

**FACTORS AFFECTING ENTREPRENEURIAL INTENTION AMONG  
TECHNOLOGY AND ENGINEERING STUDENTS: IMPACT OF  
ENTREPRENEURSHIP DEVELOPMENT PROGRAM IN UTeM**

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**The thesis is submitted in partial fulfilment of the requirements for the award of  
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**DECLARATION**

I hereby declare that the report has been prepared by my own self except the summaries and citation that I have been clarify the resources.

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### **SUPERVISOR VALIDATION**

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## **DEDICATION**

To my beloved mother and father.

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## ABSTRACT

Entrepreneurship has become one of the most important factors in the economic growth of Malaysia by contributing to the increase in GDP (Gross Domestic Product) of the nation. This study aimed to investigate the factors affecting entrepreneurial intention among the technology and engineering students. Therefore, Shapero's Entrepreneurial Event Model (EEM) and a few supports from literature review was used to uncover the factors affecting the entrepreneurial intention among the technology and engineering students. The factors affecting entrepreneurial intention among the technology and engineering students are perceived desirability, perceived feasibility, need for achievement and need for autonomy. Shapero's Entrepreneurial Event Model (EEM) is the most suitable theory which can be applied by the researcher to measure the entrepreneurial intention levels among the technology and engineering students. Then, this study has analyzed the factors affecting entrepreneurial intention among the technology and engineering students using SPSS through Pearson Correlation Analysis, Linear Multiple Regression Analysis and Hierarchical Multiple Regression Analysis. The result has shown that perceived desirability, perceived feasibility and need for autonomy have a significant influence on entrepreneurial intention among the technology and engineering students. Moreover, the conclusion for this research provides a wider range of implication and recommendation in the context of entrepreneurial intention among the technology and engineering students.

Keywords: Entrepreneurial Intention, Technology and engineering students

## ABSTRAK

*Keusahawanan telah menjadi salah satu faktor terpenting dalam pertumbuhan ekonomi Malaysia dengan menyumbang kepada peningkatan dalam Keluaran Dalam Negeri Kasar (KDNK) negara. Kajian ini bertujuan untuk mengkaji faktor-faktor yang mempengaruhi niat keusahawanan di kalangan pelajar teknologi dan kejuruteraan. Oleh itu, Model Acara Keusahawanan Shapero (EEM) dan beberapa sokongan dari semakan sastera digunakan untuk mendedahkan faktor-faktor yang mempengaruhi niat keusahawanan di kalangan pelajar teknologi dan kejuruteraan. Faktor-faktor yang mempengaruhi niat keusahawanan di kalangan pelajar teknologi dan kejuruteraan adalah keinginan yang diharapkan, kebolehan yang dilihat, keperluan untuk pencapaian dan keperluan untuk autonomi. Model Acara Keusahawanan Shapero (EEM) adalah teori yang paling sesuai digunakan oleh penyelidik untuk mengukur tahap keusahawanan di kalangan pelajar teknologi dan kejuruteraan. Kemudian, kajian ini menganalisis faktor-faktor yang mempengaruhi niat keusahawanan di kalangan pelajar teknologi dan kejuruteraan dengan menggunakan SPSS menerusi Analisis Korelasi Pearson, Analisis Regresi Berganda Berganda dan Analisis Regresi Berganda Hierarki. Hasilnya menunjukkan bahawa keinginan yang diharapkan, kebolehan yang dilihat dan keperluan untuk autonomi mempunyai pengaruh penting terhadap niat keusahawanan di kalangan pelajar teknologi dan kejuruteraan. Selain itu, kesimpulan untuk penyelidikan ini memberikan pelbagai implikasi dan cadangan dalam konteks niat keusahawanan di kalangan pelajar teknologi dan kejuruteraan.*

Kata kunci: Niat Keusahawanan, Teknologi dan pelajar kejuruteraan

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**LIST OF ABBREVIATIONS**

<b>ABBREVIATION</b>	<b>MEANING</b>
SME	Small and Medium Enterprise
GDP	Gross Domestic Product
EDP	Entrepreneurship Development Program
UTeM	Universiti Teknikal Malaysia Melaka
EEM	Shapero's Entrepreneurial Event Model
CREATE	Centre for Enterprise and Technopreneurship Development
YEAH	Youth Entrepreneur Adventure Hour
PD	Perceived Desirability
PF	Perceived Feasibility
FB	Family Background
NFA	Need for Achievement
NFB	Need for Autonomy
H <sub>1</sub>	Alternative Hypothesis
H <sub>0</sub>	Null Hypothesis



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## **CHAPTER 1**

### **INTRODUCTION**

#### **1.0 Introduction**

The chapter discussed briefly background of the study, problem statement, research questions, research objective, scope of the research, limitation and significance of the research to have a clear interpretation on the topic for the research.

#### **1.1 Background of the Study**

Entrepreneurship is an activity to exploit product and services in which a person followed chances regardless of capital, they currently owned (Barringer and R. Duane Ireland 2016). Nowadays, entrepreneurship has been given a huge attention because of its importance on economic growth, job creation, sources of innovation and productivity (Urbano and Aparicio 2015). The government has encouraged the involvement of young individuals in entrepreneurship, primarily involvement of graduate students to start their own businesses to minimize unemployment rate among them. It is important to do a research on the tendency among the university student to engage with entrepreneurship in line with the government's intention to produce a holistic, characterized entrepreneurial and balanced graduate in the future. This is because the students are future leaders and determinants of the nation's future.

In the context of the current youth unemployment crisis, the government has started creating a policy and entrepreneurial initiative for youths. The policy is to promote youth involvement among entrepreneurs. Reducing the unemployment rate among graduate students has become one of the government's concern. This help them to create jobs for others if they start to do a business. This can transform perceptions of the society to graduate students from job seekers to job creators (www.thesundaily.my 2017). Entrepreneurs do not necessarily come from students who are majored in business and entrepreneurship courses or having a family with a business background. Entrepreneurship can also be explored by the non-business students such as the engineering students. This is because the engineering students also take and learn about entrepreneurship subject while they are studying in the universities. In fact, many entrepreneurs are born from engineering students as they feel it is more fun to be self-employed compared to work for other people or work in the industry.

There are several entrepreneur traits owned by the engineering students that encouraged them to become an entrepreneur such as risk-taker, creative and innovative (Breznik and Law 2016). The engineering students that chose to be an entrepreneur are a risk-taking person. This is because they are not afraid of failure and even in the worst cases, they can make the best decision. On top of that, high creativity and innovation are also one of the traits that stimulate engineering students to become an entrepreneur. They always creatively improved the current processes and developed new ideas. Besides attending the entrepreneurship classes and programmed, these traits also one of the reasons why the engineering students chose the career to be an entrepreneur.

The United Kingdom is one of the countries that offered entrepreneurship courses to universities students. In the United Kingdom, the students that took the degree on entrepreneurship will be exposed to work with local companies and organization on real projects in their first year of studies. They can increase their knowledge on management, accounting, data analysis and markets and can find out about the operation of the businesses (www.bachelorsportal.com 2007).

The universities will mould their mind to think like an entrepreneur so that they can create innovative ideas and learn to take them from the first stage to the implementation as new products or services. As for their internship program, they can choose to have an internship with the other companies, or the students can build and manage their business during the internship period. The universities in the United Kingdom are more focuses on moulding the skills and want the students to get a real grip on the entrepreneurship environment in that country.

Malaysia also offers entrepreneurship courses for students that interested to become the future entrepreneur. In Malaysia, the first-year students will be exposed to the knowledge on entrepreneurship which is more towards the basic of entrepreneurship such as knowledge on entrepreneurship, the principle of marketing, the principle of management and others. The students will be involved with their internship and focusing on opening their business on their final year. The universities in Malaysia are focusing on giving the knowledge on entrepreneurship to the students. This shows that Malaysia studies on entrepreneurship courses are more details in which they teach the students to step by step on how the students can become an entrepreneur while in the United Kingdom they are more emphasis on the activities that can engage the students with the real entrepreneurship situation.

Today, entrepreneurship has become the catalyst helped in economic growth in Malaysia by contributing in the increase in GDP (Gross Domestic Product) of the nation. The Malaysian Department of Statistics said that SME gross domestic product in 2016 increase steadily from 36.6 per cent in 2016 as compared to 36.3 per cent in 2015. In addition, studies show that development of new firms have an impact towards political stability and national society, as it offers employment opportunities to everyone. This shows that Malaysian people are slowly adapting with the entrepreneurship environment. Based on the message delivered from Dato' Seri Idris Jusoh who is the Minister of Education in the 11th Malaysia Plan, he said that human capital development through activities of entrepreneurship is identified as an enabler to support the transformation in economic sectors knowledge-intense and innovative activities.

Structured and holistic institutional entrepreneurship programs provide opportunities for students to generate income while studying, as well as able to improve the rate of employability.

## **1.2 Problem Statement**

Early stages of entrepreneurship in Malaysia are very dynamic and volatile (Ahmad and Xavier 2012). Despite many efforts undertaken by the government to cultivate entrepreneurship to society but there are fewer number of early-stage entrepreneurship activities in Malaysia as compared to the developing countries. Challenges that been faced by some of the entrepreneur in Malaysia are inadequate financial support, bureaucracy and inconsistency of government policies, lack of entrepreneurial education at tertiary level and inadequate entrepreneurial training (Ahmad and Xavier 2012). Entrepreneurship should be applied among the students since they are in the universities. This is because the universities helped to cultivate entrepreneurship among the students before they graduate from the university. Every student should know the basic knowledge on entrepreneurship including the business students and engineering students.

In addition, the lack of entrepreneurial training is also one of the factors that cause a lower level of entrepreneurship in Malaysia. This is because an individual does not have enough resources and training to start and run their business although they are interested to start a viable business. As a result, they will stop halfway or cancel their intention to start the business. The university should provide a platform for students to start and grow their business. This platform is designed to help and guide students who want to start a business but do not know where, how and what type of business they can start. This platform will benefit the students from various fields including the business students, management students and even the engineering students.

Nowadays, the technology and engineering students are only focused on the technical and technological product only. When they graduated, they often think that they should work in the industries such as manufacturing industries, automotive industries and others. Rather than to work with the other people or in the industries, the technology and engineering students also can start their own businesses. Even though the engineering students did not learn about the skills in entrepreneurship during class, but they still can learn it when they joined the entrepreneurship program that been organized in their universities. Each university in Malaysia has their own centre for entrepreneurship development.

Universiti Teknikal Malaysia Melaka (UTeM) is one of the universities that have a centre for entrepreneurship development named Centre for Enterprise and Technopreneurship Development (CREATE). Many programs have been organized by CREATE in order to encourage and enhance the entrepreneurship skills among the students. The entrepreneurship development program will provide a comprehensive entrepreneurship skill among the engineering student which not only focuses on the technical product. But it will produce a technopreneur engineer with entrepreneurship and information technology skills in line with UTeM intention to produce professional and ethical technopreneur graduates by the year 2020 (Strategic Plan UTeM).

The researcher wants to investigate whether there is an entrepreneurial intention among the technology and engineering student in UTeM or they have more tendencies to work in the industries. Will the entrepreneurship development program gave an impact to the technology and engineering student to establish their own business rather than working in the industry. The studies will be conducted among the technology and engineering students in Universiti Teknikal Malaysia Melaka (UTeM) as the target respondent.

### **1.3 Research Questions**

The researcher has come out with three research questions and three research objectives. There are three research question that need to be achieved in the research objective in order to solve the research problems.

- 1.3.1 What are the factor affecting entrepreneurial intention among the technology and engineering student in UTeM?
- 1.3.2 What is the relationship between factor affecting entrepreneurial intention among the technology and engineering student in UTeM and their intention to become the future entrepreneur?
- 1.3.3 What are the most significant factors contributed to the entrepreneurial intention among the technology and engineering student in UTeM?

### **1.4 Research Objectives**

This research proposed three objectives:

- 1.4.1 To identify factor affecting entrepreneurship intention among the technology and engineering student in UTeM.
- 1.4.2 To analyse the relationship between factor affecting entrepreneurial intention among the technology and engineering student in UTeM and their intention to become the future entrepreneur.
- 1.4.3 To evaluate the most significant factors contributed to the entrepreneurial intention among the technology and engineering students in UTeM.

### **1.5 Scope of the Research**

The scope of the research is to investigate the factor affecting entrepreneurial intention among the technology and engineering student in UTeM. This research will focus on the fourth-year undergraduate technology and engineering students who will soon be graduated. This is because the researcher wants to uncover factor affecting entrepreneurial intention of the technology and engineering student. This research also focuses on the impact of the entrepreneurship development program to the technology and engineering students. Whether there is an impact from the entrepreneurship development program that helps them to establish their business.

### **1.6 Limitation of the Study**

One of the limitations found while conducting this study is time constraints. The time is too short to complete the research because there is only one year to complete the full set of research. A long period of time needed to complete this research due to the others subject need to also be focused.

Other limitations are the study was conducted only among the technology and engineering students in UTeM. It is difficult to get data from engineering students. This is because of the different campus locations have made it difficult for the researcher to get the data at a given time. The researcher hoped that this study can benefit and be useful for people in the entrepreneurship industry.