

# The Influence of Digital Entrepreneurial Skills, Digital Literacy and Entrepreneurship Education on Digital Entrepreneurship Outcomes among Youth

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DOI: <https://doi.org/10.47772/IJRISS.2026.10200001>

Received: 09 February 2026; Accepted: 15 February 2026; Published: 21 February 2026

## ABSTRACT

Digital entrepreneurship has become increasingly important in Malaysia's digital economy, yet many young individuals lack the capabilities required to achieve sustainable digital business outcomes. This study examines the influence of digital entrepreneurial skills, digital literacy, and entrepreneurship education on digital entrepreneurship outcomes among youth in Pahang, Malaysia. The objective of the study is to determine the relationships between these factors and to identify the most influential predictor of digital entrepreneurship outcomes. A quantitative, cross-sectional research design was employed. Data were collected using a structured online questionnaire distributed to 411 youths aged 18–34 years in Kuantan and Temerloh, Pahang, selected through purposive sampling. The data were analysed using Statistical Package for Social Sciences (SPSS), applying descriptive statistics, reliability analysis (Cronbach's Alpha), Pearson correlation, and multiple regression analysis. The results indicate that digital entrepreneurial skills, digital literacy, and entrepreneurship education all have a positive and significant relationship with digital entrepreneurship outcomes ( $p < 0.001$ ). Among the predictors, digital literacy emerged as the strongest determinant, followed by digital entrepreneurial skills and entrepreneurship education. The regression model explained 86.3% of the variance in digital entrepreneurship outcomes. The study concludes that strengthening youth digital literacy, alongside practical entrepreneurial skills and education, is essential for improving digital entrepreneurship outcomes. These findings offer valuable implications for policymakers, educators, and entrepreneurship development programmes aimed at supporting youth participation in the digital economy.

**Keywords:** Digital entrepreneurial skills; Digital literacy; Entrepreneurship education; Digital entrepreneurship outcomes; Youth entrepreneurship

## INTRODUCTION

Digital entrepreneurship has emerged as a critical component of economic growth in the digital economy, reshaping how business opportunities are created, developed, and scaled through the use of digital technologies and platforms (Atanasova, 2022; Jadhav & Moharekar, 2025). Unlike traditional entrepreneurship, digital entrepreneurship requires not only access to technology but also the capacity to strategically apply digital skills, digital knowledge, and entrepreneurial competencies to achieve sustainable business outcomes (Popescu, Dinu & Gîrboveanu, 2022).

In Malaysia, the development of digital entrepreneurship has been actively promoted through national initiatives such as the Malaysia Digital Economy Blueprint (MyDIGITAL) and the PENJANA economic recovery programme, which aim to strengthen digital infrastructure, enhance youth employability, and expand entrepreneurial participation in the digital economy (Economic Planning Unit, 2021; Yaacob & Mat Radzi, 2022). Youth play a central role in this transformation, as they are generally more digitally engaged and viewed as future drivers of entrepreneurial growth. However, despite increasing access to digital platforms and policy support, many young individuals continue to experience difficulties in converting digital opportunities

into measurable entrepreneurial outcomes (Mohamad et al., 2025; Lal, Chen & Mason, 2022).

Previous studies suggest that digital entrepreneurship outcomes are influenced by three key factors: digital entrepreneurial skills, digital literacy, and entrepreneurship education. Digital entrepreneurial skills refer to the ability to apply digital tools strategically for innovation, opportunity recognition, and problem-solving (Melnikova et al., 2019; Jardim, 2021). Digital literacy encompasses the capacity to access, evaluate, and responsibly use digital information and technologies (Leaning, 2019; Grefen, 2021). Entrepreneurship education provides foundational business knowledge, entrepreneurial mindsets, and experiential learning essential for venture development in digital contexts (Raposo & Paço, 2010; Rodrigues, 2023).

Despite growing scholarship in this area, empirical research often examines these factors separately, with limited evidence on their combined effects or their relative influence on digital entrepreneurship outcomes, particularly among youth in regional and developing contexts (Azizan & Rahim, 2024; Mohamad et al., 2025). This gap is evident in states such as Pahang, Malaysia, where youth engagement in digital entrepreneurship is increasing but uneven (Loh et al., 2021).

Therefore, this study examines the influence of digital entrepreneurial skills, digital literacy, and entrepreneurship education on digital entrepreneurship outcomes among youth in Pahang, Malaysia. Grounded in Human Capital Theory (Becker, 1975; Unger et al., 2011) and the Technology Acceptance Model (Davis, 1989; Masrom, 2007), the study aims to analyse their relationships and identify the most influential predictor. The paper proceeds with a review of relevant literature, followed by the methodology, findings, discussion, and conclusions.

## LITERATURE REVIEW

### Introduction and Overview

Digital entrepreneurship has become an essential area of research as economies increasingly rely on digital technologies for innovation, business creation, and value generation. Digital entrepreneurship refers to entrepreneurial activities in which digital technologies form the core platform for opportunity recognition, venture creation, and business growth (Hull et al., 2007; Atanasova, 2022). Unlike traditional entrepreneurship, digital entrepreneurship requires individuals to possess not only business knowledge but also advanced digital competencies that support adaptability, innovation, and online engagement (Popescu, Dinu & Gîrboveanu, 2022). Consequently, scholars have increasingly examined digital entrepreneurial skills, digital literacy, and entrepreneurship education as critical drivers of digital entrepreneurship outcomes, particularly among youth who are expected to lead future digital economic development (Jadhav & Moharekar, 2025).

### Underpinning Theories

#### Human Capital Theory

Human Capital Theory (HCT) posits that investments in education, skills, and experience enhance individual productivity and economic performance (Becker, 1975; Unger et al., 2011). In the context of digital entrepreneurship, human capital extends beyond traditional business knowledge to include digital skills and technological competencies that facilitate opportunity identification and effective venture management (Popescu et al., 2022). Prior studies confirm that individuals with higher levels of digital entrepreneurial skills and entrepreneurship education are more capable of navigating digital markets and achieving sustainable business outcomes (Melnikova et al., 2019; Mohamad et al., 2025). Thus, HCT provides a strong theoretical foundation for examining how skills and education contribute to digital entrepreneurship outcomes among youth.

#### Technology Acceptance Model

The Technology Acceptance Model (TAM) explains individuals' adoption of technology based on perceived usefulness and perceived ease of use (Davis, 1989; Masrom, 2007). Digital literacy directly influences these perceptions by enabling individuals to understand, evaluate, and effectively apply digital tools. Empirical

studies suggest that digitally literate individuals are more likely to adopt digital platforms for business activities, leading to improved entrepreneurial performance (Prabowo, Winarno & Sudarmawan, 2020; Salman & AbdAziz, 2015). TAM therefore supports the inclusion of digital literacy as a key predictor of digital entrepreneurship outcomes.

## **Independent Variables**

### **Digital Entrepreneurial Skills**

Digital entrepreneurial skills refer to the strategic, creative, and technical abilities required to use digital technologies for business development, innovation, and problem-solving (Melnikova et al., 2019; Jardim, 2021). These skills enable entrepreneurs to transform digital knowledge into practical business actions. Empirical studies consistently demonstrate a strong positive relationship between digital entrepreneurial skills and digital entrepreneurship outcomes. Melnikova et al. (2019) found that entrepreneurs with higher levels of digital entrepreneurial competence exhibited greater adaptability and innovation in digital markets. Similarly, Mohamad et al. (2025) reported that digital entrepreneurial competencies significantly improved digital business performance among Malaysian entrepreneurs. Azizan and Rahim (2024) further emphasised that strategic use of digital tools, rather than mere technical proficiency, is a key determinant of sustainable digital entrepreneurship success. These findings suggest that youth with strong digital entrepreneurial skills are better positioned to achieve favourable digital entrepreneurship outcomes.

H1: Digital entrepreneurial skills have a significant relationship with digital entrepreneurship outcomes among youth.

### **Digital Literacy**

Digital literacy is defined as the ability to access, evaluate, and use digital information and technologies effectively and responsibly (Leaning, 2019; Grefen, 2021). In digital entrepreneurship, digital literacy forms the foundational competence that enables entrepreneurs to recognise opportunities, utilise digital platforms, and manage online operations. Prior research provides strong empirical support for the role of digital literacy in enhancing digital entrepreneurship outcomes. Leaning (2019) and Grefen (2021) highlighted that digital literacy enables effective decision-making and platform engagement in digital environments. Duc et al. (2024) and Micic and Mastilo (2022) found that higher digital literacy significantly improved entrepreneurial performance and competitiveness. Notably, Zeynalov and Doğantan (2025) identified digital literacy as a critical predictor of digital entrepreneurial success, particularly among youth. These studies collectively suggest that digital literacy is a key enabler of digital entrepreneurship outcomes and may exert a stronger influence than other entrepreneurial factors.

H2: Digital literacy has a significant relationship with digital entrepreneurship outcomes among youth.

### **Entrepreneurship Education**

Entrepreneurship education refers to structured learning initiatives aimed at developing entrepreneurial knowledge, skills, attitudes, and mindsets necessary for venture creation and management (Raposo & Paço, 2010; Rodrigues, 2023). In the digital context, entrepreneurship education equips individuals with business planning, digital strategy, and risk-management capabilities. Previous empirical studies indicate that entrepreneurship education positively influences digital entrepreneurship outcomes. Raposo and Paço (2010) and Rodrigues (2023) highlighted that entrepreneurship education enhances opportunity recognition and entrepreneurial readiness. Chandra and Hendayana (2024) found that entrepreneurship education significantly improved digital entrepreneurial competence, particularly when digital elements were embedded in the curriculum. Dewantara and Raharimalala (2025) further reported that entrepreneurship education strengthened entrepreneurial attitudes and translated into improved business outcomes. However, some studies note that the impact of entrepreneurship education is more effective when combined with practical digital exposure, suggesting a complementary rather than standalone role.

H3: Entrepreneurship education has a significant relationship with digital entrepreneurship outcomes among youth.

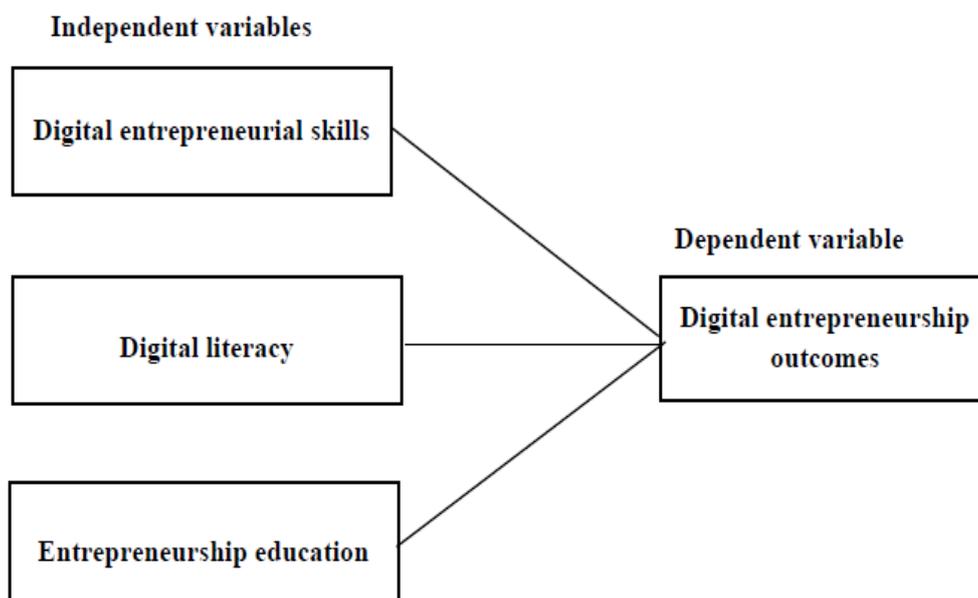
### Dependent Variable: Digital Entrepreneurship Outcomes

Digital entrepreneurship outcomes refer to the measurable results of digital business activities, including business growth, customer acquisition, innovation performance, and sustainability (Diawati, 2024; Martinez et al., 2024). Positive outcomes reflect an entrepreneur’s ability to effectively leverage digital platforms, technologies, and strategies to achieve business objectives. Empirical studies indicate that favourable digital entrepreneurship outcomes are strongly influenced by the interplay of digital skills, digital literacy, and entrepreneurial education (Paul et al., 2023; Wu, Zhu & Qu, 2024). For youth entrepreneurs, these outcomes serve as key indicators of preparedness and success within the digital economy.

### Research Framework

Figure 1 presents the conceptual framework of the study, illustrating the proposed relationships between the independent variables and the dependent variable. Grounded in established theories and prior empirical evidence, the framework specifies the direction of each hypothesised relationship and provides a structured basis for statistical analysis. It ensures alignment between the research objectives, hypotheses, and analytical approach.

Figure 1: Research framework of the study



## METHOD

This study adopted a quantitative, cross-sectional research design to examine the relationships between digital entrepreneurial skills, digital literacy, entrepreneurship education, and digital entrepreneurship outcomes among youth in Pahang, Malaysia. Data were collected using a structured online questionnaire distributed via Google Forms to youths aged 18–34 years in Kuantan and Temerloh through purposive sampling, resulting in 411 valid responses. The questionnaire employed a five-point Likert scale and was pilot-tested to ensure clarity and reliability. Data analysis was conducted using SPSS Version 30, applying descriptive statistics, reliability analysis (Cronbach’s Alpha), Pearson correlation, and multiple regression analysis to test the proposed hypotheses. Research bias was minimised through anonymous participation, voluntary consent, neutral item wording, and prior instrument validation. The quantitative approach and statistical techniques were chosen to allow objective hypothesis testing, empirical validation of theoretical relationships, and generalisable findings aligned with the study’s research objectives.

## ANALYSIS AND RESULTS

### Demographic Profile

**Table 1:** Demographic Profile

	Frequency	Percentage
<b>Age</b>		
18-24 years old	155	37.7%
25-29 years old	166	40.4%
30-34 years old	90	21.9%
<b>Gender</b>		
Female	217	52.8%
Male	194	47.2%
<b>Ethnic</b>		
Chinese	112	27.3%
Malay	214	52.1%
Indian	85	20.7%
<b>Education level</b>		
SPM	93	22.6%
Diploma	171	41.6%
Degree	126	30.7%
Master	21	5.1%
<b>Employment status</b>		
Student	81	19.7%
Self-employed	130	31.6%
Employed	129	31.4%
Unemployed	71	17.3%

The respondents comprised 411 youths with diverse demographic characteristics. From Table 1, in terms of age, the majority were between 25–29 years old (40.4%), followed by those aged 18–24 years (37.7%), while 21.9% were aged 30–34 years, indicating a predominantly young adult sample. Female respondents slightly outnumbered males, accounting for 52.8% of the sample compared to 47.2% males. Ethnically, the sample was dominated by Malay respondents (52.1%), followed by Chinese (27.3%) and Indian (20.7%), reflecting Malaysia’s multi-ethnic composition. With regard to educational attainment, most respondents held a Diploma (41.6%) or Bachelor’s degree (30.7%), while 22.6% had completed SPM and 5.1% possessed a Master’s degree. In terms of employment status, self-employed (31.6%) and employed individuals (31.4%) constituted the largest groups, followed by students (19.7%) and unemployed respondents (17.3%), indicating that a substantial proportion of participants were actively engaged in the workforce.

### Correlations

**Table 2:** Correlations

		DES	DL	EE	DEO
DES	Pearson Correlation	1	.846**	.859**	.867**
	Sig. (2-tailed)		.000	.000	.000
DL	Pearson Correlation	.846**	1	.834**	.908**
	Sig. (2-tailed)	.000		.000	.000

	tailed)				
EE	Pearson Correlation	.859**	.834**	1	.843**
	Sig. (2-tailed)	.000	.000		.000
DEO	Pearson Correlation	.867**	.908**	.843**	1
	Sig. (2-tailed)	.000	.000	.000	
** Correlation is significant at the 0.01 level (2-tailed).					
Notes: DES: Digital Entrepreneurial Skills, DL: Digital Literacy, EE: Entrepreneurship Education, DEO: Digital Entrepreneurship Outcomes					

Pearson correlation analysis was conducted to examine the relationships between the independent variables (digital entrepreneurial skills (DES), digital literacy (DL), and entrepreneurship education (EE)) and the dependent variable, digital entrepreneurship outcomes (DEO). As shown in Table 2, all correlations were positive, strong, and statistically significant at the 0.01 level ( $p < 0.001$ ), providing empirical support for the proposed hypotheses. Specifically, Digital Literacy (DL) exhibits the highest correlation with DEO ( $r = .908$ ,  $p < .001$ ), followed by Digital Entrepreneurial Skills (DES) ( $r = .867$ ,  $p < .001$ ) and Entrepreneurship Education (EE) ( $r = .843$ ,  $p < .001$ ), indicating that higher levels of each predictor are associated with more favourable digital entrepreneurship outcomes and that DL is most closely aligned with DEO at the bivariate level. The independent variables are also highly inter-correlated, DES–DL:  $r = .846$ , DES–EE:  $r = .859$ , DL–EE:  $r = .834$  (all  $p < .001$ ), that suggesting conceptual relatedness and shared variance among the predictors. Overall, the correlation results confirm that all three hypotheses are supported, with digital literacy exhibiting the strongest association with digital entrepreneurship outcomes, followed by digital entrepreneurial skills and entrepreneurship education. While the independent variables are also highly interrelated, the results justify further multivariate analysis to determine their relative predictive effects on digital entrepreneurship outcomes.

### Multiple Regression Analysis

Multiple regression analysis was employed in this study to assess the extent to which digital entrepreneurial skills (DES), digital literacy (DL), and entrepreneurship education (EE) influence digital entrepreneurship outcomes (DEO).

Table 3: Multiple Regression Analysis

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the Estimate
1	.929 <sup>a</sup>	.863	.862	.27874

Table 3 reports the results of the multiple regression analysis examining digital entrepreneurship outcomes (DEO) among youth in Pahang. The model produced a high multiple correlation coefficient ( $R = .929$ ), indicating a very strong overall relationship between the independent variables (digital entrepreneurial skills (DES), digital literacy (DL), and entrepreneurship education (EE)) and digital entrepreneurship outcomes (DEO). The coefficient of determination ( $R^2 = .863$ ) indicates that 86.3% of the variance in DEO is jointly explained by these three predictors, demonstrating substantial explanatory power of the model. The minimal difference between  $R^2$  and the adjusted  $R^2$  (.862) further suggests that the model is stable and not adversely affected by overfitting. This high level of explained variance indicates that digital entrepreneurial skills (DES), digital literacy (DL), and entrepreneurship education (EE) are critical factors influencing digital entrepreneurship outcomes (DEO) among youth, while the remaining 13.7% of variance may be attributed to other contextual or individual factors not examined in this study, such as access to capital, technological infrastructure, or market conditions.

## Coefficients

Table 4 : Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	Constant	-.327	.086		-3.784	.000
	DES	.303	.045	.269	6.663	.000
	DL	.606	.041	.558	14.917	.000
	EE	.150	.040	.147	3.777	.000

1. Dependent Variable: Digital Entrepreneurship Outcomes

The regression coefficients in Table 4 indicate that all three predictors make positive and statistically significant contributions to digital entrepreneurship outcomes (DEO) when considered simultaneously. Digital literacy (DL) is the strongest predictor ( $\beta = .558$ ,  $t = 14.917$ ,  $p < .001$ ) associated with DEO. Digital entrepreneurial skills (DES) also show a substantive effect ( $\beta = .269$ ,  $t = 6.663$ ,  $p < .001$ ), indicating that improvements in applied digital skills are linked to higher DEO beyond the effect of literacy alone. Entrepreneurship education (EE) exhibits a smaller yet meaningful effect ( $\beta = .147$ ,  $t = 3.777$ ,  $p < .001$ ), suggesting that educational exposure enhances outcomes, albeit to a lesser extent than DL and DES after accounting for overlap. The standardised betas confirm the relative influence DL ( $\beta = .558$ ) > DES ( $\beta = .269$ ) > EE ( $\beta = .147$ ). Overall, the pattern of coefficients indicates that strengthening digital literacy yields the greatest marginal gains in DEO, followed by entrepreneurial digital skills, with entrepreneurship education providing an additional, complementary boost.

## DISCUSSION

The empirical findings demonstrate that digital entrepreneurial skills, digital literacy, and entrepreneurship education all exert positive and statistically significant effects on digital entrepreneurship outcomes (DEO) among youth. The regression model explains 86.3% of the variance in DEO, indicating substantial explanatory power and confirming that digital capability-related factors collectively shape youth performance in digital entrepreneurship. This strong model fit aligns with recent research emphasising the central role of digital competencies in contemporary entrepreneurial success within technology-driven markets (Kreiterling, 2023; Paul et al., 2023). However, beyond statistical robustness, a deeper contextual and theoretical interpretation is required.

Digital literacy emerged as the most influential predictor ( $\beta = .558$ ), indicating that youths with stronger abilities to access, evaluate, and utilise digital information are better positioned to leverage online platforms, manage digital operations, and adapt to technological change. This finding is consistent with empirical evidence identifying digital literacy as a critical enabler of entrepreneurial performance in digitally intensified environments (Duc et al., 2024; Zeynalov & Dođantan, 2025). Policy-oriented studies likewise recognise digital literacy as a foundational competency for youth participation in the digital economy (OECD, 2023; UNESCO, 2024). Within the Malaysian context, rapid digitalisation, expanding e-commerce ecosystems, and widespread adoption of digital payment systems have lowered entry barriers while intensifying market competition. In such an environment, the capacity to critically navigate digital systems and platform algorithms may be more decisive than formal entrepreneurial instruction alone. This reinforces Human Capital Theory (Becker, 1975; Unger et al., 2011), suggesting that digital literacy represents a contemporary form of productivity-enhancing human capital.

Digital entrepreneurial skills also demonstrated a significant positive effect on DEO ( $\beta = .269$ ), highlighting the importance of applied and strategic digital competencies, including innovation, opportunity recognition, and digital problem-solving. This aligns with recent studies showing that entrepreneurs with stronger digital application skills exhibit greater competitiveness and resilience in dynamic markets (Hammoda, 2024; Singh et

al., 2024). The results suggest a complementary relationship: digital literacy provides foundational knowledge, while digital entrepreneurial skills translate that knowledge into actionable business strategies.

Entrepreneurship education, although exhibiting a comparatively smaller effect ( $\beta = .147$ ), remains statistically significant. This indicates that structured learning contributes meaningfully to digital entrepreneurship outcomes but may function primarily as an enabling mechanism rather than a dominant driver. From the perspective of the Technology Acceptance Model (Davis, 1989), digital literacy may enhance perceived usefulness and ease of use of digital tools, potentially mediating the impact of entrepreneurship education on performance outcomes. Contemporary research further suggests that entrepreneurship education is most effective when embedded with experiential and digitally oriented pedagogies (Rodrigues, 2023; Sitaridis & Kitsios, 2024), reinforcing global evidence that traditional approaches require adaptation in digital contexts (GEM, 2024).

Despite these substantive findings, the high inter-correlations among predictors ( $r = .834-.859$ ) warrant methodological reflection. The strong associations between digital literacy, digital entrepreneurial skills, and entrepreneurship education indicate conceptual proximity and shared variance. Although the minimal difference between  $R^2$  (.863) and adjusted  $R^2$  (.862) suggests model stability, potential multicollinearity cannot be dismissed. Future studies should report variance inflation factor (VIF) and tolerance values to enhance methodological transparency. Conceptually, the high correlations may reflect an integrated digital capability framework rather than entirely distinct constructs.

Additionally, common method bias remains a consideration due to the cross-sectional and self-reported nature of the data. While anonymity and validated instruments were employed to reduce bias, collecting all variables from the same respondents at a single time point may inflate relationships. Future research should consider procedural and statistical remedies, such as Harman's single-factor test, marker-variable techniques, or time-lagged designs, to strengthen causal interpretation.

Overall, the findings suggest a layered capability structure: digital literacy forms the foundational competence, digital entrepreneurial skills operationalise that competence into business action, and entrepreneurship education strengthens strategic and cognitive orientation. This integrated interpretation moves beyond a simple ranking of predictors and provides a more theoretically coherent explanation of how youth achieve digital entrepreneurship outcomes.

## CONCLUSION

This study examined the effects of digital entrepreneurial skills, digital literacy, and entrepreneurship education on digital entrepreneurship outcomes among youth. The findings demonstrate that all three factors exert significant and positive influences on digital entrepreneurship outcomes, with digital literacy emerging as the most dominant predictor, followed by digital entrepreneurial skills and entrepreneurship education. The results confirm that youth who possess strong digital competencies and applied entrepreneurial skills are more likely to achieve favourable outcomes in digitally driven business activities, reinforcing evidence from recent digital entrepreneurship research (Paul et al., 2023; Zeynalov & Doğantan, 2025). The high explanatory power of the regression model further indicates that these variables collectively play a central role in shaping youth performance within the digital economy.

This study offers important theoretical, methodological, empirical, and practical implications for understanding youth digital entrepreneurship. Theoretically, this study advances Human Capital Theory by demonstrating that digital literacy and digital entrepreneurial skills constitute critical forms of modern human capital that directly enhance entrepreneurial productivity. It further extends the Technology Acceptance Model by implying that digital literacy may strengthen perceived usefulness and effective technology utilisation in entrepreneurial contexts. Rather than treating education, skills, and literacy as isolated constructs, the findings suggest a complementary capability structure within digital entrepreneurship ecosystems. Empirically, the dominance of digital literacy reflects the realities of Malaysia's digitally driven economic transformation, where youth engagement in online business increasingly depends on technological fluency. The results provide empirical evidence relevant to regional policy frameworks such as MyDIGITAL, highlighting the need to prioritise digital capability development alongside entrepreneurship training. Methodologically, the study

contributes by applying a validated quantitative framework that integrates digital skills, literacy, and education, offering a replicable model for future research. Practically, the findings suggest that policymakers, educators, and SMEs should prioritise digital literacy development and applied digital skills training, while redesigning entrepreneurship education to incorporate experiential and digitally oriented learning to better address real-world entrepreneurial challenges.

Despite these contributions, the study has limitations. Theoretically, the focus on a limited set of variables and theories may not fully capture the complexity of digital entrepreneurship. Methodologically, the cross-sectional design, use of self-reported data, non-probability sampling, and concentration on a single geographical context restrict causal inference and generalisability. Practical constraints related to time, respondent access, and geographical coverage further limit the scope of the findings. Future research should explore mediating mechanisms such as perceived usefulness (TAM) mediating the relationship between digital literacy and outcomes or moderating variables, such as access to digital infrastructure or prior entrepreneurial experience, grounded explicitly in Human Capital Theory. Longitudinal or mixed-method designs would further strengthen causal inference and theoretical refinement.

In conclusion, this study makes a meaningful contribution by empirically demonstrating that digital entrepreneurial skills, digital literacy, and entrepreneurship education significantly influence digital entrepreneurship outcomes among youth, with digital literacy playing a dominant role. The findings underscore the importance of equipping young individuals with strong digital capabilities to enable sustainable participation in the digital economy. By providing theoretically grounded and contextually relevant insights, the study benefits scholars, policymakers, educators, and practitioners seeking to strengthen youth entrepreneurship development in an increasingly digitalised environment.

## ACKNOWLEDGEMENT

The study is funded by the Ministry of Higher Education (MOHE) of Malaysia through the publication incentive and the Faculty of Technology Management and Technopreneurship, Universiti Teknikal Malaysia Melaka, Malaysia. The authors also would like thanks to Centre of Technopreneurship Development (C-TeD) for the support.

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