# Skills in Realizing E-Entrepreneurship For Technical And Vocational Education And Training (TVET)Students

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**Abstract:** Entrepreneurial development and education are important agendas in ensuring that the country's higher education system is always competitive and moving forward according to current global demand and trends. Therefore, this study aimed to identify the factors in realizing e-entrepreneurship in terms of skills among students of the Faculty of Technical and Vocational Education at a technical university of Malaysia. This study used quantitative method to collect data through a questionnaire. The results of the study showed that students had a high level of skills in terms of knowledge (Mean = 4.04, SP = 0.65), expertise (Mean = 4.06, SP = 0.68), and interest (Mean = 4.17, SP = 0.60) in realizing e-Entrepreneurship. In conclusion, having entrepreneurial skills were seen to be increasingly important in the current change of entrepreneurial world. In this regard, the findings of this study are expected to contribute to the parties involved in the planning or implementation of entrepreneurship education programs in schools or educational institutions so that appropriate steps can be taken in an effort to improve the implementation of entrepreneurship vocational components in TVET.

Keywords: e-entrepreneurship, TVET, skills

#### 1.0 INTRODUCTION

The Tenth Malaysia Plan (10MP) from 2011-2015 had shown drastic planning on the part of the government in mainstreaming the country's Technical and Vocational Education and Training(TVET) system towards providing alternative education to the community, especially the young. In other words, TVET graduates are graduates of educational institutions who are specially trained to highlight their potential according to inclinations and talents. They are said to be a group of individuals equipped with certain skills in technical and vocational fields that are seen not only to meet the needs of the job market but also potentially act as job creators who will provide employment opportunities to the community. It is a common understanding that the country's youths, especially graduates of Higher Educational Institutions (HEI) are facing intense challenges at this time to place themselves in their chosen careers. This is no exception among TVET graduates. Unemployment of HEI graduates occurs as a result of the slow growth of employment structure and is unable to accommodate the growing number of them every year [1]. The future is seen as increasingly challenging where the 4th Industrial Revolution (Indusri 4.0) continues to create pressure in the existing labor market as the emphasis on the construction of virtual reality technology or Internet of Thing (IOT) gradually takes over labor intensively in the labor market [2]. High dependence of graduates on the current job market especially in careers that suit their qualifications and field of study is seen as unable to resolve the unemployment issue that occurs among them. Some of them inevitably, need to find alternatives by venturing into the field of entrepreneurship according to self-inclinations and trained talents.

In the context of TVET graduates, their potential is recognized as a result of the systematic flow of technical and vocational education in their respective educational institutions. Although the crisis of accreditation or recognition of TVET graduates in Malaysia is still debated, TVET graduates are seen as the most potential graduates to be provided as job generators who can solve most of the unemployment problem among the young people due to their trained skills [2]. Data from the [3] on the marketability of TVET graduates shows that there is an encouraging increase in 2016 where Malaysian Technical University Network (MTUN) show the marketability of graduates at the level of 87.1% followed by Polytechnics (88.6%) and Community Colleges (97.2%). Although this scenario is seen as positive from one angle, this data is seen to continue to contribute to Malaysia's low achievement in terms of entrepreneurial intention [4] especially among TVET graduates in this

context. In fact, efforts to strengthen entrepreneurship either towards entrepreneurial thinking (entrepreneurial mind-set) or the tendency to become an entrepreneur can increase the marketability of graduates, solve the issue of unemployment among young people, increase the socio-economic level of society and reduce the gap between the rich and poor [3]. However, the support of all stakeholders is crucial to its success. This is because previous studies show that there are various factors identified to curb the development of entrepreneurship among the graduates themselves [5]. Therefore, this study aims to look at the factors of skills in realizing entrepreneurship for technical and vocational students.

### 2.0 LITERATURE REVIEW

## 2.1 Definition of Entrepreneurship

The definition of an entrepreneur is focused on the nature of an individual entrepreneurship that refers to the process of occurrence of the activities and actions of an entrepreneur. Although the experts' views on entrepreneurship vary according to their respective fields, the basic concept of entrepreneurship is the same, where it describes the methods used in the success of an entrepreneur's actions to the maximum. According to [6], entrepreneurship is defined as all things related to the entrepreneur or the activities and skills of an entrepreneur. The field of entrepreneurship has grown rapidly, in line with the development of management, strategic management, economics, sociology, and psychology. In general, [7]stated entrepreneurship as a beneficial activity through business development and owned separately by a profit-motivated person.

# 2.2 e-Entrepreneur or Digital Entrepreneur

The advent of the internet around the world has contributed to a variety of intermediaries to do business. In fact, the Internet is a prerequisite to the existence of digital entrepreneurship that has made a huge impact in today's marketing methods. It is seen to bring more benefits than disadvantages [8]. In the past problems of cost and time limited the trade activities. Costs such as transportation, maintenance and advertising can be reduced once digital entrepreneurship begins to be used. Different time zones no longer bring problems to deal with. Digital entrepreneurship is a method or mechanism that helps trade activities more rapidly. Thus, with this development, a new business concept has emerged that has been widely used, namely the digital entrepreneurship (e-commerce). In addition to digital entrepreneurship, other terms used to describe Internet transactions are iCommerce, Internet Commerce and Digital Commerce [9]. With a variety of applications that can be accessed through the internet, it makes a business grow globally. Through this digital entrepreneurship, many traders or entrepreneurs use online applications such as blogs, facebook, instagram and even e-business applications to increase business access and also facilitate the sale and purchase of goods. [9], found that entrepreneurs with high internet orientation also showed an improvement in expanding their business results. Thus, the development of information and communication technology is seen as a catalyst for business expansion, especially in online business.

[10], says that electronic commerce or digital entrepreneurship refers to sectors that include business or commerce that uses equipment and infrastructure of communication and information technology as a medium for communication purposes as well as transactions.

According to him, the World Trade Organization (WTO) Declaration defines e-commerce as "the production, distribution, marketing, sale or delivery of goods and services by electronic means". From a business perspective, [11], states that digital entrepreneurship is a form of business conducted between business partners through the internet and other private networks. This business will involve the sale of information, products and services through the current computer network. According to [12], digital entrepreneurship from an Islamic point of view, has a very similar definition for the conventional view. They saidthat some rules and principles must be followed in the Islamic path, which made the difference. These include the legitimacy of data information control, the legitimacy of transaction security, the legitimacy of promoting goods and the honesty in receiving payment and delivery of goods. This situation is similar to the rules in Islam where consumers must follow some rules set by sharia.

#### 3.0 RESEARCH METHODOLOGY

The study conducted was descriptively in which the design was in the form of a survey study. Researchers obtained feedback from respondents who reviewed the level of skills in realizing e-entrepreneurship. According to [13], survey methods are used to retrieve data or information in a specific time only, often with a set of questionnaires. The researcher only reviews the situation at a given time which was a snap shot that described the current situation.

## 3.1 Research Population and Sample

In this study, the population targeted by researchers was students of the Faculty of Technical and Vocational Education (Creative Multimedia) at a technical university in Malaysia who took entrepreneurship courses. The number of students involved was a total of 50 people, all of from a cohort, namely cohort 5. The study sample involved a number of respondents in a study population. According to [14] in [15]determination of the total sample of the study based on the total population. For this study, the population was 50 people and the sample to be taken at random was 44 students with reference to the sample size determination table [14]. Meanwhile, the sample for the interview involved a total of 2 students involved in the study.

#### 3.2 Instrument

In this study, the research instrument was the quiestionnaire using survey method with quantitative approach. The set of questionnaires had two parts, namely parts A and B. Part A contained 2 items that had questions related to student demographics. Section B contained 30 items that included questions related to students' knowledge, expertise and interest in e-entrepreneurship. The choice of answers for the questions in this section was designed using a nominal scale where the respondents were required to fill in the blanks and mark (/) in the box provided. The collected data from the questionnaire were analyzed using SPSS software. The distribution of content in the set of questionnaires is shown in Table 1:

 Section
 Aspects
 Number of question

 A
 Demographics of respondents
 2

 Students' knowledge in e-entrepreneurship
 10

 B
 Students' expertise in e-entrepreneurship
 10

 Students' interest in e-entrepreneurship
 10

**Table 1:** Questionnaire Content Distribution

Each item of the questionnaire used a five-level Likert Scale to see the level of respondents' agreement on the 50 items starting from 1 as strongly disagree to 5 as strongly agree. The Likert ranking scale is shown as in Table 2 below:

**Table 2:** Likert Rating Scale

Score	Answer options
1	Strongly disagree
2	Disagree
3	Don't agree
4	Agree
5	Strongly agree

## 4.0 Findings and Discussion of the Study

Data analysis is a method of collecting, processing, processing, calculating, and storing data. Data analysis is done in order to obtain the results and results of the study should be useful and have meaningful information. The data obtained were produced in two forms, namely qualitative and quantitative. Quantitative data were analyzed using Statiscal Package For Social Sciences (SPSS) version 23.0 software. In this study, the quantitative data analysis method used included frequency score (f), percentage (%) and mean whichwas descriptive statistical analysis. Table 3 shows the mean score level based on the analysis.

**Table 3:** Classification of Respondent Feedback Based on Mean Score

Scale	Level
1.00 - 2.33	Low
2.34 - 3.67	Moderate
3.68 - 5.00	High

# 4.1 Distribution and Background of Respondents

This section investigated the information about the distribution and background of the respondents. The demographics of the respondents were analyzed using frequency and percentage. Referring to Table 5, the number of female respondents exceeds the number of male respondents. A total of 36 respondents (81.8%) were female students while the remaining 18.3% (8 respondents) were male students. In terms of age distribution, the majority was found to be 59.1% (aged 23 - 24 years), while 40.9% were 18 students who were aged 25 years.

**Table 5:** Respondent Demographic Analysis

Item	Frequency	Percent
Gender		
Male Female	8	18.2%
Temale	36	81.8%
Age		
23-24 years old	26	59.1%
25 years old	18	40.9%

# 4.2 Knowledge Aspect Analysis

Based on the analysis shown in Table 6, it was found that almost all the items related to skills from the aspect of knowledge havehigh level of mean values. In the 2nd item which stated "Understand e-entrepreneurship is the knowledge of activities as a digital entrepreneur" showed the highest mean score of 4.23. This is because [17] states that the collection, search and use of effective information can be done if the entrepreneur is sensitive and has prepared before starting a business by gathering knowledge about the business first. While the lowest valuewas the 6th knowledge item which was "Learn about e-entrepreneurship before entering university" showed a mean score of 3.61 which was at a moderate level. This is also supported by the results of the study of [18] who states that knowledge from unlimited reading can increase one's knowledge to a high level. Ideas produced by highly knowledgeable individuals are more thoughtful and creative as well as innovative than individuals without high knowledge. However, as a whole, students had a high level of knowledge in realizing e-entrepreneurship by obtaining a mean value of 4.04 which was at a high level.

Table 6: Skill fromknowledge aspect

Bil	Item	Mean	SP	Level
1.	Understand the meaning of entrepreneurship is activity as an entrepreneur	4.20	0.76	High
2.	Understand e-entrepreneurship is the knowledge of activities as a digital entrepreneur	4.23	0.77	High
3.	Can differentiate entrepreneurship and e-entrepreneurship.	4.02	0.85	High
4.	Can find ideas to implement into e-entrepreneurship	3.84	0.91	High
5.	Often use existing knowledge to think about e-entrepreneurship.	3.98	0.93	High
6.	Learn about e-entrepreneurship before entering university.	3.61	1.04	Moderate
7.	Learn about e-entrepreneurship through social media	4.20	0.88	High
8.	Learn a lot about e-entrepreneurship while in the university world.	4.02	0.85	High
9.	Get to know many contacts who are involved with e-entrepreneurship	4.18	0.90	High
10.	Able to expand business knowledge by following e- entrepreneurship	4.11	0.87	High
	Overall average	4.04	0.65	High

# 4.3 Expertise Aspect Analysis

Table 7 shows the results of the study related to skills in terms of student expertise. The majority of items were found to be at a high level. Item 4 "Believe in the importance of practicality in eentrepreneurship matters"showed the highest mean score of 4.25. This was because the experience gained from entrepreneurial activities would further open the minds of students as well as expand the views, knowledge, understanding of students and produce development and physical, mental, social, and emotional maturity of students [19]. While the 6th item "Skilled in the field of borderless network" showed the lowest mean score with a mean value of 3.09 which was at a moderate level. This was supported by the study of [20] who stated that to be a successful entrepreneur must have a creative mind in order to create something new. Next element was about building social networks, where entrepreneurs needed to have skills on social networks to expand the business they ran. Business social network helps to ensure that the business owned is well known and receive response from other businesses to establish joint ventures to achieve success in business (Ministry of Education Malaysia, 2010). [21] also said that most of the students still practiced the old way of communication and were not far-sighted. In addition, the attitude and mentality of students also play a role in influencing their participation in entrepreneurship programs that have been organized by the university [22]. Overall, the mean obtained in this aspect of expertisewas 4.06 which was at a high level. This showed that students had high expertisein realizing e-entrepreneurship.

**Table 7**: Skills from Expertise Aspect

Bil	Item	Mean	SP	Level
1.	Know about the implementation of e-entrepreneurship	4.00	1.03	High
2.	Can attract customers through e-entrepreneurship.	4.05	0.94	High
3.	More skilled after taking entrepreneurship courses at university.	4.05	0.99	High
4.	Believe in the importance of practicality in e- entrepreneurship matters	4.25	.83874	High
5.	Never perform work beyond the time limit.	3.98	0.98	High
6.	Proficient in the field of borderless networking.	3.09	0.71	Moderate

7.	Never perform work beyond the time limit.	3.98	0.93	High
8.	Proficient in the field of borderless networking.	4.05	0.75	High
9.	Do not get tired of answering questions asked by others through the world of borderless networks.	4.05	0.75	High
10.	Perform a task systematically.	4.11	0.65	High
	Overall average	4.06	0.68	High

## 4.4 Interest Aspect Analysis

Based on Table 8, all items show that the mean scores are at high levels. Item 2, "Ready to do anything to become an entrepreneur" showed the highest mean score of 4.32. Entrepreneurs need to have high mental, physical and emotional strength to continue to survive in business [23]. The next element of flexibility, which was the ability to adapt to environmental changes such as customer demand and the business of an entrepreneur was a characteristic of a successful entrepreneur. Nowadays, the competition in the business world is great where there is a need to be open-minded and always come up with new ideas to improve and market the products introduced for a long time. In fact, according to the results of a study by [17] who stated that a person who wants to venture into entrepreneurship must have certain abilities in conducting entrepreneurial activities to compete in business.

While the 6th item, "Interest in entrepreneurship in line with my goals" showed the lowest mean score of 3.90 at a moderate level. [24] stated the factors that influence the success of Micro Credit Entrepreneurs in Johor were the skills in the field of management and the use of time. These were identified as the most critical factors that must be present in small entrepreneurs to succeed in business. His study also found other factors influencing the success of entrepreneurs such as specialization and division of labor; do not give up easily; ability to be independent; have high interest; high skills in business; willingness to take risks; and quick to act in changing business strategies. In other words, the factors that influence the success of entrepreneurs as found in the study of [24] can also be interpreted as a personality trait factor and technical skills seen as a constraint factor for a person to venture into the field of entrepreneurship as found in the study of [25]. Therefore, the overall the aspect of interest in this studywas found to be at a high level. This showed that students had high interest in realizing this e-entrepreneurship.

**Table 8**: Skill from interest aspects

Bil	Item	Mean	SP	Level
1.	Interested in doing business.	4.30	0.76	High
2.	Willing to do anything to become an entrepreneur	4.32	0.80	High
3.	Want to achieve my goals as a successful entrepreneur	4.25	0.69	High
4.	Often engage in entrepreneurial activities.	4.00	0.81	High
5.	Venturing into the field of entrepreneurship which is one of the fields that I am interested in.	3.93	0.82	High
6.	Entrepreneurial interest in line with my goals.	3.90	0.86	Moderate
7.	Dreaming of opening a business in the future.	4.25	0.84	High
8.	Interested in starting a business if given the opportunity and there are resources that help.	4.30	0.70	High
9.	Interested in advertisements related to entrepreneurship courses.	4.09	0.80	High

10	Work hard if given the option to open your own business.	4.32	0.74	High
Overall average		4.17	0.60	High

#### 10. Conclusion

In conclusion, the skills in realizing e-entrepreneurship in the aspects of knowledge, skills and interests need to be inculcated in each individual, especially students so that they can be independent to find employment opportunities after the end of the learning period. These skills are important not only to be easily accepted to work by the employer, but also to work on their own with the willingness to accept the risks of what they are working on. Students' interests and talents also need to be nurtured while in school. This is important so that students' interests and talents can be detected from the beginning and it will be easier to help them to determine the direction of their career. Therefore, continuous efforts to strengthen entrepreneurship education across TVET studies need to be done by all education or training provider agencies.

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## **REFERENCES**

- 1. Nooriah Yusof, Zakiah Jamaluddin & Norain Mat Lazim. (2013). The perception of undergraduates' student towards the marketability of graduate and competition in the job market, Jurnal Personalia Pelajar, 16, 77-92.
- 2. Dzuhailmi Dahalan. (2019). Cabaran graduan TVET. Kosmo, 5 Januari 2019.
- 3. Kementerian Pendidikan Tinggi. (2016). Kenyataan Media Menteri Pendidikan Tinggi: Kebolehpasaran Graduan Institusi Pendidikan Tinggi (IPT) Malaysia 2016 Meningkat. Dalam talian: https://www.mohe.gov.my/en/press-statement/458-kenyataan-mediakebolehpasaran-graduan-ipt-2016
- 4. UNIRAZAK (2015). Entrepreneurship trends in Malaysia: A National Five Year (2009-2013) Longitudinal Study Using GEM Methodology. Kuala Lumpur: Universiti Tun Abdul Razak.
- 5. Norasmah Othman, Azzyyati Anuar & Muhammad Husin. (2009). Kekangan dalam menjalankan dalam kalangan pelajar Universiti Kebangsaan Malaysia. Jurnal Personalia Pelajar, 12, 87-107.
- 6. Kamus Dewan. 2010. Edisi ke-4. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- 7. Block, J.H., Gruber, M. & Petty, J.S. (2011). The exploitation of business opportunities: Patterns, biases, and processes. Frontiers of Entrepreneurship Research 31(4): 172.
- 8. Ravi, N. (2015). Hubungan sikap, pemikiran dan tingkah laku terhadap keinginan dalam pemilihan kerjaya keusahawanan dalam kalangan prasiswazah India di Institut Pengajian Tinggi sekitar Bangi. Tesis Sarjana, Universiti Kebangsaan Malaysia (UKM), Bangi.
- 9. Senik, Z.C., Mat Isa, R., MdSham, R. & Ayob, A.H. (2014). A model for understanding SMEs internationalization in emerging economies. Jurnal Pengurusan 41: 25-42.
- 10. Omar, F.I., Rahim, S. A., & Salman, A. (2015). Penyertaan Digital dan ciri keusahawanan dalam pemerkasaan usahawan wanita di Malaysia. Jurnal Komunikasi Jilid 31(1).
- 11. Andreeva, T. & Kianto, A. (2011). Knowledge processes, knowledge-intensity and innovation: A moderated mediation analysis. Journal of Knowledge Management 15(6): 1016-1034.
- 12. Talib, A., Jusoh, A., Ibrahim, Y., & Ahmad, A. (2012). Penyertaan komuniti dalam bidang keusahawanan luar bandar. Malaysia Journal of Society and Space 8 issue 9 (84 96).

- 13. Mohamad Najib Abdul Ghafar (1999). Penyelidikan Pendidikan. Johor Bahru: Penerbit Universiti Teknologi Malaysia.
- 14. Krejcie, R.V., & Morgan, D.W., (1970). Determining Sample Size for Research Activities. Educational and Psychological Measurement.
- 15. Chua, Y. P. (2011). Kaedah Penyelidikan. Selangor: McGraw Hill (Malaysia) Sdn. Bhd
- 16. Creswell, J. W. And V. L. P. Clark (2011). Designing and Conducting Mixed Methods Research, SAGE Publications.
- 17. Yusof, A. A. (2000). Usahawan Dan Pengukuhan Jaringan Rakan Niaga. Sintok: Penerbit Universiti Utara Malaysia.
- 18. Ramachandra. (2013). The Big Jump into Entrepreneurship. Singapore: Horizon
- 19. Mohamad, M. M. (2016). Kemahiran Keusahawanan Pelatih Wanita Kursus Rekaan Fesyen Pakaian di Institut Latihan Kemahiran. Jurnal Pemikir Pendidikan (2016) 7: 137-151 : 137-51.
- 20. Fauzi, M. N. H. (2014). Penerapan Budaya, Sikap dan Nilai Terhadap Pembentukan Usahawan Teknikal dalam Kalangan Pelatih GIATMARA di Kelantan. Tesis Sarjana. Universiti Tun Hussein Onn Malaysia
- 21. Idris, F. (2013). Applying the concepts of simplicity and discipline for creating customers' value in a low contact services company: An exploratory study. Business Strategy Series, 14(5-6), 144-150
- 22. Esa, A., (2014). Penguasaan Pelajar Terhadap Kemahiran Komunikasi Interpersonal Menerusi Kokurikulum Keusahawanan Universiti Tun Hussein Onn Malaysia (UTHM). E-jurnal Pembangunan Holistik Pelajar, Bil 1, 1.
- 23. Kementerian Pengajian Tinggi. (2010). *Dasar Pembangunan Keusahawanan Institusi Pengajian Tinggi*. Putrajaya: Kementerian Pengajian Tinggi.
- 24. Mohd. Hassan Mohd. Osman. (2007). Faktor-faktor yang telah mendorong graduan dan alumni Universiti Teknologi Malaysia menceburi bidang keusahawanan. Laporan Penyelidikan. Universiti Teknologi Malaysia.
- 25. Norasmah Othman, Azzyyati Anuar & Muhammad Husin. (2009). Kekangan dalam menjalankan dalam kalangan pelajar Universiti Kebangsaan Malaysia. Jurnal Personalia Pelajar, 12, 87-107.