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: increasing the number of available kiosks; providing financial assistance for students to start their business; variate and expanding programmes that can increase students' interest; initiating entrepreneurship networking programme amongst local and international universities; and providing a "Student's Mall" to attract students involved in entrepreneurship. The business lots are rented to the university's students only. Finally, this study is expected to provide an overview of the student's involvement in entrepreneurial activities at UTHM, thus contributing 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. Future studies can also explore the entrepreneurial ecosystem of other local universities and be compared with the ones in place at UTHM.

DECLARATION STATEMENT

The lead author* affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that any discrepancies from the study as planned (and, if relevant, registered) have been explained.

ACKNOWLEDGEMENT

The authors wish to thank the University for their support of this study.

CONFLICT OF INTEREST

The authors declare no self-interest in the study conducted

REFERENCES

- Asmawi Hashim, Zuraidah Zainol, & Suzyanty Mohdshokory (2008). *Kecenderungan Graduan Untuk Menceburi Bidang Perniagaan Sebagai Kerjaya*, 6–11. Universiti Pendidikan Sultan Idris
- Azlizan Talib & Hamzah Jusoh. (2012). Penyertaan Komuniti dalam Bidang Keusahawanan LuarBandar . Kajian di Daerah Kubang Pasu , Kedah Community Participation in Rural Entreprenuership : 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 Dan Kebolehan Ke Atas Amalan Komunikasi Dalam Sistem Mentoring Di Institusi Pengajian Tinggi Awam. *Malaysian Journal of Educators and Education*, 22, 133–160 http://www.usm.my/education/publication/JPP
- 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.
- Darby, S. (2013). Perhimpunan Usahawan Bumiputera 2013. Agenda Transformasi Ekonomi Bumiputera, by 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 worldview. In *Australian Centre for Entrepreneurship (ACE) Research Exchange Conference*, 2019. https://researchspace.auckland.ac.nz/docs/uoa-docs/rights.htm
- Dhaliwal, A. (2016). Role of entrepreneurship in economic development. *International Journal of scientific Research and Management*, 4(6), 4262-4269.
- 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). Kajian terhadap kecenderungan keusahawan dalam kalangan pelajar jurusan perdagangan SMK Seksyen 24(2) Shah Alam Selangor. University Utara Malaysia. Unpublished Masters Degree. In press
- Hamdan, A., Khamis, R., Reyad, S., Badawi, S., & Hassan, A. (2019, September). Entrepreneurship and Economic Growth: Literature Review. At *International Conference on Innovation and Entrepreneurship* pp. 350. 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.
- 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 Ministry Of Higher Education Malaysia (2011). *Guide Book on the Elements of Entrepreneurship, Curriculum Development Division*. 1–58.
- 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. http://www.mohe.gov.my/portal/images/utama/penerbitan/bitara_jun_2011.pdf
- 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 Empirikal Di Universiti Utara Malaysia. International Seminar on Quality and Affordable Education*, (Isqae), 89–93.
- Pihie L, Z. A., & Elias, H. (2011). Keupayaan Usahawan Bumiputera Melaksanakan KemahiranKeusahawanan: Satu Kajian Kes. *Journal Social.Sciences & Humanities*, 12(1) Portal Universiti Tun Hussein Onn Malaysia, 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. 65.
- 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. January 2013. Universiti Tun Hussein Onn Malaysia. (in press)
- TEKUN Nasional (2018). Retrieved from TEKUN website at https://www.tekun.gov.my/en/tekun-entrepreneur/special-program/special-program-3/
- UTHM Business and Entrepreneurship Centre. Retrieved from https://www.facebook.com/groups/kkdt.uthm 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.