Entrepreneurial Business and Economics Review

2025, Vol. 13, No. 4

10.15678/EBER.2025.130408

Generation Y entrepreneurial competitiveness: An empirical analysis of determining factors

Bilal Khalid, Singha Chaveesuk, Wornchanok Chaiyasoonthorn

ABSTRACT

Objective: The research aimed to identify the determining factors that influence Generation Y entrepreneurial competitiveness. The study was motivated by this Generation's significant impact on the global economy, as they comprise a quarter of the global population, and the fact that they grew up in a period of technological advancement.

Research Design & Methods: We used a quantitative survey research design to empirically collect primary data from Gen Y entrepreneurs, using a sample size of 384 respondents. The model had six independent variables, i.e., personal traits, entrepreneurial self-efficacy, networking skills, digital capabilities, fear of failure, and growth mindset. The mediating variable was entrepreneurial orientation, while the dependent variable was entrepreneurial competitiveness. We evaluated the model using confirmatory factor analysis (CFA), and we tested the hypotheses using structural equation modelling (SEM).

Findings: We found that entrepreneurial self-efficacy, digital capabilities, networking skills, and growth mindset significantly enhance Gen Y competitiveness, while personal traits showed no significant effect. Fear of failure had an unexpected positive impact. Entrepreneurial orientation did not mediate these relationships. Innovation and adaptability were key drivers, but digital transformation emerged as the strongest predictor of Gen Y entrepreneurial success in competitive markets.

Implications & Recommendations: The study recommended Gen Y entrepreneurs and policymakers entrepreneurial training and education to enhance their entrepreneurial capabilities; networking strategies and skills, which are vital in nurturing a diverse workforce; and digital transformation for small businesses as a strategy to achieve entrepreneurial competitiveness.

Contribution & Value Added: Our research advances entrepreneurial research by identifying key drivers of Gen Y competitiveness: digital capabilities, self-efficacy, and networking, while challenging conventional assumptions about personal traits and fear of failure. It bridges gaps in generational entrepreneurship literature by empirically validating technology's pivotal role. The findings offer a refined framework for policymakers and educators to cultivate adaptive, digitally fluent entrepreneurs, enhancing competitiveness in evolving markets. This work enriches theoretical discourse and provides actionable strategies for fostering Gen Y entrepreneurial success by integrating psychological and technological perspectives.

Article type:	research article
Keywords:	generation Y; entrepreneurial competitiveness; entrepreneurial orientation; entrepreneurial self-efficacy; digital capabilities
JEL codes:	J24, L26, M13

Received: 16 April 2025 | Revised: 27 July 2025 | Accepted: 1 October 2025

Suggested citation:
Khalid, B., Chaveesuk, S., & Chaiyasoonthorn, W. (2025). Generation Y entrepreneurial competitiveness: An empirical analysis of determining factors. *Entrepreneurial Business and Economics Review,* 13(4), 147-163. https://doi.org/10.15678/EBER.2025.130408

INTRODUCTION

Generation Y entrepreneurs represent the unusually strong combination of exceptional technological competence with the largest segment of the global workforce. Therefore, understanding the psycho-digital drivers-behavioural patterns and digital uniqueness of future entrepreneurs for competition will

be extremely vital for adaptation to the future business dynamics. Born between 1981 and 1996, Gen Y has significantly contributed to reshaping the entrepreneurial landscape and the general global economy (Črešnar & Nedelko, 2020; Heiberg, 2024). Singh *et al.* (2023) inform that Gen Y comprise up to 40% of the current global labour force and could rise to 75% by the year 2025. Moreover, individuals from Generation Y grew up in a period of technological advancements. Hence, they continue to be influenced by technology in the global economy, including the use of social media and other technologies in business to enhance their competitiveness. Like individuals in other demographic categorisations, Generation Y presents various unique characteristics significant to the global economy. For instance, scholars consider Generation Y to be highly tech-savvy and deliberate in sharing information and finding solutions to their problems online (Nguyen, 2020).

Competitiveness in business entails the ability to gain an advantage and succeed in the market, resulting in increased productivity (Farida & Setiawan, 2022). Therefore, entrepreneurial competitiveness refers to an entrepreneur's ability to create more opportunities in business (Hu *et al.*, 2022). For instance, entrepreneurs can enhance their competitiveness by acquiring and maintaining a competitive advantage (Somwethee *et al.*, 2023). Entrepreneurs can gain a competitive advantage by hiring quality staff with the right skills and innovative characteristics, successfully differentiating their products, having low-cost suppliers, employing different business strategies, and having target niches (Farida & Setiawan, 2022). According to the literature, there is a knowledge gap about the elements that drive entrepreneurial competitiveness among Generation Y. Despite changes in the corporate environment and technological innovation, the literature continues to focus on human attributes. Technology and economic aspects remain underexplored. For instance, a study by Neumann (2021) explains how entrepreneurship affects welfare, but his study fails to extend its analysis into social and environmental welfare.

Past research demonstrates that Gen X shows different entrepreneurial patterns as compared to Gen Y. As such, it introduces the belief that Millennials display reduced entrepreneurial inclinations. Research examining entrepreneurial competitiveness through multiple factors remains scarce in the literature. The literature lacks studies about identity factors which affect Generation Y entrepreneurial competitiveness levels. The marketplace that Generation Y must contend with is very competitive. Entrepreneurial self-efficacy, digital skills, fear of failure, growth mentality, and entrepreneurial orientation are some psychological qualities that contribute to their entrepreneurial competitiveness. We aimed to close the knowledge gap by examining the factors and their impacts on the entrepreneurial behaviour associated with Generation Y.

To bridge this research gap, we addressed the following research objectives: (1) to identify and measure the impact of key psychological and technological factors (entrepreneurial self-efficacy, digital capabilities, networking skills, growth mindset, fear of failure, and personal traits) on Generation Y entrepreneurial competitiveness; and (2) to find out the factors influencing the entrepreneurial competitiveness of Generation Y entrepreneurs. This research makes three key contributions: (1) it shifts the theoretical focus from static traits to dynamic psychological and technological factors critical for Gen Y; (2) it identifies and empirically validates the specific mediating pathways, especially the pivotal role of digital capabilities and growth mindset, that enhance competitiveness in this generation; and (3) it provides actionable insights for developing targeted interventions, such as specialized training in sector-specific digital tools and resilience-building programs to cultivate a more competitive Generation Y entrepreneurial ecosystem.

The remainder of this article is structured as follows. Section 2 presents a literature review and develops the research hypotheses. Section 3 details the research methodology, including the sample, data collection, and analytical techniques. Section 4 presents the results of the empirical analysis and discusses the key findings. Finally, Section 5 concludes the article by outlining the theoretical and practical implications, acknowledging the study's limitations, and suggesting future research directions.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Evaluating Generation Y Entrepreneurship

Literature search revealed the existence of prior studies to discern the inherent characteristics and motivations of Generation Y entrepreneurs, by comparing them to other demographic categorisations (Liu *et al.*, 2019). Srivastava and Banerjee (2016) found that Generation Y entrepreneurs base their decisions on making meaningful differences when studying their motivations compared to Generation X (group born 1965-1980, bridging analogue traditions and digital innovation), who value preserving a work-life balance. People from Generation Y, with their solid educational foundation, seek positive feedback and numerous achievements in their professional work as their motivational drivers. Gen Y individuals gain their entrepreneurial motivation from creativity and innovation due to their upbringing in the technological era (Nalluri, 2019). Consequently, technology plays a vital role in their entrepreneurial activities. Business Millennials depend on Facebook and X (formerly Twitter) to maintain networks with critical stakeholders, according to Alhabash and Ma (2017). The digital proficiency of Gen Y entrepreneurs allows them to use trend understanding and analytical data and performance metrics to enhance their performance outcomes.

The Generation Y Competitive Structures

The Generation Y competitive structure is defined by their unique capacity to leverage digital globalisation for opportunity creation, yet challenged by intense market competition, particularly from resource-entrenched Gen X, who may perceive them as inexperienced (Hershatter & Epstein, 2010). To escape this duality, the Gen Y entrepreneurs take recourse in business model innovation strategies to competitively reconfigure value propositions and capture emerging markets with technological agility (Cui *et al.,* 2024; Nayak *et al*., 2023). We identified the following as two major industrial advantages for this cohort: speed of assimilating disruptive technology within the core infrastructure of the industry and collaborative networking ecosystems. We decided to combine thus identified features to create a certain competitive architecture through which Gen Y will be able to convert its fluency with digital into a market advantage without antagonism among generations.

Theoretical Frameworks of Entrepreneurship

Schumpeter's innovation theory of entrepreneurship describes entrepreneurs as innovative through technological invention but also through their application to business processes and production methods (Mihalcea *et al.*, 2012). It is fundamental to Schumpeter's framework that it delineates competitive advantage by the normatively new application of innovations. This is ever relevant when assessing the ability of Generation Y to deploy and embed digital technologies into business operations and offerings. Young Generation business entrepreneurs develop competitive edges by taking risks and showing innovation combined with tolerance (Kraus *et al.*, 2021; Tai *et al.*, 2021; Nayak *et al.*, 2023). Gen Y entrepreneurs should use Schumpeter's theory of entrepreneurship to develop approaches for how they will embed different technologies into their business operations and manufacturing processes. The theory possesses limited effectiveness since technological innovations serve alone as insufficient to develop competitive advantages in the market. The psychological theory of entrepreneurship finds suitable application when examining different traits present in entrepreneurs. The theory has limitations since particular characteristics, including excessive optimism, produce incorrect assumptions about future expectations (Ben Fatma *et al.*, 2024). The theories here provide the analytical dimension to suggest how such digital fluency of Gen Y relates in tandem with defining psychological dispositions to entrepreneurial competitiveness.

Determining Factors of Generation Y Entrepreneurial Competitiveness Personality Traits

Scholars have identified that personality traits influence decisions made by people in different circumstances, both personal and business. Moreover, scholars have discerned that the big five personality traits play a critical role in entrepreneurial performance and success for business ventures

(Nayak *et al.*, 2023). According to Batool *et al.* (2023), the big-five model demonstrates that action-oriented traits such as innovativeness and competitiveness, together with risk-taking, facilitate the development of Gen Y entrepreneurial competitiveness in people. Caliendo *et al.* (2023) support the assertion that people who possess characteristics of innovativeness and high achievement needs, together with self-efficacy along risk tolerance capabilities, better recognise growth opportunities and develop competitive advantages. According to Awwad *et al*. (2021), trait variables demonstrate a positive impact on the entrepreneurs' achievement.

Since the success of entrepreneurial enterprises depends on the owner's human capital, Gen Y's high entrepreneurial score on trait variables is vital in developing a competitive advantage. In this context, we formulated the following hypothesis:

H1: The Big Five personal traits positively affect Generation Y entrepreneurial competitiveness.

Entrepreneurial Self-efficacy

Entrepreneurial self-efficacy is a personality trait. It is the belief an entrepreneur has in their proficiency to execute goals that are performance-oriented (Khalid, 2024). Often, small and medium-sized enterprises and Gen Y start-ups do not survive or experience growth. The element of entrepreneurial self-efficacy is of vital importance in the decisions made by new entrepreneurs regarding entry, as well as in assisting such entrepreneurs' survival and growth, asserts Sitinjak (2019). Again, in supporting this statement, Caliendo and his colleagues indicate that self-efficacy in Gen Y entrepreneurs encompasses self-belief in the ability to conduct challenging tasks to achieve success (2023). Having a self-efficacy trait plays a critical role in not only ensuring start-up survival but also increasing entrepreneurial income and competitiveness. Consequently, researchers proposed the following hypothesis:

H2: Entrepreneurial self-efficacy positively affects Generation Y entrepreneurial competitiveness.

Networking Skills

Scholars consider networking a critical skill in achieving entrepreneurial success. This is because the development of a strong network of contacts eases access to business partners, new customers, and mentors (Delias *et al.*, 2023; Wasim *et al.*, 2023). According to Dhameria *et al.* (2021), the networking abilities of entrepreneurs strongly affect competitive advantage development in entrepreneurial marketing contexts. Gen Y's networking ability directly affects the marketing effectiveness of business enterprises, which leads to enhanced business success rates. According to Anwar *et al.* (2021), different business networking systems, such as business networking and political networking alongside financial networking, have an essential impact on venture performance. A company achieves new market access and venture success by developing all possible business networks. Researchers formed the following hypothesis through this study.

H3: Networking skills positively affect Generation Y's entrepreneurial competitiveness.

Digital Capabilities

Scholars have identified digital business capabilities as disruptive elements that have a positive impact on start-up initiatives through an introspective examination of the literature (Dabbous *et al.*, 2023; Galindo-Martín *et al.*, 2023). They achieve this while simultaneously maintaining a commanding market position and a competitive edge (Dabbous *et al.*, 2023). According to Dabbous *et al.* (2023), digital business methods affect entrepreneurial competitiveness through three major operational areas involving internet use and digital integration, along with connectivity functions. Zhang *et al.* (2023) establish that digital enterprise transformation establishes fundamental importance for core business performance improvement. Gen Y grew up in an age of technological advancement, and incorporating digital capabilities into business will be critical in areas such as management capabilities, which will lead to competitive advantage (Prakasa & Jumani, 2024). Thus, we hypothesised:

H4: Digital capabilities positively affect Generation Y entrepreneurial competitiveness.

Fear of Failure

Entrepreneurs have turned the fear of business failure into a motivator, which could have positive as well as negative outcomes (Dutta & Sobel, 2020; Hunter *et al.*, 2021). Societal discrimination against business failure generates the fear of failure as a psychological trait which restrains business development, according to Halim *et al.*'s (2023) research. Business success is prone to suffer when failure occurs at high levels, as this negatively affects both entrepreneurial risk-taking and business competitiveness; this prompted Hunter and colleagues (2021) to claim that entrepreneurs' fear of failure impacts their decision-making, increasing risk and also negatively affecting competitiveness. The discussion from the literature founded the next hypothesis:

H5: Generation Y's entrepreneurial competitiveness directly influences their fear of failing.

Growth Mindset

When discussing entrepreneurship, a growth mindset refers to a positive outlook on events irrespective of barriers and adversaries, as well as persistence in seeking growth and improvement in the face of adversity (Billingsley *et al.*, 2021). According to Li *et al.* (2023), the likelihood of entrepreneurs engaging in entrepreneurship when confronted with less demanding business contexts increases rather than when confronted with difficult problems. In buttressing this view, Jemal (2020) avers that a growth mindset, which includes variables like creativity, innovation, pro-activeness, and risk-taking, among other traits, has all positively influenced the performance of small and medium ventures, whilst increasing competitiveness (Chatzoglou *et al.*, 2022). These views were the basis for proposing the following hypothesis:

H6: Growth mindset has a positive effect on the entrepreneurial competitiveness of Generation Y.

Entrepreneurial Orientation

Entrepreneurial orientation in business refers to entrepreneurs' risk-taking, innovativeness, pro-activeness, competitive aggressiveness, and autonomy (Lumpkin & Dess, 1996). Entrepreneurs can improve their business competitiveness by leveraging various dimensions, including risk-taking, to venture into new opportunities that larger organisations may not exploit (Feng *et al.*, 2024; Wales *et al.*, 2013). Similarly, by addressing the dimension of competitive advantage, entrepreneurs can improve the relationship between business entrepreneurial orientation and venture performance (Badruddin *et al.*, 2019). Exploiting the various dimensions of business entrepreneurial orientation will help entrepreneurs improve their business competitiveness. Therefore, we proposed the following hypothesis:

H7: Entrepreneurial orientation significantly mediates the effects of determining factors on generation Y entrepreneurial competitiveness.

Conceptual Framework

From the above critical review of literature, and the hypothesis proposed, we developed the following conceptual framework. The model comprised six independent variables, namely personal traits, entrepreneurial self-efficacy, networking skills, digital capabilities, fear of failure, and growth mindset. The mediating variable was entrepreneurial orientation, while the independent variable was entrepreneurial competitiveness. Figure 1 presents them both.

RESEARCH METHODOLOGY

The study opted for a quantitative survey design, which involved gathering primary data from the study target population (Gen Y entrepreneurs in Thailand), allowing for the analysis of multiple variables. The study considered all types of businesses, whether large or small, as well as different business sectors. The large size of the population led to the selection of a representative sample. We selected a large representative sample to minimise the sample size and results bias. Assuming an unlimited population, we determined the sample size using the following formula:

$$n = \frac{z^2 \times \hat{p}\,(1-\hat{p}\,)}{\varepsilon^2} \quad (1)$$

in which:

n - sample size;
z - the z score;
ε - the margin of error;
$\hat{p}$ - the population proportion.

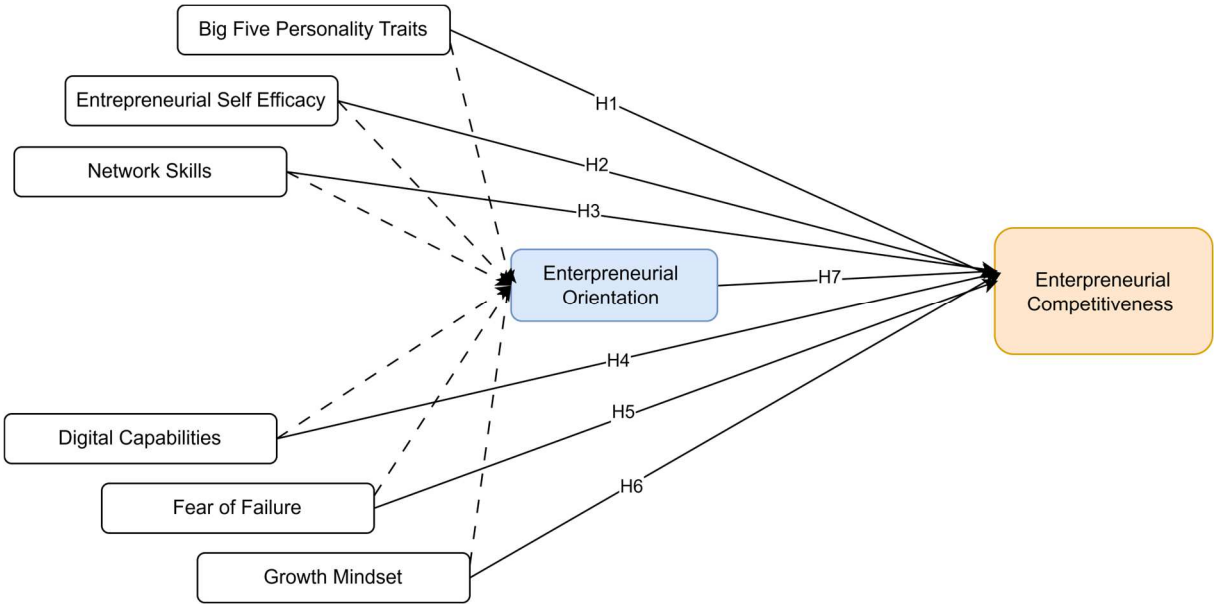

Figure 1. The study's conceptual framework
Source: own elaboration.

We computed the following sample using a 50% percentage, a 95% confidence level, and a 5% margin of error for a two-tailed test as outlined:

$$n = \frac{1.96^2 * 0.5(1-0.5)}{0.05^2} = 384 \quad (2)$$

Therefore, we determined the minimum size to be 384 respondents.

We adopted the non-probability sampling method and convenience sampling technique to recruit the respondents who satisfied the required inclusion criteria. To mitigate convenience sampling bias, we enhanced representativeness through strategic diversification: targeting key industries (see Table 1), recruiting nationwide based on the population spread (Bangkok: 17%, Central including East: 33%, North: 18%, Northeast: 33%, South: 14%), and including ventures from micro to medium sizes with varied founder experience levels. To collect the data, we developed a structured self-administered online questionnaire adopting a 5-point Likert scale, where 1=strongly disagree and 5 = strongly agree. We developed and administered the survey using Google Forms. We invited the respondents through links to the Google Form-hosted questionnaire to participate in the survey. We shared the questionnaire on Thailand social entrepreneur groups on the Line app. We collected data between November 2024 and January 2025. We received 412 responses (51.2% response rate), with 384 valid for analysis after data cleaning (48.0% valid response rate). This aligns with response rates for entrepreneurial surveys and ensures geographic/industry diversity across our target cohort.

We investigated the relationship between the different variables and the hypotheses using SEM, after we evaluated the proposed model for validity, reliability, and goodness of fit. We ensured the validity of combining scales from different sources through conceptual alignment, pilot testing, and psychometric validation (CFA), confirming reliability and measurement model fit for the integrated scales.

The big five personality traits had five observed variables, each having two items adopted from Salmony and Kanbach (2022) and Nayak *et al.* (2023). Five observed variables, adapted from Ferreira-Neto *et al.* (2023) and Caliendo *et al.* (2023), measured entrepreneurial self-efficacy. Udimal *et al.* (2021) and Wasim *et al.* (2023) provided the five observed variables used to evaluate networking skills. We measured digital capabilities by four observed variables obtained from Dabbous *et al.* (2023) and Prakasa and Jumani (2023). Dutta and Sobel (2020) and Gao *et al.* (2024) provided five observed variables to measure the fear of failure. We measured growth mindset using three observed variables obtained from Dweck (2009) and Kapasi and Pei (2021). We measured entrepreneurship orientation using three observed variables, each having three items obtained from Covin *et al.* (2020) and Bolton and Lane (2012). We used three variables to assess entrepreneurial competitiveness, with each of them having three items adapted based on the studies of Lawal *et al.* (2018) and Cullen and Adendorff (2014).

RESULTS AND DISCUSSION

Demographic Characteristics

We conducted descriptive statistics to evaluate the respondents' characteristics. The gender variable results indicated that the majority of respondents were women (52.6%), while a significant proportion (8.3%) indicated that they belonged to the 'others' gender category. For the age variable, the majority were those born between 1986 and 1990 (44.01%), followed by those who were born between 1991 and 1996 (36.46%). The rest of the Table addresses the education, industry of operations, and their years of experience.

Table 1. Descriptive statistics

Variables	Categories	Frequency	Percent
Gender	Male	150	39.1
	Female	202	52.6
	Others	32	8.3
	Total	384	100
Age	1981-1985	75	19.53
	1986-1990	169	44.01
	1991-1996	140	36.46
	Total	384	100
Education	Junior high school or lower	34	8.9
	High school / Diploma	96	25
	Bachelor's degree	215	56
	Master's degree	34	8.85
	Doctorate degree	5	1.3
	Total	384	100
Industry	E-commerce and retail	70	18.2
	Finance/Professional services	31	8.1
	Technology and innovation	48	12.5
	Education and training	69	18
	Healthcare and wellness	48	12.5
	Media and entertainment	33	8.6
	Arts and crafts	36	9.4
	Hospitality and tourism	49	12.8
	Total	384	100
Enterprise Age	< 1 year	39	10.2
	1-5 Years	165	43
	6-10 Years	119	31
	Over 10 Years	61	15.9
	Total	384	100

Source: own study.

Model Evaluation

The first analysis was an evaluation of the model's fitness. We conducted the model fitness using CFA. The results summarised in Table 2 indicate that all the fitness indices evaluated satisfied the required criteria. This supported the requirement that the data used in the analysis effectively fit the model.

Table 2. Evaluation of model fitness

Reference index	x^2/df	RMR	GFI	TLI	IFI	CFI	RMSEA
Evaluation criterion	1—3	<0.08	＞0.8	＞0.9	＞0.9	＞0.9	＜0.08
Statistical values	2.462	0.027	0.829	0.907	0.917	0.917	0.062
Model fitness level	Fit	Fit	Fit	Fit	Fit	Fit	Fit

Note: Robust fit indices (CFI > 0.90; RMSEA < 0.08) provide secondary evidence against substantial common method variance.
Source: own study.

We evaluated common method bias (CMB) using multiple approaches. Firstly, Harman's single-factor test indicated that a single factor accounted for only 24.7% of the total variance, suggesting that common method variance was unlikely to be a major concern. Secondly, we applied the confirmatory factor analysis (CFA) marker variable technique using an unrelated construct (an environmental marker) according to Lindell and Whitney's (2001) recommendations. The marker variable showed no significant method-related covariance ($\lambda = 0.08$, $p = 0.41$), further supporting the absence of substantial CMB. Finally, the measurement model demonstrated a strong overall fit (Table 2), consistent with conditions of minimal common method bias (Williams *et al*., 2010). The other analysis conducted was the evaluation of the reliability (Cronbach's alpha and composite reliability (CR)) and validity analysis (factor loadings and average variance extracted (AVE)); Table 3 summarises the results. The required threshold for standardised factor loadings and average variance extracted (AVE) was 0.5 (Afthanorhan *et al*., 2020; Brandstätter, 2011; Obschonka *et al*., 2012), and the required threshold for composite reliability and Cronbach's alpha was 0.70 (Sujati & Akhyar, 2020). From the results, the standardised factor loadings ranged from 0.53 to 0.898, while the average variance extracted (AVE) ranged from 0.52 to 0.781, which satisfied the required threshold. In assessing the study reliability data, the values for CR ranged from 0.653 to 0.914, while those for Cronbach's alpha were from 0.821 to 0.915. These satisfied the required threshold and thus confirmed that the required reliability and validity levels were satisfactory, hence giving the go-ahead for SEM analysis.

From the correlation analysis presented in Table 4, the correlation between the dependent variable, entrepreneurial competitiveness (EC), with other variables was strong, positive, and significant. Correlation with entrepreneurial self-efficacy (ESE) ($r = 0.833$, $p < 0.001$); with networking skills (NS) ($r = 0.832$, $p < 0.001$); with digital capabilities (DC) ($r = 0.835$, $p < 0.001$); with fear of failure (FF) ($r = 0.841$, $p < 0.001$); with growth mindset (GM) ($r = 0.798$, $p < 0.001$); and with entrepreneurial orientation (EO) ($r = 0.822$, $p < 0.001$). Entrepreneurial competitiveness (EC) also had a moderate and significant and moderate correlation with personality traits (PT) ($r = 0.742$, $p < 0.001$). Therefore, these factors showed that they had a significant role in Gen Y competitiveness. The results meant that a positive change in these variables resulted in a positive change in Gen Y entrepreneurial competitiveness.

We explored the relationship between the independent latent variables on the dependent variable of entrepreneurial competitiveness. The first analysis on hypothesis one indicated that the big five personal traits have a positive and insignificant influence on entrepreneur competitiveness ($\beta = 0.086$, $p = 0.111$). Since the effect was insignificant, we rejected hypothesis one. The second hypothesis was on the effect of entrepreneurial self-efficacy. The results indicated that entrepreneurial self-efficacy had a positive and significant influence on entrepreneurial competitiveness ($\beta = 0.098$, $p = 0.009$). Thus, we accepted this hypothesis. The third hypothesis was on the effect of network skills. The statistics showed that network skills have a positive and significant influence on Gen Y entrepreneurial competitiveness ($\beta = 0.215$, $p = 0.000$). Hence, we did not reject hypothesis three. Hypothesis four concerned

the effect of digital capabilities. We found that they have a positive and significant influence on entrepreneurial competitiveness (β = 0.234, p = 0.000). As such, we accepted this hypothesis. We also accepted the fifth hypothesis. This is because we found that the relationship between fear of failure and entrepreneurial competitiveness was positive and significant (β = 0.165, p = 0.000). The fifth hypothesis investigated the effect of a growth mindset. The study indicated a positive and significant relationship with entrepreneurial competitiveness (β = 0.106, p = 0.000). Hence, we accepted this hypothesis. The last hypothesis six indicated that entrepreneurial orientation had a positive and significant influence on entrepreneurial competitiveness (β = 0.272, p = 0.046). This led to accepting this hypothesis. Table 5 summarises the direct relationship path.

Table 3. Reliability and validity analysis

Latent variables	Observed variables	Standardized factors	CR	AVE	Cronbach's alpha
DC	dig1	0.53	0.842	0.520	0.857
	dig2	0.738			
	dig3	0.784			
	dig4	0.73			
	dig5	0.793			
EC	Compe	0.898	0.914	0.781	0.915
	Mark	0.877			
	RiskT	0.876			
EO	Innov	0.762	0.837	0.631	0.839
	Proact	0.8			
	Risk	0.82			
ESE	esf1	0.789	0.826	0.591	0.843
	esf2	0.725			
	esf3	0.766			
	esf4	0.52			
	esf5	0.672			
FF	fof1	0.681	0.819	0.676	0.821
	fof2	0.738			
	fof3	0.666			
	fof4	0.661			
	fof5	0.7			
GM	grow1	0.685	0.653	0.538	0.856
	grow2	0.736			
	grow3	0.778			
	grow4	0.726			
	grow5	0.741			
NS	net1	0.7	0.846	0.524	0.848
	net2	0.762			
	net3	0.722			
	net4	0.688			
	net5	0.746			
PT	Agre	0.807	0.879	0.592	0.881
	Con	0.744			
	Extra	0.787			
	Neu	0.734			
	Open	0.774			

Note: PT = personality traits; ESE = entrepreneurial self-efficacy; NS = networking skills; DC = digital capabilities; FF = fear of failure; GM = growth mindset; EO = entrepreneurial orientation; EC = entrepreneurial competitiveness.
Source: own study.

Table 4. Pearson correlation matrix of latent variables

Variable	ESE	NS	DC	FF	GM	EO	EC	PT
ESE	1.00							
NS	0.825**	1.00						
DC	0.824**	0.765**	1.00					
FF	0.818**	0.812**	0.795**	1.00				
GM	0.783**	0.761**	0.762**	0.779**	1.00			
EO	0.798**	0.757**	0.766**	0.769**	0.734**	1.00		
EC	0.833**	0.832**	0.835**	0.841**	0.798**	0.822**	1.00	
PT	0.728**	0.680**	0.731**	0.674**	0.659**	0.748**	0.742**	1.00

Note: *p < 0.05, ** p < 0.001*
Source: own study.

Table 5. Direct relationship: Empirical results

Hypothesis	Paths	Estimate	S.E.	C.R.	p-value	Confirmed?
H1	PT→EC	0.086	0.054	1.593	0.111	No
H2	ESE→EC	0.098	0.038	2.601	0.009	Yes
H3	NS→EC	0.215	0.036	5.891	***	Yes
H4	DC→EC	0.234	0.035	6.617	***	Yes
H5	FF→EC	0.165	0.033	5.088	***	No
H6	GM→EC	0.106	0.028	3.793	***	Yes
H7	EO→EC	0.272	0.137	1.992	0.046	Yes

EC = entrepreneur competitiveness, EO = entrepreneurial orientation, PT = personal trait, ESE = entrepreneurial self-efficacy, NS = network skills, DC = digital capabilities, FF = fear of failure, GM = growth mindset.
Source: own study.

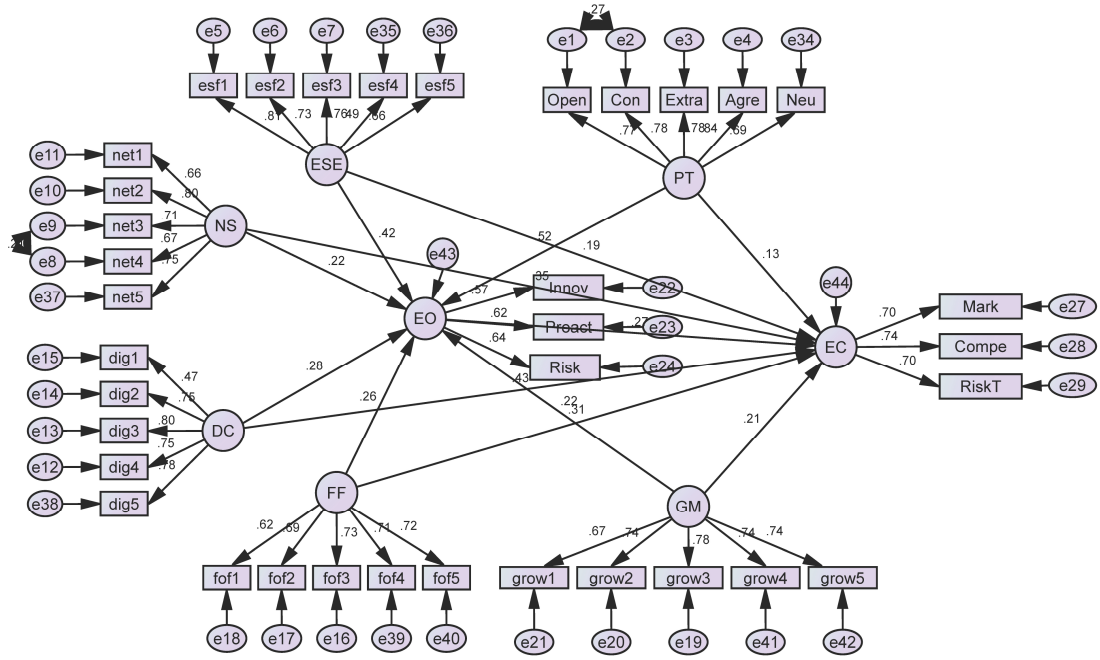

Figure 2. Empirical results

Note: Latent variable (observed variables) – DC (dig1 dig2, dig3, dig4, dig5); EC (Compe, Mark, RiskT); EO (Innov, Proact, Risk); ESE (esf1, esf2, esf3, esf4, esf5); FF (fof1, fof2, fof3, fof4, fof5); GM (grow1, grow2, grow3, grow4, grow5); NS (net1, net2, net3, net4, net5); PT (Agre, Con, Extra, Neu, Open)
Source: own elaboration.

Furthermore, we evaluated the indirect influence by analysing the mediating effect of entrepreneurial orientation on the effect of independent variables (personal traits, entrepreneurial self-efficacy, networking skills, digital capabilities, fear of failure, and growth mindset) on entrepreneurial competitiveness. We conducted the analysis using the SEM bootstrapping method. Table 6 summarises the results. The results indicated that entrepreneurial orientation did not have a significant mediation effect, as none of the indirect paths were significant.

Table 6. Indirect relationship empirical results

Indirect Paths	Total	Direct	Indirect
GM --> EO -->EC	0.137**	0.106**	0.031
FF --> EO -->EC	0.202**	0.165**	0.037
DC --> EO -->EC	0.276**	0.234**	0.042
NS --> EO -->EC	0.251**	0.215	0.037
ESE --> EO -->EC	0.156**	0.098	0.058
PT --> EO -->EC	0.175	0.086	0.090

Source: own study.

Invariably, the understanding from the findings includes that several personal and environmental factors contribute to the entrepreneurial competitiveness and successes of Gen Y entrepreneurs. We can also deduce from the results that entrepreneurial self-efficacy significantly influences the entrepreneurial competitiveness of the Gen Y population. Thus, we can highlight that the investigated elements of self-efficacy include being confident in the ability to recognise and assess business opportunities to spot their potential, and having the requisite knowledge and skills to successfully run a sustainable business enterprise, as well as being able to overcome entry barriers and encumbrances that are tied to running a startup enterprise. Based on our findings, we think that these aspects are vital in shaping the entrepreneurial abilities of Gen Y entrepreneurs. This view can find validation from the research of Sitinjak (2019), who is of the view that people confident enough to carry out entrepreneurial tasks and functions are more likely to decisively make decisions needed to successfully run any business enterprise, regardless minding those who may be affected by their decisions. They also tend to be resilient when faced with business impasses, and in the end, can achieve favourable business results. McGee and Peterson (2019) claim that entrepreneurs with strong self-efficacy succeed at acquiring resources and resolving crucial issues to maintain a sustainable business during its startup phase.

Our findings align with Schumpeter's innovation theory: digital capabilities (the strongest predictor) embody 'creative destruction,' enabling Gen Y to disrupt markets (Zhang *et al*., 2023). Conversely, psychological theory explains self-efficacy's impact (McGee & Peterson, 2019) but fails to predict the non-significance of traits or fear of failure's positive role; resource-based logic (Barney, 1991) further contextualises networking's value (Hoyos-Ruperto *et al*., 2013). We also found that the digital capabilities of entrepreneurs influence their entrepreneurial performance because effective digital technology users maintain their position at the frontiers enabled by technological progress. Corporations are forced to move to online platforms because their clients have shifted their operations to the internet. Thus, businesses have to keep up with the trends. Most significant among the findings was the important position of technological awareness and the adaptability role factor in Gen Y entrepreneurs.

The research backs this up. Zhang *et al.* (2023) explain that digital technology serves as a vital innovation driver and efficiency accelerator that boosts new business scalability. Young entrepreneurs view the mastery of digital marketing tools, along with online business promotional strategies and data analysis tools that track business operations to enhance operational efficiency, as vital components of their digital capabilities. Gen Y entrepreneurs possess two main digital skills: they automate business operations with digital technologies, and they excel at finding and making use of online information resources. According to Von Arnim and Mrozewski (2020), Generation Y entrepreneurs are very adept with their digital tools; they are excellent in spotting good opportunities in business where many see challenges, and they would probably work well in pushing omnichannels to engage their clientele and entice the online window shoppers into offline/storefront customers.

This paradigm has come to stand as an iconic variable that Gen Y entrepreneurs are to understand its damn minutiae-gravity significance. The very essence of this theory is beneficial to entrepreneurs who have developed the ability to adapt whenever challenges arise. Entrepreneurs who survived the business obstacles from COVID-19 lockdowns demonstrated success because they made their products or services operationally efficient for digital platforms. The education sector and logistics sector experienced exceptional growth during this period because people required online learning and logistics services. Burnette *et al.* (2019) demonstrate that entrepreneurs who believe strongly in themselves can transform their business ventures using diligence and determination, which both match entrepreneurial achievement objectives. The characteristics of a growth mindset include developing abilities through hard labour and turning challenges and business failures into opportunities for data collection and business growth. Prudent Gen Y entrepreneurs dedicate themselves to lifelong learning efforts that enable them to develop business-advancing competencies.

The research finds that although entrepreneurial orientation makes a very minimal impact when compared to the other studied variables, it is vital in decision making within Gen Y business owners that have implications towards the performance of the firm. Cho and Lee (2018) acknowledge the importance of this concept while explaining that it provides Gen Y entrepreneurs with superior innovative abilities to exploit opportunities better than competitors. A positive entrepreneurial mindset connected to relationship-building helps Gen Y entrepreneurs handle business development challenges in the twenty-first century. Networking skills represent a fundamental element for entrepreneurial achievement, because they grant business individuals the ability to obtain beneficial information as well as necessary resources, along with supportive contacts.

Hoyos-Ruperto *et al.* (2013) reaffirm that effective networking enhances opportunity recognition, facilitates access to funding, and fosters the formation of strategic partnerships, all of which collectively constitute a competitive advantage crucial to Gen Y's enterprising skills. Central to the theoretical hypotheses, this study found that inherent personal traits may not have a significant influence on determining entrepreneurial success. We found that fear of failure positively affects Gen Y entrepreneurial competitiveness. Very unlike the assumptions they had formulated and percepts in literary sources, the observation proved dissonant. However, the fear of failure prevents many people from putting their lives on the line, since innovation and risk-taking play quite vital roles in entrepreneurship.

CONCLUSIONS

Recommendations, Practical and Theoretical Implications

This study shifts entrepreneurial focus from traditional traits to technology-driven factors like digital capabilities, adaptability, and self-assessment. To build Gen Y competitiveness, implementing specific actions is required: finance/professional services should adopt cloud accounting (*e.g.*, QuickBooks Online) and analytics tools (*e.g.*, Tableau); technology & innovation must utilize development platforms (*e.g.*, GitHub) and cloud infrastructure (*e.g.*, AWS/Azure); education & training requires integrating LMS (*e.g.*, Canvas) with AI tutors; healthcare & wellness needs EHR systems (*e.g.*, Epic) and telehealth platforms; media & entertainment should leverage video tools (*e.g.*, Adobe Premiere Pro) and social analytics (*e.g.*, Hootsuite); arts & crafts can utilize e-commerce platforms (*e.g.*, Etsy, Shopify) and design software; Hospitality & Tourism must deploy booking systems (*e.g.*, Resy) and reputation management tools (*e.g.*, Revinate). Provide sector-specific bootcamps and workshops on these tools to enhance digital skills and entrepreneurial self-perception. Theoretically, this study's advances include: (1) a digital-psychological synergy framework for Gen Y; (2) Schumpeterian innovation theory refinement (digital > invention); (3) boundary conditions for psychological theory and entrepreneurial orientation.

Limitations and Future Studies

The research has been able to investigate the factors with characteristics to augment entrepreneurial competitiveness of Generation Y, taking into cognisance the increasing competition brought about by technological expansion and development. The study limitations include the use of convenience sampling, which may have affected generalisability and by its cross-sectional design, which restricts causal

interpretation of the examined variables, as well as the non-application of the demographic data in the discussion. Future studies could consider incorporating demographic moderating effects on entrepreneurial competitiveness to extend the findings of this study.

REFERENCES

Afthanorhan, A., Awang, Z., & Aimran, N. (2020). An extensive comparison of CB-SEM and PLS-SEM for reliability and validity. *International Journal of Data and Network Science, 4*(4), 357-364. https://doi.org/10.5267/j.ijdns.2020.9.003

Al-Ghazali, B.M., Shah, S.H., & Sohail, M.S. (2022). The role of five big personality traits and entrepreneurial mindset on entrepreneurial intentions among university students in Saudi Arabia. *Frontiers in Psychology, 13*, 964875. https://doi.org/10.3389/fpsyg.2022.964875

Alhabash, S., & Ma, M. (2017). A tale of four platforms: Motivations and uses of Facebook, Twitter, Instagram, and Snapchat among college students?. *Social Media + Society*, *3*(1). https://doi.org/10.1177/2056305117691544

Anwar, M., Rehman, A.U., & Shah, S.Z.A. (2018). Networking and new venture's performance: Mediating role of competitive advantage. *International Journal of Emerging Markets, 13*(5), 998-1025. https://doi.org/10.1108/IJoEM-07-2017-0263

Awwad, M.S., & Al-Aseer, R.M.N. (2021). Big Five personality traits impact on entrepreneurial intention: The mediating role of entrepreneurial alertness. Asia Pacific *Journal of Innovation and Entrepreneurship*, *15*(1), 87-100. https://doi.org/10.1108/APJIE-09-2020-0136

Badruddin, S., Burhanuddin, B., & Halim, P. (2019). The influence of innovation performance and national competitiveness on entrepreneurial education. *Polish Journal of Management Studies, 20*(2), 104-113. https://doi.org/10.17512/pjms.2019.20.2.09

Batool, S.N., Razzaq, K., & Imam, H. (2023). How does action-oriented personality traits impact on entrepreneurial career choices? A trait-factor theory perspective. *Kybernetes, 52*(11), 5068-5086. https://doi.org/10.1108/K-04-2022-0498

Ben Fatma, E., Dana, L.P., Elleuch, S., & Ben Mohamed, E. (2024). Does dispositional optimism affect entrepreneurial success? Evidence from Saudi Arabia. *International Entrepreneurship and Management Journal, 20*(4), 1127-1152. https://doi.org/10.1007/s11365-024-00946-w

Billingsley, J., Lipsey, N.P., Burnette, J.L., & Pollack, J.M. (2021). Growth mindsets: Defining, assessing, and exploring effects on motivation for entrepreneurs and non-entrepreneurs. *Current Psychology*. Advance online publication. https://doi.org/10.1007/s12144-021-02149-w

Bolton, D.L., & Lane, M.D. (2012). Individual entrepreneurial orientation: Development of a measurement instrument. *Education + Training*, *54*(2-3), 219-233. https://doi.org/10.1108/00400911211210314

Brandstätter, H. (2011). Personality aspects of entrepreneurship: A look at five meta-analyses. *Personality and Individual Differences*, *51*(3), 222-230. https://doi.org/10.1016/j.paid.2010.07.007

Burnette, J.L., Pollack, J.M., Forsyth, R.B., Hoyt, C.L., Babij, A.D., Thomas, F.N., & Coy, A.E. (2019). A growth mindset intervention: Enhancing students' entrepreneurial self-efficacy and career development. *Entrepreneurship Theory and Practice*, *44*(5), 878-908. https://doi.org/10.1177/1042258719864293

Caliendo, M., Kritikos, A.S., Rodriguez, D., & Stier, C. (2023). Self-efficacy and entrepreneurial performance of start-ups. *Small Business Economics*, *61*(3), 1027-1051. https://doi.org/10.1007/s11187-022-00728-0

Chatzoglou, P., Chatzoudes, D., Savvidou, A., Fotiadis, T., & Delias, P. (2022). Factors affecting repurchase intentions in retail shopping: An empirical study. *Heliyon*, *8*(9), e10619. https://doi.org/10.1016/j.heliyon.2022.e10619

Cho, Y.H., & Lee, J.H. (2018). Entrepreneurial orientation, entrepreneurial education, and performance. *Asia Pacific Journal of Innovation and Entrepreneurship*, *12*(2), 124-134. https://doi.org/10.1108/APJIE-05-2018-0028

Covin, J.G., Rigtering, J.P.C., Hughes, M., Kraus, S., Cheng, C.-F., & Bouncken, R.B. (2020). Individual and team entrepreneurial orientation: Scale development and configurations for success. *Journal of Business Research*, *112*, 1-12. https://doi.org/10.1016/j.jbusres.2020.02.023

Črešnar, R., & Nedelko, Z. (2020). Understanding future leaders: How are personal values of generations Y and Z tailored to leadership in Industry 4.0?. *Sustainability*, *12*(11), 4417. https://doi.org/10.3390/su12114417

Cui, Y., Van Esch, P., & Phelan, S. (2024). How to build a competitive advantage for your brand using generative AI. *Business Horizons*, *67*(5), 583-594. https://doi.org/10.1016/j.bushor.2024.05.003

Cullen, M., & Adendorff, C. (2014). The impact of infrastructural change and regulation on entrepreneurial competitiveness in the South African telecommunications sector. *South African Journal of Business Management*, *45*(3), 97-110. https://doi.org/10.4102/sajbm.v45i3.134

Dabbous, K.A., Barakat, S., & Kraus, S. (2023). The impact of digitalization on entrepreneurial activity and sustainable competitiveness: A panel data analysis. *Technology in Society, 73*, 102224. https://doi.org/10.1016/j.techsoc.2023.102224

Delias, P., Mittas, N., & Florou, G. (2023). A doubly robust approach for impact evaluation of interventions for business process improvement based on event logs. *Decision Analytics Journal*, *8*, 100291. https://doi.org/10.1016/j.dajour.2023.100291

Dhameria, V., Ghozali, I., Hidayat, A., & Aryanto, V. (2021). Networking capability, entrepreneurial marketing, competitive advantage, and marketing performance. *Uncertain Supply Chain Management*, *9*(4), 941-948. https://doi.org/10.5267/j.uscm.2021.7.007

Dutta, N., & Sobel, R.S. (2020). Entrepreneurship, fear of failure, and economic policy. European *Journal of Political Economy, 66*, 101954. https://doi.org/10.1016/j.ejpoleco.2020.101954

Dweck, C.S. (2009). Mindsets: Developing talent through a growth mindset. *Olympic Coach, 21*(1), 4-7.

Farida, I., & Setiawan, D. (2022). Business strategies and competitive advantage: The role of performance and innovation. *Journal of Open Innovation: Technology, Market, and Complexity, 8*(3), 163. https://doi.org/10.3390/joitmc8030163

Feng, Q., Chaiyasoonthorn, W., & Chaveesuk, S. (2024). The effect of competitive strategy on enterprises' performance: Capital structure and corporate governance as mediating variables. *Global Journal of Entrepreneurship and Management*, *5*(1), 1-8. https://doi.org/10.57585/GJEM.024.001

Ferreira-Neto, M.N., Castro, C., & Lessa, S. (2023). The role of self-efficacy, entrepreneurial passion, and creativity in developing entrepreneurial intentions. *Frontiers in Psychology, 14*, 1134618. https://doi.org/10.3389/fpsyg.2023.1134618

Galindo-Martín, M.Á., Castaño-Martínez, M.S., & Méndez-Picazo, M.T. (2023). Digitalization, entrepreneurship and competitiveness: An analysis from 19 European countries. *Review of Managerial Science, 17*(5), 1809-1826. https://doi.org/10.1007/s11846-023-00640-1

Gao, Y., Wang, X., Lu, J., Chen, B., & Morrin, K. (2024). Entrepreneurial fear of failure among college students: A scoping review of literature from 2010 to 2023. *Heliyon, 10*(10), e31072. https://doi.org/10.1016/j.heliyon.2024.e31072

Halim, S.K., Hidayat, D., Eni, Y., & Fernando, E. (2023). What is Entrepreneurial Fear of Failure?. *Binus Business Review, 14*(1), 73-84. https://doi.org/10.21512/bbr.v14i1.8658

Heiberg, D. (2024, January 15). *Key statistics about Millennials in the workplace*. *FirstUp*. Retrieved from https://firstup.io/blog/key-statistics-millennials-in-the-workplace/ on November 23, 2024.

Hershatter, A., & Epstein, M. (2010). Millennials and the world of work: An organization and management perspective. *Journal of Business and Psychology, 25*(2), 211-223. https://doi.org/10.1007/s10869-010-9160-y

Hoyos-Ruperto, D., Romaguera, J.M., Carlsson, B., & Lyytinen, K. (2013). Networking: A critical success factor for entrepreneurship. *American Journal of Management, 13*(2), 55-72. https://doi.org/10.33423/ajm.v25i3

Hu, W., Xu, Y., Zhao, F., & Chen, Y. (2022). Entrepreneurial passion and entrepreneurial success—the role of psychological capital and entrepreneurial policy support. *Frontiers in Psychology, 13*, 792066. https://doi.org/10.3389/fpsyg.2022.792066

Hunter, E., Jenkins, A., & Mark-Herbert, C. (2021). When fear of failure leads to intentions to act entrepreneurially: Insights from threat appraisals and coping efficacy. *International Small Business Journal, 39*(5), 407-423. https://doi.org/10.1177/0266242620967006

Jemal, S. (2020). Effect of entrepreneurial mindset and entrepreneurial competence on performance of small and medium enterprises, evidence from literature review. *International Journal of Management and Entrepreneurship Research, 2*(7), 476-491. https://doi.org/10.51594/ijmer.v2i7.197

Kapasi, A., & Pei, J. (2021). Mindset Theory and school psychology. *Canadian Journal of School Psychology*. Advance online publication. https://doi.org/10.1177/08295735211053961

Khalid, B. (2024). Evaluating customer perspectives on omnichannel shopping satisfaction in the fashion retail sector. *Heliyon, 10*(16), e36027. https://doi.org/10.1016/j.heliyon.2024.e36027

Kraus, S., Jones, P., Kailer, N., Weinmann, A., Chaparro-Banegas, N., & Roig-Tierno, N. (2021). Digital transformation: An overview of the current state of the art of research. *SAGE Open*. https://doi.org/10.1177/21582440211047576

Lawal, F.A., Iyiola, O.O., Adegbuyi, O.A., Ogunnaike, O.O., & Taiwo, A.A. (2018). Modelling the relationship between entrepreneurial climate and venture performance: The moderating role of entrepreneurial competencies. *Academy of Entrepreneurship Journal, 24*(1), 1-16. Retrieved from https://www.abacademies.org/articles/modelling-the-relationship-between-entrepreneurial-climate-and-venture-performance-the-moderating-role-of-entrepreneurial-competen-7077.html on January 16, 2025.

Li, H., Ozdemir, S.Z., & Heslin, P.A. (2023). Merely folklore? The role of a growth mindset in the taking and timing of entrepreneurial actions. *Entrepreneurship Theory and Practice, 47*(6), 2077-2120. https://doi.org/10.1177/10422587221128270

Lindell, M.K., & Whitney, D.J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, *86*(1), 114-121. https://doi.org/10.1037/0021-9010.86.1.114

Liu, J., Zhu, Y., Serapio, M.G., & Cavusgil, S.T. (2019). The new generation of millennial entrepreneurs: A review and call for research. *International Business Review, 28*(5), 101581. 101581. https://doi.org/10.1016/j.ibusrev.2019.05.001

Lumpkin, G.T., & Dess, G.G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review, 21*(1), 135-172. https://doi.org/10.2307/258632

McGee, J.E., & Peterson, M. (2019). The long-term impact of entrepreneurial self-efficacy and entrepreneurial orientation on venture performance. *Journal of Small Business Management, 57*(3), 720-737. https://doi.org/10.1111/jsbm.12324

Mihalcea, A.D., Mitan, A., & Vițelar, A. (2012). Generation Y: Views on entrepreneurship. *Economia. Seria Management, 15*(2), 277-287. Retrieved from https://www.management.ase.ro/reveconomia/2012-2/cuprins2012-2.htm on January 16, 2025.

Nayak, P.M., Joshi, H.G., Nayak, M., & Gil, M.T. (2023). The moderating effect of entrepreneurial motivation on the relationship between entrepreneurial intention and behaviour: An extension of the theory of planned behaviour on emerging economy. *F1000Research, 12*, 102. https://doi.org/10.12688/f1000research.140675.2

Neumann, T. (2021). The impact of entrepreneurship on economic, social and environmental welfare and its determinants: A systematic review. *Management Review Quarterly, 71*(3), 553-584. https://doi.org/10.1007/s11301-020-00193-7

Nguyen, X.T. (2020). Factors affecting entrepreneurial decision of nascent entrepreneurs belonging Generation Y in Vietnam. *The Journal of Asian Finance, Economics and Business, 7*(8), 407-417. https://doi.org/10.13106/JAFEB.2020.VOL7.NO8.407

Obschonka, M., Goethner, M., Silbereisen, R.K., & Cantner, U. (2012). Social identity and the transition to entrepreneurship: The role of group identification with workplace peers. *Journal of Vocational Behavior*, *80*(1), 137-147. https://doi.org/10.1016/j.jvb.2011.05.007

Prakasa, Y., & Jumani, Z.A. (2024). Linking digital capability to small business performance: The mediating role of digital business transformation. *Cogent Business & Management, 11*(1). https://doi.org/10.1080/23311975.2024.2342486

Salmony, F.U., & Kanbach, D.K. (2022). Personality trait differences across types of entrepreneurs: A systematic literature review. *Review of Managerial Science, 16*(3), 713-749. https://doi.org/10.1007/s11846-021-00466-9

Singh, R., Chaudhuri, S., Sihag, P., & Shuck, B. (2023). Unpacking generation Y's engagement using employee experience as the lens: an integrative literature review. *Human Resource Development International*, *26*(5), 548-576. https://doi.org/10.1080/13678868.2023.2170210

Sitinjak. (2019). The effect of entrepreneurial self-efficacy and entrepreneurial competence on the entrepreneurial entry decision and the success of start-up MSMEs in Medan City. *Jurnal Ekonomi, Bisnis, dan Kewirausahaan, 8*(3), 204-215. https://doi.org/10.26418/jebik.v8i3.35670

Somwethee, P., Aujirapongpan, S., & Ru-Zhue, J. (2023). The influence of entrepreneurial capability and innovation capability on sustainable organization performance: Evidence of community enterprise in Thailand. *Journal of Open Innovation: Technology, Market, and Complexity*, *9*(2), 100082. https://doi.org/10.1016/j.joitmc.2023.100082

Srivastava, M., & Banerjee, P. (2016). Understanding Gen Y: The motivations, values, and beliefs. *Journal of Management Research, 16*(3), 148-164. Retrieved from https://www.indianjournals.com/article/jmr-16-3-003 on December 11, 2025.

Sujati, H., & Akhyar, M. (2020). Testing the construct validity and reliability of curiosity scale using confirmatory factor analysis. *Journal of Education and Social Research, 20*(4), 229. https://doi.org/10.36941/jesr-2020-0080

Tai, Y.F., Wang, Y.C., & Luo, C.C. (2021). Technology- or human-related service innovation? Enhancing customer satisfaction, delight, and loyalty in the hospitality industry. *Service Business, 15*(4), 667-694. https://doi.org/10.1007/s11628-021-00461-w

Udimal, T.B., Liu, E., & Lou, M. (2021). Network reliance and entrepreneurial performance, the role of external networking behaviour and entrepreneurial orientation: The case of rural farmer-entrepreneurs. *Innovation & Management Review, 18*(3), 308-330. https://doi.org/10.1108/INMR-10-2019-0127

von Arnim, L., & Mrozewski, M. (2020). Entrepreneurship in an increasingly digital and global world: Evaluating the role of digital capabilities on international entrepreneurial intention. *Sustainability, 12*(19), 7984. https://doi.org/10.3390/su12197984

Wales, W.J., Gupta, V.K., & Mousa, F.T. (2013). Empirical research on entrepreneurial orientation: An assessment and suggestions for future research. *International Small Business Journal, 31*(4), 357-383. https://doi.org/10.1177/0266242611418261

Wasim, J., Youssef, M.H., Christodoulou, I., & Reinhardt, R. (2023). The path to entrepreneurship: The role of social networks in driving entrepreneurial learning and education. *Journal of Management Education*, *48*(3), 459-493. https://doi.org/10.1177/10525629231219235

Williams, L.J., Hartman, N., & Cavazotte, F. (2010). Method variance and marker variables: A review and comprehensive CFA marker technique. *Organizational Research Methods*, *13*(3), 477-514. https://doi.org/10.1177/1094428110366036

Zhang, P., Qiu, P., & Cao, P. (2023). Does digital transformation enhance the core competitiveness?—Quasi-natural experimental evidence from Chinese traditional manufacturing. *PLOS ONE, 18*(11), e0289278. https://doi.org/10.1371/journal.pone.0289278

Authors

Author contributions to this article are as follows: Bilal Khalid – 40% (conceptualization, methodology, validation, investigation, resources, data curation, writing – original draft, writing – review & editing, visualization, project administration, funding acquisition), Singha Chaveesuk – 35% (conceptualization, methodology, validation, formal analysis, data curation, writing – original draft, writing – review & editing, supervision), Wornchanok Chaiyasoonthorn – 35% (conceptualisation, methodology, writing, review & editing, supervision

Bilal Khalid

Bilal Khalid, the Assistant Dean at KMITL Business School, does research in many fields such as digital change, how to handle new ideas, and keeping a business competitive in the long run. His research interests include omnichannel marketing, gamification, and digital payment systems in retail. Currently, he is paying more attention to AI and eco-friendly ideas. Dr. Khalid has written many articles about consumer actions, MOOCs, renewable energy, and how people feel about self-driving cars. His recent work looks at global citizenship in international higher education and omnichannel shopping in the fashion industry. Dr. Khalid's work combines ways to study technology adoption with ideas about sustainability and entrepreneurship. This gives useful information about digital competition and new ways of learning in growing economies.

Correspondence to: Dr. Bilal Khalid, KMITL Business School, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand, e-mail: bilal.kh@kmitl.ac.th

ORCID https://orcid.org/0000-0002-4313-4805

Singha Chaveesuk (corresponding author)

Dr. Singha Chaveesuk, an associate professor and Dean of KMITL Business School, is a respected expert in how businesses take up digital change and new tech. For more than two decades, his research has shown a relationship between tech advances and sustained growth, concentrating on how individuals and groups adopt new tech to better society and the economy. His work has gone from early looks at how people used mobile phones, cloud tech, and online learning to today's studies on farming run by AI, digital payments, and sustainability. Dr. Chaveesuk studied TAM, UTAUT, and TPB as models for understanding humans' decisions about technology usage. His research studies thought processes, social influences, and managerial decisions for adoption in Thailand and elsewhere.

Correspondence to: Assoc. Prof. Dr Singha Chaveesuk, KMITL Business School, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand, e-mail: singha.ch@kmitl.ac.th

ORCID https://orcid.org/0000-0002-5256-409X

Wornchanok Chaiyasoonthorn

Associate Professor Dr. Wornchanok Chaiyasoonthorn, Vice Dean at the KMITL Business School, specializes in technology management, organizational behavior, and technology adoption. Her research is concerned with how digital transformation is accepted by individuals and organizations in Thailand as studied through models such as TAM and UTAUT. She has significantly added to the understanding of digital innovation in HRM, e-learning, and social media engagement. Chaiyasoonthorn's work stresses the behavioral and cultural dimensions of tech adoption, with a focus on sustainability and user-centered design.

Correspondence to: Assoc. Prof. Dr Wornchanok Chaiyasoonthorn, KMITL Business School, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand, e-mail: wornchanok.ch@kmitl.ac.th

ORCID https://orcid.org/0000-0001-5936-5299

Acknowledgements and Financial Disclosure

This work was supported by the KMITL Business School, King Mongkut's Institute of Technology, Ladkrabang, Bangkok 10520, Thailand, under Grant number 2567-02-12-002.

Use of Artificial Intelligence

The manuscript is free of AI/GAI usage.

Conflict of Interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Published by Krakow University of Economics – Krakow, Poland