# THE ROLE OF PERCEIVED KNOWLEDGE, DESIRABILITY AND FEASIBILITY IN SHAPING DIGITAL ENTREPRENEURSHIP INTENTION

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## ABSTRACT

Graduate unemployment in developing nations like Malaysia, coupled with a gap in the nation's digital innovation ecosystem, necessitates a deeper understanding of the factors driving digital entrepreneurship. This study addresses a significant gap in the literature by developing and empirically testing an integrated theoretical model to identify the antecedents of digital entrepreneurial intention (DEI) among postgraduate students. The research synthesises constructs from the Theory of Planned Behaviour (TPB), Social Learning Theory (self-efficacy) and the Entrepreneurial Intention Model to create a comprehensive framework. A cross-sectional study was conducted, gathering data from 394 Malaysian Master of Business Administration (MBA) students via an internet-mediated questionnaire. The hypothesised relationships were analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM). The empirical findings reveal that perceived knowledge of digital entrepreneurship, personal attitude and digital entrepreneurial self-efficacy are crucial and significant antecedents of DEI. Notably, while personal attitude was a strong predictor, the traditional TPB constructs of subjective norm and perceived behavioural control were found to be non-significant, suggesting the limited influence of social pressure and general control in this context. Furthermore, the study confirms that personal attitude and digital entrepreneurial self-efficacy act as significant partial mediators, channelling the positive effect of perceived knowledge onto digital entrepreneurial intention. The findings offer critical practical implications for higher education institutions and policymakers, highlighting the need to develop curricula that emphasise ICT-based learning and hands-on digital skills to bolster student attitudes and self-efficacy. Theoretically, the study contributes a validated, integrated model that refines the TPB for the digital context and underscores the superior predictive power of domain-specific self-efficacy over general perceived control.



**Keywords:** Digital entrepreneurship intention, digital knowledge, digital self-efficacy, attitude, Theory of Planned Behaviour (TPB), entrepreneurship education, MBA students, Malaysia

## APPROVAL

This is to certify that this thesis conforms to acceptable standards of scholarly presentation and is fully adequate, in quality and scope, for the fulfilment of the requirements for the Doctor of Business Administration.

The student has been supervised by: **Prof. Dato' Dr. Nik Maheran**

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This thesis was submitted to Asia e University and is accepted as fulfilment of the requirements for the Doctor of Business Administration.

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**Asia e University**
Chairman, Examination Committee
[29 September 2025]

## DECLARATION

I hereby declare that the thesis submitted in fulfilment of the requirements for the Doctor of Business Administration is my own work and that all contributions from any other persons or sources are properly and duly cited. I further declare that the material has not been submitted either in whole or in part, for a degree at this or any other university. In making this declaration, I understand and acknowledge any breaches in this declaration constitute academic misconduct, which may result in my expulsion from the programme and/or exclusion from the award of the degree.

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**Signature of Student**: **Date**: 29 September 2025

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## TABLE OF CONTENTS

## LIST OF TABLES

## LIST OF FIGURES

## LIST OF ABBREVIATION

| | |
|---|---|
| ATT | Attitude |
| BHV | Basic Human Values Theory |
| DE | Digital Entrepreneurship |
| DEI | Digital Entrepreneurship Intention |
| DESE | Digital Entrepreneurship Self-Efficiency |
| DOSM | Department of Statistics Malaysia |
| EI | Entrepreneurial Intention |
| HEI | Higher Education Institution |
| MBA | Master of Business Administration |
| MCO | Movement Control Order |
| ME | Mediating Effect |
| MEDAC | Ministry of Entrepreneur Development and Cooperatives |
| MQR | Malaysian Qualification Register |
| PBC | Perceived Behavioural Control |
| PK | Perceived Knowledge |
| PV | Personal Values |
| SEM | Structural Equation Modelling |
| SN | Subjective Norms |

| | |
|---|---|
| TPB | Theory of Planned Behaviour |
| VIF | Variance Inflation Factors |

# CHAPTER 1

# INTRODUCTION

## 1.0 Introduction

This chapter offers a comprehensive overview of the foundational elements of the research, thoroughly discussing the problem statement identified within the existing body of knowledge. It delineates the scope of the study, specifying the boundaries and focus areas that guide the investigation. In addition, it outlines the key research questions that will drive the inquiry, alongside the clear research objectives that aim to address these queries.

The research plan is presented in detail, providing insight into the methodologies and strategies that will be utilised throughout the study. Furthermore, the chapter discusses the research delimitation, which includes defining the specific sector and geographical area where the analysis will take place, ensuring clarity in the context of the findings.

The significance of the study is emphasised, highlighting its contributions to both academic discourse and practical applications in the field. This section underscores the importance of the research and its potential impact on future studies and real-world practices. Additionally, a brief description of some key terminology utilised throughout the research is provided, ensuring that readers are well-equipped to engage with the material presented.

## 1.1 Research Background

Entrepreneurship, famously characterised by Schumpeter (1934) as a process of creative destruction, has emerged as a cornerstone of government policy initiatives across the globe. This dynamic field has garnered significant scholarly attention, as

evidenced by the works of Singh et al. (2024) and Morante Dávila et al. (2025). A focal point of this research is entrepreneurial intention, which is deemed crucial as it serves as a reliable predictor of the establishment of new enterprises (Sim et al., 2023). Entrepreneurs are widely recognised as the "engines of growth," and with effective support and resources, they possess the potential to make substantial contributions to their country's economic advancement and social progress (Sim et al., 2023; Saoula et al., 2023; Silva et al., 2024; Singh et al., 2024; Morante Dávila et al., 2025; Taneja et al., 2025).

Among the various theoretical frameworks explored in past research, the Entrepreneurial Intention Model proposed by Linan and Chen (2004) and Ferreira et al. (2012) stands out. This model identifies several motivational dimensions that can influence an individual's entrepreneurial intention, drawing from the widely recognised Theory of Planned Behaviour (Ajzen, 1991). These influential factors, or antecedents of intention, can be broadly categorised into personal attitude, subjective norm and perceived behavioural control (PBC) (Ajzen, 1991).

In addition to these dimensions, there is a compelling argument for integrating the concept of self-efficacy into the discussion of entrepreneurial intention. Rooted in the Theory of Social Learning put forth by Bandura (1977), self-efficacy significantly differs from the previously mentioned perceived behavioural control. According to Newman et al. (2019), entrepreneurial self-efficacy is defined as “an individual’s belief in his/her capability to perform tasks and roles aimed at entrepreneurial outcomes.” In contrast, perceived behavioural control (PBC) primarily reflects an individual’s perception of the degree of control over their circumstances (Perez & Alonso-Montesinos, 2023; Alam et al., 2024; Ajzen & Fishbein, 2024). In fact, Ajzen

& Fishbein (2024) in terms of theoretical development, offer a fresh perspective and propose PBC should include emotional and identity-related components

Hence, for a more nuanced and comprehensive framework in studying digital entrepreneurial intention, it is vital to include and rigorously test both self-efficacy and perceived behavioural control together in the current study's framework. This multifaceted approach promises to yield richer insights into the factors that drive entrepreneurial intentions in the digital era.

In the entrepreneurship intention model developed by Linan in 2004, several key factors influence an individual's desire to pursue entrepreneurial ventures. Among these, an independent variable known as entrepreneurial knowledge plays a crucial role as an antecedent to both perceived desirability and perceived feasibility, ultimately leading to entrepreneurial intention. Notably, perceived knowledge, particularly in the realm of digital entrepreneurship, is deemed especially significant in the context of the current study, as it represents the type of knowledge that can be effectively acquired within a higher education setting. Therefore, this study has adopted perceived digital entrepreneurial knowledge as an independent variable, tailoring it to fit within Linan's (2004) framework, as also evidenced in the works of Aloulou et al. (2024) and Shriha et al. (2025).

The rapid digital transformation of entrepreneurship presents another compelling area for exploration. Over the past two decades, technology has profoundly impacted a wide range of industries, encompassing both manufacturing and service sectors (Chaudhary & Biswas, 2025). In today's fast-paced business landscape, it has become essential for organizations to stay abreast of technological advancements, ensuring their systems remain compatible and aligned with these innovations.

According to the graduate employability statistics published by the Department of Statistics Malaysia (DOSM) the landscape of employment for graduates is rather concerning. Out of 5.87 million graduates in 2024, approximately 356,000 individuals found themselves unemployed, resulting in an unemployment rate of around 6.1%. To visually illustrate the challenges in graduate employment, Table 1.1 below provides a detailed depiction of the scenario faced by graduates in 2024.

**Table 1.1: Graduate Employability Statistics – Malaysia (2024–2025)**

| Year | Total Graduates (approx.) | Unemployed Graduates | Unemployment Rate |
|---|---|---|---|
| 2020 | 5.36 million | 202,000 | 4.4% |
| 2021 | 5.48 million | 230,000 | 4.2% |
| 2022 | 5.61 million | 247,000 | 4.4% |
| 2023 | 5.74 million | 298,000 | 5.2% |
| 2024 | 5.87 million | 356,000 | 6.1% |

*Sources: DOSM Labour Force Survey (2024); MOHE Employment Status Report (2024)*

As of early 2025, both DOSM and the Ministry of Higher Education (MOHE) have released updated statistics that reflect changes in graduate employment status post-pandemic, including impacts from economic recovery, digital transformation and policy interventions.

**Table 1.2: Graduate Employability Statistics (2023–2024)**

| Indicator | Value |
|---|---|
| Graduates entering labor market annually | 350,000 |
| Graduate unemployment rate (under 35) | 6.2% (Q4 2024)* |
| Graduate underemployment rate | 12–15% |
| Time taken to find first job | Median = 6 months; varies by field |
| Most affected fields | Arts, humanities and social sciences |
| High-demand fields | STEM, digital technology, engineering, health sciences |

*Source: DOSM Labour Force Survey (2024)*

This figure highlights a considerable concern within the labor market. Compounding this issue, approximately 31.2% of recent graduates are employed in semi-skilled and low-skilled positions, leading to a significant mismatch between their qualifications and their jobs. This phenomenon of skill-related underemployment underscores a critical structural issue in the labor market, as the prevalence of graduates in such mismatched roles was already pronounced before the onset of the COVID-19 pandemic (DOSM, 2021).

The challenge of unemployment is not isolated; it is a pervasive issue that impacts many developing countries globally. In light of this, researchers like Ahmed et al. (2021) have posited that entrepreneurship can serve as a vital strategy for mitigating this pressing problem. The importance of entrepreneurship in fostering job creation cannot be overstated, as highlighted by recent studies (Fairlie & Fossen, 2020; Acs et al., 2023; Naudé & Minniti, 2023; Raffiee et al., 2024; Lebdioui, 2024; Ismail et al., 2024). With this foundational understanding, the subsequent section will

consider the research gaps that have emerged, ultimately leading to the formulation of the problem statement for the present study.

Despite numerous government initiatives such as the MyDigital Framework and substantial investment in the digital economy, Malaysia continues to face a persistent paradox: graduate unemployment is rising and key innovation metrics like technology absorption and product innovation lag behind global and regional competitors. This paper argues that this policy-performance gap stems from a critical oversight: a focus on macro-level ecosystem factors at the expense of understanding the micro-level psychological drivers of entrepreneurship. Policies designed to build an ecosystem are ineffective if they fail to ignite the entrepreneurial intention of individuals within it. The core problem, therefore, is not a lack of policy, but a lack of empirically validated insight into the specific cognitive antecedents—such as perceived knowledge, personal attitude and digital self-efficacy—that transform a graduate into a digital founder.

While the title of this study refers to "Ecosystem Factors," it is crucial to clarify their role within this research. These factors are not treated as direct independent variables within the quantitative model but rather as the essential context that shapes the core psychological constructs of the study. For instance, an 'ecosystem factor' like the availability of university-led digital labs, government training programs (e.g., MyDigital), or mentorship networks does not directly create entrepreneurial intention. Instead, its primary function is to build an individual’s perceived knowledge and bolster their digital self-efficacy—the core variables this model measures.

Therefore, this study's contribution is not to measure the ecosystem itself, but to reveal the cognitive mechanism through which ecosystem interventions are translated into individual entrepreneurial intent. It answers the critical question: *How do*

*ecosystem initiatives actually work at the human level?* By understanding this psychological pathway, the effectiveness of any ecosystem-level policy or program can be accurately predicted and enhanced.

## 1.2 Problem Statement

In the National Entrepreneurship Policy 2030 Report, Malaysia's entrepreneurship landscape is portrayed as dynamic and continuously evolving, a change substantiated by the country's impressive standings on various international indices that evaluate entrepreneurship. These include the Global Entrepreneurship Index (GEI), Global Competitiveness Report (GCR), Global Innovation Index (GII) and the Doing Business report. Malaysia has emerged as the second developing nation, following China, to secure a place within the top 50, outpacing several developed countries such as Greece and Poland.

However, a closer examination of Malaysia's performance within specific sub-indices reveals significant challenges in its entrepreneurship ecosystem. Notably, there are concerning gaps in areas such as knowledge creation, the competency of the workforce, product innovation and the absorption of technology.

For instance, Malaysia’s overall GEI rank slightly declined from 58 (2018) to 61 (2024). Improvement in key sub-indicators like technology absorption and product innovation has been modest, though still below global averages.

**Table 1.3: Malaysia's Entrepreneurship & Innovation Performance (As of 2023–2024) Based on Global Entrepreneurship Index (GEI) – 2024 Report**

| Indicator | Malaysia Score (2024) | Global Average |
|---|---|---|
| Overall GEI Rank | 61 out of 137 | N/A |
| Technology Absorption | 18% | 30% |
| Product Innovation | 21% | 35% |
| High Growth Expectations | 23% | 40% |

*Source: GEDI Institute (2024), Global Entrepreneurship Index 2024*

The challenge is compounded by a significant theoretical gap in the existing literature. While the Theory of Planned Behaviour (TPB) is widely cited, its traditional constructs—particularly subjective norm and perceived behavioural control—are proving to be weak and often non-significant predictors for educated, self-directed populations in a digital context. Generic models fail to capture the nuanced realities of digital entrepreneurship, where domain-specific digital self-efficacy is far more critical than general perceived control and personal attitude outweighs social pressure. Consequently, there is an urgent need for a more robust, integrated theoretical framework that synthesises relevant theories to accurately model the path from knowledge to intention in the digital era. Without such a model, educational interventions and policy incentives will continue to miss their mark, perpetuating the very innovation lag and graduate unemployment they are designed to solve.

## 1.3 Global Innovation Index (GII) – 2023 & 2024

The GII , published annually by WIPO, measures innovation performance using indicators related to infrastructure, knowledge creation, diffusion and impact.