

Make Your Publications Visible.

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Dung, Pham Thi Phuong; An, Ho Minh; Huy, Pham Quoc; Quy, Nguyen Le Dinh

Article

Understanding the startup's intention of digital marketing's learners: An application of the theory of planned behavior (TPB) and technology acceptance method (TAM)

Cogent Business & Management

Provided in Cooperation with:

Taylor & Francis Group

Suggested Citation: Dung, Pham Thi Phuong; An, Ho Minh; Huy, Pham Quoc; Quy, Nguyen Le Dinh (2023): Understanding the startup's intention of digital marketing's learners: An application of the theory of planned behavior (TPB) and technology acceptance method (TAM), Cogent Business & Management, ISSN 2331-1975, Taylor & Francis, Abingdon, Vol. 10, Iss. 2, pp. 1-17, https://doi.org/10.1080/23311975.2023.2219415

This Version is available at: https://hdl.handle.net/10419/294479

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.



https://creativecommons.org/licenses/by/4.0/

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.





Cogent Business & Management



ISSN: (Print) (Online) Journal homepage: www.tandfonline.com/journals/oabm20

Understanding the startup's intention of digital marketing's learners: An application of the theory of planned behavior (TPB) and technology acceptance method (TAM)

Pham Thi Phuong Dung, Ho Minh An, Pham Quoc Huy & Nguyen Le Dinh Quy

To cite this article: Pham Thi Phuong Dung, Ho Minh An, Pham Quoc Huy & Nguyen Le Dinh Quy (2023) Understanding the startup's intention of digital marketing's learners: An application of the theory of planned behavior (TPB) and technology acceptance method (TAM), Cogent Business & Management, 10:2, 2219415, DOI: 10.1080/23311975.2023.2219415

To link to this article: https://doi.org/10.1080/23311975.2023.2219415

9	© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.
	Published online: 01 Jun 2023.
	Submit your article to this journal ${\it \mathbb{G}}$
lılı	Article views: 3019
Q ^L	View related articles ☑
CrossMark	View Crossmark data ☑
2	Citing articles: 1 View citing articles ☑







Received: 13 February 2023 Accepted: 25 May 2023

*Corresponding author: Nguyen Dinh Quy, Independent Researcher, Hanoi, Vietnam

E-mail: quynld96@gmail.com

Reviewing editor:

Sandra Alves, GOVCOPP, School of Accountancy and Administration, Universidade de Aveiro, Portugal

Additional information is available at the end of the article

MARKETING | RESEARCH ARTICLE

Understanding the startup's intention of digital marketing's learners: An application of the theory of planned behavior (TPB) and technology acceptance method (TAM)

Pham Thi Phuong Dung¹, Ho Minh An¹, Pham Quoc Huy¹ and Nguyen Le Dinh Quy^{2*}

Abstract: Due to its low entry barrier, minimal overhead, and high return on investment, digital marketing has become more popular among startups, small and medium-sized enterprises as well as all businesses. There is a high need for workers skilled in Digital Marketing, so it is no surprise that schools are vying for students with an interest in this area. In this study, we will look at how students of digital marketing feel about the goals of startups, using data from recent studies to help us draw conclusions. The findings indicate that there is a strong positive relationship between startups' propensity to use digital marketing tools and their intended behavior, which has a positive effect on their intention to launch a business. The results also support the theoretical hypotheses of the Technology Acceptance Model (TAM), as entrepreneurs' propensity to use digital marketing tools has a direct impact on their intention to launch a business. Consistent with recent research, these findings indicate that the level of adoption of technological innovations can predict people's intent to act in particular ways. This study offers insights for entrepreneurs and policymakers seeking to promote entrepreneurship by maximizing the potential of digital marketing tools. Based on theory of planned behavior (TPB) and the technology acceptance model (TAM), this research has also helped bring to light the role of normative influence and behavioral control in shaping entrepreneurs' intention.

Pham Thi Phuong Dung

ABOUT THE AUTHORS

Pham Thi Phuong Dung is a final year Master of Commercial Business student at the University of Economics in Ho Chi Minh City, Vietnam. She currently works as Vice Dean of Art and Science Faculty at Saigon Institute of Technology, teaching in Digital Marketing degree. Her research interests include consumer buying behavior, advertising, social commerce and the impact of technology on business. Ho Minh An is an entrepreneur that specializes in the production of edibles and drinks. He is a final year Master of Commercial Business student at the University of Economics in Ho Chi Minh City, Vietnam. Branding and social media in service companies are two areas of study that he is very passionate about right now.

Pham Quoc Huy is a Master's Commercial Business student at the University of Economics in Ho Chi Minh City, Vietnam. He graduated from Ton Duc Thang University. His research interests are consumer buying behavior, social media celebrities and social commerce.

Nguyen Le Dinh Quy is a researcher on Management Science and Development Economics.







© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.



Subjects: Internet; Digital Marketing; e-Marketing

Keywords: Digital marketing; theory of planned behavior; technology acceptance model; startup

1. Introduction

The importance of entrepreneurship in fostering national growth and wealth has only become apparent recently (Ferreira et al., 2023; Mohammadali & Abdulkhaliq, 2019; Radukić & Petrović, 2019). Many nations' plans for economic growth and employment creation center on supporting their local small and medium-sized businesses (Ngota et al., 2019; Gobey & Matikonis, 2021). Incorporating a push for entrepreneurship within that plan is crucial. Since then, encouraging entrepreneurship has been often considered the most pressing issue in business and economics (Ahlstrom et al., 2019; Kenneth-Southworth et al., 2018; Khan, 2019).

According to the newly published Emerging Giants in Asia Pacific report, Vietnam boasts one of the newest and most vibrant start-up scenes in Asia, and it has emerged as a hub for start-ups. The research, released by HSBC and KPMG, quoted start-up data platform Tracxn as indicating that Vietnam was home to 1,600 start-ups at the beginning of the COVID-19 pandemic, but that number has now increased to over 3,000, including four unicorns. However, many businesses are unable to sell their products and services effectively due to a lack of capital. Digital marketing is a potential option for these firms, since it can be executed both organically and inorganically with optimal expenditure.

We uncovered a significant vacuum in the literature when we discovered no big studies had been conducted on the topic of digital marketing adoption by startups and these adopters were students of digital marketing courses. Specifically, the introduction of digital technologies has provided entrepreneurs with new opportunities to reach their target audience and compete in the market. Digital marketing tools are now an integral part of the marketing strategies of startups, allowing them to reach a larger audience, increase consumer engagement, and reduce marketing expenses. However, the extent to which the propensity of startups to employ digital marketing tools influences their planned behavior and intention to launch a business has not been thoroughly studied.

This study seeks to fill this void by examining the connection between startups' propensity to use digital marketing tools, their planned behavior, and their intent to start a business. Using the Technology Acceptance Model (TAM), which postulates that the level of acceptance of technological innovations predicts people's behavior, this study investigates the extent to which startups' willingness to use digital marketing tools influences their planned behavior and entrepreneurial intent. The findings offer policymakers and entrepreneurs who seek to promote entrepreneurship by maximizing the potential of digital marketing tools with valuable insights.

This article consists of four parts: literature review, methodology, discussion of results, and conclusion.

2. Literature review

2.1. Theoretical background and hypotheses development

2.1.1. Startups' use of digital marketing

Kotler (2010) defines digital marketing as "a sort of direct marketing that uses interactive technologies such as electronic mail, websites, online forums and newsgroups, interactive television, and mobile communications to bring together buyers and sellers". Search engine optimization (SEO) and search engine marketing (SEM), both of which are services provided by Google, were the earlier iteration of digital marketing. In addition, social media marketing (SMM) was carried out by utilizing various platforms such as Facebook, Instagram, Twitter, YouTube, and LinkedIn. Email



marketing, smartphone marketing, and affiliate marketing were some of the other techniques that were used in the first wave of digital marketing (Sharma et al., 2021).

Then came the era of Digital Marketing 2.0, in which marketers made use of techniques such as Growth Hacking, Online Reputation Management (ORM), Content Marketing, and Social Listening. Now that we are in the era of Digital Marketing 3.0, the technologies that are utilized for marketing and promotions include Chatbots, Cookies, Automated Responders, Artificial Intelligence and Machine Learning (AIML), and Internet-of-Things (IoT) (Chahal and Chakraborty, 2018). Companies are now tracing their customers' digital footprints in order to use this information for retargeting (Arya et al., 2019).

Scholars have done a lot of research on how companies use digital marketing. According to research by Emini and Merovci (2021), SMEs are not reaping the benefits of digital marketing since they are not aware of them. According to Lee et al. (2021) or Chakraborti et al. (2022), the major drivers of digital marketing adoption by startups include variables like top management engagement, support, and trust, perceived value, and simplicity of use. In the research on how small businesses use digital marketing, Emini and Merovci (2021) found that the "degree of perception of ease of use" and the "degree of control" are statistically significant and have a positive effect on how SMEs use digital marketing.

Also, the results of this study gave businesses and managers some information about how the process of adopting digital technology works. It shows how small and medium-sized businesses (SMEs) in Kosovo use digital marketing, why they do it, and what happens as a result.

This notwithstanding, we propose:

H1: The willingness to use digital marketing tools will have a positive effect on startups' intentions (**A** will have a positive effect on **C**).

2.1.2. Technology acceptance model (TAM)

TAM is based on the theory of reasoned action (TRA) (Fishbein & Ajzen, 1975), which proposes that an individual's conduct is motivated by his or her behavioral intention to carry out a certain activity. In turn, an individual's behavioral intention is influenced by his or her attitude and subjective norms towards the conduct in issue (Fishbein & Ajzen, 1975). According to the TRA, the desire to act directly impacts behavior since, in general, individuals act in accordance with their intentions.

TAM is founded on two important behavioral beliefs that influence behavioral intentions: perceived ease of use (PEOU) and perceived usefulness (PU). Davis (1989) defines PEOU as "the extent to which a person feels that utilizing a specific system would be effortless" (p. 320). That is, the notion that a system or program is user-friendly (Davis, 1989). PU is defined as "the extent to which an individual feels that employing a certain system will improve his or her job performance" (Davis, 1989, p. 320).

Numerous studies utilizing TAM have demonstrated that both PEOU and PU are important acceptability and use determinants. Students' Perceived Ease of Use and Perceived Usefulness of an e-portfolio system, as well as their Behavioral Intention to use the system for learning, are examined to determine the impact of Self-Efficacy, Subjective Norm, Enjoyment, Computer Anxiety, and Experience (Abdullah et al., 2016).

The Theory Acceptance Model (TAM) was used by Taufik and Hanafiah (2019) to determine that passengers' perceptions of the technology's ease of use and perceived usefulness have a major impact on whether or not they choose to use it and how they behave while using it in airports. In



contrast, a number of studies have found that perceived usefulness has no effect or a little effect on an individual's attitude or intention (Tahar et al., 2020).

Therefore, this research, drawing from a number of previous TAM studies, proposes the following further hypotheses:

H2: The willingness to use digital marketing tools will have a positive effect on startups' planned behavior (**A** will have a positive effect on **B**).

2.1.3. Theory of planned behavior (TPB)

According to the Theory of Planned Behavior (TPB), three factors—attitude toward behavior, subjective norms, and perceived behavioral control—determine an individual's behavior intentions (Ajzen, 1991a). An individual's attitude toward behavior refers to how they feel about engaging in the behavior under consideration (negative or positive). When we talk about subjective norms, we are talking about how people feel that the people who matter to them should behave. The term "perceived behavior control" refers to an individual's estimation of how challenging or simple it is to carry out a specific behavior.

The theory of planned behavior (TPB) has been used in many fields, including technology, medicine, and politics, and it has provided a compelling explanation of how people embrace new ideas and practices (Barnard-Brak et al., 2010; Conner & Armitage, 1998; Davis, 1989; Taylor & Todd, 1995).

Although there is a recently large body of literature in support of the Theory of Planned Behavior (Pan & Liu, 2022; Shanka & Gebremariam Kotecho, 2023; Wang et al., 2022), the focus of the present study is on the predictive power of the TPB construct in predicting learners' behavioral intentions toward entrepreneurship/startup.

2.1.4. Students' attitude toward business startups

According to Agarwal et al. (2020), those under the age of 30 are more likely to pursue entrepreneurial endeavors. These positive views among young people are further supported by research conducted by Mat et al. (2015); Nowiński and Haddoud (2019); Ayu et al. (2021) among young students in many context.

Startups' rising profile as engines of economic expansion and innovation has captured the interest of academics and policymakers alike. Students are the future generation of business owners, thus learning about their perspectives on starting new companies is important. The purpose of this literature review is to analyze the current state of knowledge about students' views about business beginnings, focusing on the factors that shape these views and their potential consequences. Here are a few things that may affect how students feel about starting their own businesses:

Entrepreneurial Education and Knowledge: knowledge and training in entrepreneurship students' perspectives on new venture creation might be significantly influenced by exposure to entrepreneurship education programs. Mykolenko et al. (2022) discovered that compared to their peers, students who had been exposed to entrepreneurship education had more favorable views of startups. Similarly, Mukhtar et al. (2021) found that students' views and intentions for startup activities were positively influenced by their levels of entrepreneurial expertise.

Social Persuasion and Role Models: Students' perspectives on new venture creation are shaped in large part by the examples set by their role models and the people they associate with. Students' views and intentions toward startups were found to improve when they were exposed to successful entrepreneurs as role models, according to research by Otache et al. (2021). A more optimistic



outlook toward new ventures has also been linked to being surrounded by entrepreneurial friends and acquaintances (Bignotti & le Roux, 2020).

Risk Aversion and Defeat Anxiety: Students' perceptions of risk and their aversion to failure have a significant impact on their opinions of new businesses. Students who saw startups as more precarious were more likely to have negative sentiments toward them, according to research by Peng and Walid (2022). Similarly, Turulja et al. (2020) found that students' apprehension of failure was a major factor in determining their perspectives and plans about new ventures.

Job Stability and Economic Conditions: Students' opinions regarding startups have been proven to be influenced by economic circumstances and students' beliefs of job security. Students who felt they had few options for future work were more likely to have a favorable view of startups, according to research by Suratno Narmaditya and Wibowo (2021). In addition, the students' optimistic outlook was influenced by their faith in startups' potential for monetary success and the creation of jobs (Kusumojanto et al., 2021).

Therefore, we propose a hypothesis based on the TPB stating that the likelihood of students wanting to start their own businesses increases as their views on entrepreneurship become more positive.

2.1.5. The role of subjective norm

Accessible normative ideas that take into consideration the expectations of others as a significant driver of behavioral intention establish a subjective norm (Ajzen, 1991b). Subjective norms are of utmost significance in pro-environmental research, particularly in East Asian nations, which promote collectivism in contrast to the individualism of Western societies (Shi et al., 2017). Additionally, individuals' social pressures to do or refrain from performing a certain behavior are said to be judged by subjective norms (Husain et al., 2021; Yarmohammadi et al., 2023).

Some studies suggested that subjective norms have a vital influence on behavior intentions (Liu et al., 2019; Yarmohammadi et al., 2021). In contrast, a number of studies have found that subjective norms have little effect on behavioral tendencies (Catalano et al., 2017; Shah et al., 2021; Shi et al., 2017).

2.1.6. The connection between perceived behavioral control and career decision-making The TPB model includes a construct called "perceived behavior control" (PBC), which centers on one's confidence in one's capacity to act in a certain way. It is helpful since it reveals details about how much power a person actually has: having a lot of PBC should make you work harder and stay with the behavior longer (Vicente et al., 2021).

In the TPB, PBC refers to "people's expectations regarding the amount to which they are capable of doing a certain behavior, the extent to which they believe they have the necessary resources, and their belief that they can overcome any potential hurdles" (Ajzen, 2002, p. 677). This means that people should have high levels of PBC when they feel confident in their ability to perform the behavior in question and when they perceive that they have all the necessary resources and opportunities (such as skills, time, money, cooperation by others) and that the obstacles they are likely to encounter are few and manageable (Ajzen, 2002).

There are some indications of a correlation between behavioral control and entrepreneurial intent. For example, Vamvaka et al. (2020) found that emotional attitude and perceived self-efficacy are by far the best predictors of intention. This shows how important emotions are in the process of being an entrepreneur. Similarly, Esfandiar et al. (2019) identified self-efficacy as the second predictor of the intention to start a business. Recent research by Nguyen (2020) shows that students' perceptions of environmental factors are significantly related to their sense of behavioral control in the context of entrepreneurship. This means that students' sense of



behavioral control in the context of entrepreneurship acts as a mediator between environmental factors and entrepreneurial intention. We therefore hypothesize that:

This notwithstanding, we propose:

H3: Planned behavior positively influences the intention to start an own business by adopting digital marketing skills (**B** will have a positive effect on **C**).

3. Conceptual model

The propensity to utilize digital marketing tools (A) is anticipated to have a positive impact on the scheduled actions of startups (B). This indicates that firms that are prepared to use digital marketing tools are more likely to engage in planned behavior regarding the adoption and implementation of digital marketing strategies.

It is anticipated that planned behavior (B) will mediate the relationship between propensity to use digital marketing tools (A) and intention to launch a business by adopting digital marketing skills (C). In other words, entrepreneurs who engage in planned behavior associated with the adoption of digital marketing skills are more likely to intend to launch a business that employs digital marketing tools.

The conceptual model (Figure 1) proposes that the propensity to use digital marketing tools influences the intention to start a business (directly) by employing digital marketing skills via planned behavior (indirectly).

4. Methods

4.1. Research design

A quantitative survey technique was conducted as a major data collection method to find out the hypothesized link between variables A, B, and C. The majority of these surveys employ the 5-point Likert scale. Undergraduates from all schools and majors in Ho Chi Minh City—Vietnam as well as anyone interested in enrolling in digital marketing classes, were polled. The questionnaire is mainly divided into two parts.

The objective of the first part is to explore the demographics of respondents; thus, information regarding gender, age, education level, and intention to study digital marketing was collected. The second part of the questionnaire includes the measurement items, shown in Appendix A.

4.2. Data collection and sample

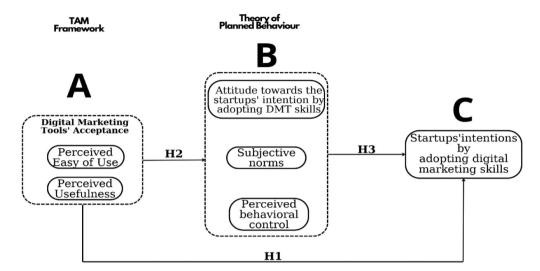
An online pilot survey was administered between December 30th, 2022 and January 3rd, 2023 to determine the survey's feasibility. The survey was posted online in Google Forms and sent out to 25 participants using the Facebook and Zalo. It proved that everybody who answered the survey got the questions. The results of the preliminary survey were merged with those of the full survey.

As a result, data for the final survey was gathered from 3 January 2023, to 26 January 2023, with a total of 200 replies. Five unfinished surveys were thrown out after we checked and selected the data. The final sample of 195 undergraduates included students from a wide range of Ho Chi Minh City institutions. We used a convenience sample technique to pick our respondents, reaching out to them via social media and contacts made in their college's alumni network.

4.3. Data analysis

To examine the validity of the suggested model and assumptions, this research used covariance-based structural equation modeling (CB-SEM). Because of its reliability and validity in evaluating theoretical models, CB-SEM has become a popular tool for studying the interrelationships between latent variables (Hair et al., 2019).

Figure 1. Proposed conceptual model.



There were a few stages to the examination of the data and the software packages SPSS 22.0 as well as AMOS 20.0 were utilized throughout the statistical analysis process. Descriptive statistics and inter-variable correlations were the first to be analyzed. The factor loadings, convergent validity, and discriminant validity of the measurement model were then evaluated. Third, we looked at how well the structural model fits the data and how much weight the direct and indirect effects should be given.

4.4. Measurements

For this study's variable measurement, a questionnaire will be administered. The questionnaire (see the Appendix) will be divided into two major sections: the respondents' profiles and their perspectives about:

- Entrepreneurial intention—adjusted from Ayeh et al., (2022);
- Attitude towards entrepreneurial intention—adjusted from Ayeh et al., (2022);
- Perceived behavioral control—adjusted from Ayeh et al., (2022);
- Subjective norm—adjusted from Ayeh et al., (2022);
- Perceived ease of use (digital marketing tools)—adjusted from Moses et al. (2013); Joo and Sang (2013);
- Perceived usefulness (digital marketing tools)—adjusted from Moses et al. (2013); Joo and Sang (2013).

5. Results and discussion

5.1. Respondent's profile

The total responses consisted of 195 questionnaires, of which 45.1% are men and 54.9% are women. Almost 87.7% of people polled saw value in taking digital marketing classes. 77.9% do not have entrepreneurship experiences. 13.8% of sample respondents have a master's degree, 66.7% have a bachelor's degree, 13.8% and 5.6% represent a diploma and intermediate degree, respectively. When broken down by age range, 24.1% were under the age of 20, 36.4% were between the ages of 21 and 23, and 39.5% were above the age of 24.

5.2. Cronbach's Alpha

An investigation using Cronbach's Alpha was carried out so that we could determine how reliable the scales were. Cronbach's Alpha ranged from **0.741** to **0.890** across all of the scales. Each individual variable in the research has a "Cronbach's Alpha if item deleted" value that is lower



than the scale's Cronbach's Alpha value. Each and every one of the individual items has a value for "Corrected item total correlation" that is more than 0.3. (Table 1).

5.3. Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA)

To test the validity of the study's instrument, EFA analysis was done at the same time for six variables, including independent and dependent variables with 18 items using the promax rotation method. At the first time, **13/18** items were loaded in original factors with factor loading in all cases above 0.5; initial Eigenvalues = **65.192** >50%; KMO = **0.912**; Sig. (Bartlett's Test) = 0.000.

In the second time, after deleting 5 items above, we get 13/13 items loaded in original factors with factor loading in all cases above 0.5; initial Eigenvalues = 70.881 > 50%; KMO = 0.872; Sig. (Bartlett's Test) = 0.000 The validity of measurement instruments is confirmed.

Then, the confirmatory factor analysis (CFA) was performed with survey data. The measurement models exhibited a reasonably good level of fit (Figure 2): $\chi 2 = 171.040$, df = 61, p = 0.000 < 0.5; $\chi 2/df = 2.804 < 3$; GFI = 0.877 > 0.8, CFI = 0.927, TLI = 0.907 > 0.9, RMSEA = 0.096 < 0.1; standardized regression weights of all items are higher than 0.5 (Table 2). Thus, validity is proven for all scales, as all scales are internally consistent and reliable for use in the next steps.

5.4. Reliability and validity

Reliability of the constructs has been checked through average variance extracted (AVE) and composite reliability (CR). The values of CR equal to or greater than 0.70 indicate good reliability (Hair et al., 2019). In the present study, CR values of all constructs are greater than 0.70 (Table 3), indicating that the scales are quite reliable.

Convergent and discriminant validity were assessed as a part of construct validity. A scale with 0.5 or above average variance extracted (AVE) and SRW values establish convergent validity (Hair et al., 2019). As shown in Table 3, the values of AVE and standardized loadings are all above 0.5.

In addition, the discriminant validity of the model has been demonstrated by contrasting the AVE with the squared correlations of the various components (Kaya, 2019). As a result of the AVE for each of the constructs being greater than the squared correlation, discriminant validity has been demonstrated (Table 4).

Indicators of goodness-of-fit demonstrate how compatible the model is on a holistic level. The model satisfies the Goodness-of-Fit requirements that were set out. An adequate degree of excellent fit is demonstrated by the model's overall fit statistics (Figure 3), which are as follows: RMSEA = 0.096 < 0.1, Chi-square/Chi = 2.804 < 3, CFI = 0.927 > 0.9, Chi = 0.877 > 0.8, Chi = 0.907 >

Table 1. Cronbach alph	1 a 1		
Variables	Number of items	Code	Cronbach's Alpha
Entrepreneurial intention	3	ITN	0.875
Attitude towards entrepreneurial intention	3	ATD	0.814
Perceived behavioral control	3	PBC	0.790
Subjective norm	3	SNM	0.741
Perceived ease of use (digital marketing tools)	3	PEOU	0.780
Perceived usefulness (digital marketing tools)	3	PU	0.890

Figure 2. Confirmatory factor analysis².

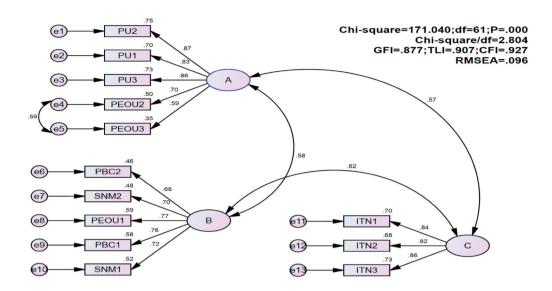
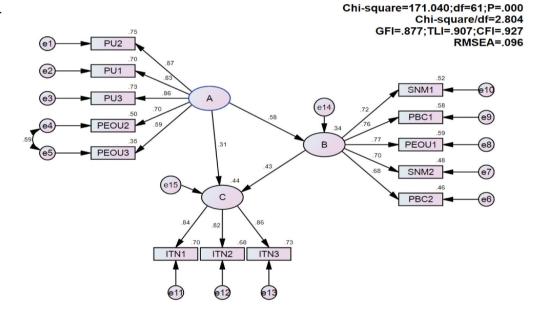


Figure 3. The result of hypothesis testing.⁶



0.9 (Hair et al., 2009). Given that the initial model is what's being used to assess the relationship between the variables, it follows that the design of the model is one that is consistent with the sample data.

5.5. Hypotheses testing

In total, there were three direct relationships that were investigated (as shown in Table 5). Each and every one of them carries a statistically significant weight (supported by research data). The hypothesis test shows that the relationship between *The willingness to use digital marketing tools* (A) and startups' planned behavior (B) is very strong ($\beta = 0.632$; sig. <0.001).

The second-order construct – startups' planned behavior (B)– holds a positive and significant influence on entrepreneurial intention (β = 0.518; sig. <0.001).



Table	2. Sta	ndardized regression weights3	
			Estimate
PU2	<_	A	.868
PU1	<	A	.835
PU3	<	A	.856
PEOU2	<	A	.704
PEOU3	<	A	.592
PBC2	<	В	.677
SNM2	<	В	.696
PEOU1	<	В	.771
PBC1	<	В	.760
SNM1	<	В	.722
ITN1	<	С	.837
ITN2	<_	С	.825
ITN3	<	С	.856

Table 3. AVE ar	nd CR4			
Constructs	Dimensions	Standardized Regression Weights	Average Variance Extracted	Composite Reliability
A		3.855	0.606	0.883
	PU2	0.868		
	PU1	0.835		
	PU3	0.856		
	PEOU2	0.704		
	PEOU3	0.592		
В		3.626	0.527	0.848
	SNM1	0.677		
	PEOU1	0.696		
	PBC2	0.771		
	SNM2	0.760		
	PBC1	0.722		
С		2.518	0.705	0.877
	ITN1	0.837		
	ITN3	0.825		
	ITN2	0.856		

Table 4. Di	Table 4. Discriminant validitys						
	CR	AVE	MSV	ASV	В	Α	С
В	0.848	0.527	0.379	0.359	0.726		
Α	0.883	0.606	0.339	0.330	0.582***	0.778	
С	0.877	0.705	0.379	0.350	0.616***	0.566***	0.839



Table 5. Regression weights					
Hypothesis	Estimate	S.E.	C.R.	P	Description
H1: C ← A	0.408	0.113	3.607	***	Supported
H2: B ← A	0.632	0.095	6.649	***	Supported
H3: C ← B	0.518	0.115	4.510	***	Supported

In line with the theoretical assumption of TAM, The willingness to use digital marketing tools (A) also directly affects the positive and significant correlation on startups' intentions (C) (β = 0.408; sig. <0.001). This analysis of effect is consistent with the recent studies conducted by Fatoki (2022); Toraman (2022); Parikh et al. (2021), which confirms that people's purpose to act in certain ways may be predicted based on their level of acceptance of technological innovations.

6. Conclusions

The results of this study show that the readiness of startups to utilize digital marketing tools is positively correlated with their intended conduct and their desire to launch a firm. The results corroborate the TAM's underlying assumptions and imply that the degree to which a startup embraces and uses digital marketing tools is predictive of that company's future actions and level of entrepreneurial ambition.

The significance of planned behavior as a mediator between openness to using digital marketing tools and entrepreneurial ambition is also emphasized. Based on the findings, it appears that startups need to consciously act in ways that correspond to their aims for the adoption and execution of digital marketing techniques.

Managers, policymakers, and practitioners interested in fostering entrepreneurship and making use of digital marketing tools would do well to consider the study's implications. The results indicate that a significant increase in startup intent can be achieved through the provision of training and support on the effective use of digital marketing tools, the creation of targeted marketing campaigns that highlight the benefits of digital marketing tools, and the design of policies and initiatives that encourage and support the adoption of digital marketing tools by startups.

Finally, the study emphasizes the importance of future research into the contexts in which startups adopt digital marketing tools, the effects of various digital marketing tools on startups' planned behavior and entrepreneurial intentions, and the impact of different types of digital marketing tools on startups' planned behavior and entrepreneurial intentions.

6.1. Theoretical implications

This research makes numerous important theoretical contributions to the fields of entrepreneurship and technological acceptability. To begin, the results of the study validate the TAM for use with digital marketing tools and young enterprises. According to these results, people's actions and decisions may be anticipated based on their level of comfort with technological advances.

Second, the research emphasizes the role of planned behavior as a mediator between the acceptance of digital marketing tools and the motivation to start a business. Unless companies engage in deliberate behavior regarding the adoption and implementation of digital marketing techniques, the results of this study imply that the readiness of startups to use such technologies may not directly convert into entrepreneurial ambitions.

Thirdly, the study informs policymakers and practitioners attempting to promote entrepreneurship on the variables that impact the entrepreneurial intentions of startups. The findings show that



entrepreneurs' desire to launch a firm is greatly boosted when digital marketing tools are used and planned behavior is undertaken concerning the adoption of digital marketing abilities.

Overall, the study adds to our knowledge of the significance of digital marketing tools to the entrepreneurial process, and it stresses the importance of policymakers and practitioners helping and encouraging startups to adopt and implement digital marketing tools.

6.2. Managerial implications

Managers and practitioners interested in encouraging entrepreneurship and making use of digital marketing tools would do well to consider the implications of this study's findings.

First, the results may be used by managers to devise strategies for getting startups to use digital marketing tools and to act consciously regarding doing so. As an example, a company may assist entrepreneurs create a digital marketing strategy by teaching them how to utilize digital marketing tools properly.

Second, the results may be used by managers to create promotional initiatives that specifically target startups and emphasize the value of digital marketing tools. As an example, you may highlight the achievements of other firms that have effectively implemented digital marketing strategies.

Third, the results may be used by politicians to create programs that help new businesses employ digital marketing. For example, governments may incentivize companies to engage in digital marketing by granting tax breaks for doing so, or they could provide cash and resources to help firms improve their digital marketing abilities.

The findings as a whole imply that entrepreneurs' desire to launch a firm can benefit greatly from the use of digital marketing tools and the planned behavior associated with such use. These results may be used by managers and politicians to create programs that encourage entrepreneurship and make the most of digital marketing opportunities.

6.3. Limitations

No empirical study can ever claim to be perfect. This study is based on 195 samples of participants who come from two big cities, Ho Chi Minh and Ha Noi, and have access to the internet every day. Therefore, they are using digital marketing tools more easily than participants who come from other regions. The findings suggest that future research should invest more time and expand the area of collecting data.

6.4. Further research

Even though this study sheds light on the connection between startups' openness to using digital marketing tools, their planned behavior, and their intention to launch a company, more investigation into this topic is warranted.

The characteristics that motivate startups to use digital marketing strategies might be investigated in future studies. To do so would include researching the elements, both internal and external to the business itself, such as founder traits, company culture, and access to funding and other resources.

Another potential subject for further study is the effect of various digital marketing tools on the actions and decisions of entrepreneurs. To do so, businesses may evaluate the efficacy of various marketing strategies, including but not limited to social media marketing, search engine optimization, and email marketing.



The influence of contextual variables on the connection between entrepreneurs' readiness to utilize digital marketing tools, their planned conduct, and their desire to start a firm is a third possible subject for further research. The amount of digitization in a certain industry, for example, may have a significant impact on the likelihood of a startup's decision to employ digital marketing.

Overall, more research in this area can shed light on the influences on the planned actions and entrepreneurial aspirations of startups regarding the use of digital marketing tools. This study provides valuable insight that can be used to improve the policies, tactics, and programs that aim to encourage entrepreneurship and help companies make the most of digital marketing's potential.

Acknowledgments

The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

There is no funding for this research project.

Author details

Pham Thi Phuong Dung¹ Ho Minh An¹ Pham Quoc Huy¹ Nguyen Le Dinh Quy² E-mail: quynld96@gmail.com

- ¹ University of Economics, Ho Chi Minh, Vietnam.
- ² Independent Researcher, Hanoi, Vietnam.

Disclosure statement

No potential conflict of interest was reported by the authors.

Citation information

Cite this article as: Understanding the startup's intention of digital marketing's learners: An application of the theory of planned behavior (TPB) and technology acceptance method (TAM), Pham Thi Phuong Dung, Ho Minh An, Pham Quoc Huy & Nguyen Le Dinh Quy, Cogent Business & Management (2023), 10: 2219415.

Notes

- 1. Source: primary data.
- 2. Source: primary data.
- Source: primary data.
 A: The willingness to use digital marketing tools; B: startups' planned behavior; C: startups' intentions
- 4. Source: primary data.
- Source: primary data.
 A: The willingness to use digital marketing tools; B: startups' planned behaviour; C: startups' intentions
- Source: Primary Data.
 A: The willingness to use digital marketing tools; B: startups' planned behaviour; C: startups' intentions

References

- Abdullah, F., Ward, R., & Ahmed, E. (2016). Investigating the influence of the most commonly used external variables of TAM on students' perceived ease of use (PEOU) and perceived usefulness (PU) of e-portfolios. Computers in Human Behavior, 63, 75–90. https://doi.org/10.1016/j.chb.2016.05.014
- Agarwal, S., Ramadani, V., Gerguri-Rashiti, S., Agrawal, V., & Dixit, J. K. (2020). Inclusivity of entrepreneurship education on entrepreneurial attitude among young community: Evidence from India. *Journal of Enterprising Communities*, 14(2), 299–319. https://doi.org/10.1108/JEC-03-2020-0024
- Ahlstrom, D., Chang, A. Y., & Cheung, J. S. T. (2019). Encouraging entrepreneurship and economic growth.

- Journal of Risk and Financial Management, 12(4), 178. https://doi.org/10.3390/irfm12040178
- Ajzen, I. (1991a). The theory of planned behavior.

 Organizational Behavior and Human Decision

 Processes, 50(2), 179–211. https://doi.org/10.1016/
 0749-5978(91)90020-T
- Ajzen, I. (1991b). The theory of planned behavior organizational behavior and human decision processes.

 Organizational Behavior and Human Decision

 Processes, 50(2), 179–211. https://doi.org/10.1016/0749-597891290020-T
- Ajzen, I. (2002). Perceived behavior control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, 32(4), 665–683. https://doi.org/10.1111/j.1559-1816.2002.tb00236.x
- Arya, V., Sethi, D., & Paul, J. (2019). Does digital footprint act as a digital asset? Enhancing brand experience through remarketing. *International Journal of Information Management*, 49, 142–156. https://doi.org/10.1016/j.ijinfomqt.2019.03.013
- Ayu, S. F., Iskandarini, & Fatoni, R. B. M. I. (2021). Factors affecting risk perceptions of young entrepreneurs in agricultural startup business. *IOP Conference Series*, 782(2), 22055–. https://doi.org/10.1088/1755-1315/782/2/022055
- Barnard-Brak, L., Burley, H., & Crooks, S. M. (2010). Explaining youth mentoring behavior using a theory of planned behavior perspective. *International Journal of Adolescence and Youth*, 15(4), 365–379. https://doi.org/10.1080/02673843.2010.9748040
- Bignotti, A., & le Roux, I. (2020). Which types of experience matter? The role of prior start-up experiences and work experience in fostering youth entrepreneurial intentions. International Journal of Entrepreneurial Behaviour & Research, 26(6), 1181–1198. https://doi.org/10.1108/IJEBR-10-2019-0577
- Catalano, H. P., Knowlden, A. P., Birch, D. A., Leeper, J. D., Paschal, A. M., & Usdan, S. L. (2017). Using the theory of planned behavior to predict HPV vaccination intentions of college men. *Journal of American College Health*, 65(3), 197–207. https://doi.org/10.1080/07448481.2016.1269771
- Chahal, R., & Chakraborti, J. (2018). Digital Marketing 2.0. Himalaya Publishing House.
- Chakraborti, J., Dutta, A., & Jana, B. (2022). Digital marketing adoption among startups in India: A systematic review and bibliometric analysis. Journal of Information & Optimization Sciences, 43(6), 1301–1309. https://doi.org/10.1080/02522667.2022. 2117329
- Conner, M., & Armitage, C. J. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of Applied Social Psychology*, 28(15), 1429–1464. https://doi.org/10.1111/j.1559-1816.1998.tb01685.x

- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319–340. https://doi.org/10.2307/249008
- Emini, A., & Merovci, S. (2021). Do-it-yourself marketing and digital marketing adoption: evidence from a developing country. *Business Systems Research*, 12 (2), 1–16. https://doi.org/10.2478/bsrj-2021-0016
- Esfandiar, K., Sharifi-Tehrani, M., Pratt, S., & Altinay, L. (2019). Understanding entrepreneurial intentions:
 A developed integrated structural model approach.

 Journal of Business Research, 94, 172–182. https://doi.org/10.1016/j.jbusres.2017.10.045
- Fatoki, O. (2022). Determinants of intention to purchase photovoltaic panel system: An integration of technology acceptance model and theory of planned behaviour. International Journal of Energy Economics & Policy, 12(3), 432–440. https://doi.org/10.32479/ijeep.12931
- Ferreira, J. J., Fernandes, C. I., Veiga, P. M., & Gerschewski, S. (2023). Interlinking institutions, entrepreneurship and economic performance. *International Journal of Entrepreneurial Behaviour & Research*. https://doi.org/ 10.1108/IJEBR-07-2022-0640
- Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention and behaviour: An introduction to theory and research. Addison-Wesley.
- Gobey, M., & Matikonis, K. (2021). Small business property tax reductions and job growth. Small Business Economics, 56(1), 277–292. https://doi.org/10.1007/s11187-019-00219-9
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019).

 Multivariate data analysis (Eighth edition ed.). Cengage.
- Husain, F., Shahnawaz, M. G., Khan, N. H., Parveen, H., & Savani, K. (2021). Intention to get COVID-19 vaccines: Exploring the role of attitudes, subjective norms, perceived behavioral control, belief in COVID-19 misinformation, and vaccine confidence in Northern India. Human Vaccines & Immunotherapeutics, 17(11), 3941–3953. https://doi.org/10.1080/21645515.2021.1967039
- Joo, J., & Sang, Y. (2013). Exploring Koreans' smartphone usage: An integrated model of the technology acceptance model and uses and gratifications theory. Computers in Human Behavior, 29(6), 2512–2518. https://doi.org/10.1016/j.chb.2013.06.002
- Kaya, T., Erkut, B., & Thierbach, N. (2019). Entrepreneurial Intentions of Business and Economics Students in Germany and Cyprus: A Cross-Cultural Comparison. Sustainability, 11(5), 1437. https://doi.org/10.3390/ su11051437
- Kenneth-Southworth, E., Watters, C., & Gu, C. (2018).
 Entrepreneurship in China: A review of the role of normative documents in China's legal framework for encouraging entrepreneurship. Entrepreneurial Business and Economics Review, 6(4), 71–85. https://doi.org/10.15678/EBER.2018.060404
- Khan, M. A. I. A. A. (2019). Dynamics encouraging women towards embracing entrepreneurship: Case study of Mena countries. *International Journal of Gender and Entrepreneurship*, 11(4), 379–389. https://doi.org/10. 1108/IJGF-01-2019-0017
- Kotler, P. (2010). Principles of Marketing: A South Asian perspective, 13/E. Pearson Education India.
- Kusumojanto, D. D., Wibowo, A., Kustiandi, J., & Narmaditya, B. S. (2021). Do entrepreneurship education and environment promote students' entrepreneurial intention? the role of entrepreneurial attitude. Cogent Education, 8(1). https://doi.org/10. 1080/2331186X.2021.1948660

- Lee, Y. Y., Falahat, M., & Sia, B. K. (2021). Drivers of digital adoption: A multiple case analysis among low and high-tech industries in Malaysia. *Asia-Pacific Journal of Business Administration*, 13(1), 80–97. https://doi.org/10.1108/APJBA-05-2019-0093
- Liu, R.-D., Wang, J., Gu, D., Ding, Y., Oei, T. P., Hong, W., Zhen, R., & Li, Y.-M. (2019). The effect of parental phubbing on teenager's mobile phone dependency behaviors: The mediation role of subjective norm and dependency intention. Psychology Research and Behavior Management, 12, 1059–1069. https://doi. org/10.2147/PRBM.S224133
- Mat, S. C., Maat, S. M., & Mohd, N. (2015). Identifying factors that affecting the entrepreneurial intention among engineering technology students. *Procedia Social & Behavioral Sciences*, 211, 1016–1022. https://doi.org/10.1016/j.sbspro.2015.11.135
- Mohammadali, Z. M., & Abdulkhaliq, S. S. (2019).

 Prospects and challenges of entrepreneurship development in the Kurdistan Region of Iraq: An overview.

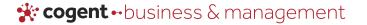
 International Journal of Entrepreneurial Knowledge, 7
 (2), 4–16. https://doi.org/10.37335/ijek.v7i2.89
- Moses, P., Wong, S. L., Bakar, K. A., & Mahmud, R. (2013). Perceived usefulness and perceived ease of use: antecedents of attitude towards laptop use among science and mathematics teachers in Malaysia. The Asia-Pacific Education Researcher, 22(3), 293–299. https://doi.org/10.1007/s40299-012-0054-9
- Mukhtar, S., Wardana, L. W., Wibowo, A., & Narmaditya, B. S. (2021). Does entrepreneurship education and culture promote students' entrepreneurial intention? The mediating role of entrepreneurial mindset. Cogent Education, 8(1). https://doi. org/10.1080/2331186X.2021.1918849
- Mykolenko, O., Ippolitova, I., Doroshenko, H., & Strapchuk, S. (2022). The impact of entrepreneurship education and cultural context on entrepreneurial intentions of Ukrainian students: The mediating role of attitudes and perceived control. Higher Education, Skills & Work-Based Learning, 12(3), 519-536. https://doi.org/10.1108/HESWBL-08-2020-0190
- Ngota, B. L., Rajkaran, S., & Mang'unyi, E. E. (2019). African Immigrant Entrepreneurs in South Africa: Exploring Their Economic Contributions. *Entrepreneurial Business and Economics Review*, 7(4), 33–55. https://doi.org/10.15678/EBER.2019.070403
- Nguyen, T. T. (2020). The impact of access to finance and environmental factors on entrepreneurial intention: The mediator role of entrepreneurial behavioural control. Entrepreneurial Business and Economics Review, 8(2), 127–140. https://doi.org/10.15678/EBER.2020.080207
- Nowiński, W., & Haddoud, M. Y. (2019). The role of inspiring role models in enhancing entrepreneurial intention. *Journal of Business Research*, *96*, 183–193. https://doi.org/10.1016/j.jbusres.2018.11.005
- Otache, I., Edopkolor, J. E., & Okolie, U. C. (2021).

 Entrepreneurial self-confidence, perceived desirability and feasibility of hospitality business and entrepreneurial intentions of hospitality management technology students. The International Journal of Management Education, 19(2), 100507-. https://doi.org/10.1016/j.ijme.2021.100507
- Pan, J. Y., & Liu, D. (2022). Mask-wearing intentions on airplanes during COVID-19 – Application of theory of planned behavior model. *Transport Policy*, 119, 32–44. https://doi.org/10.1016/j.tranpol.2022.01.023
- Parikh, A., Patel, J. D., & Jaiswal, A. K. (2021). Managing job applications online: Integrating website informativeness and compatibility in theory of planned behaviour and technology acceptance model.



- Decision (Calcutta), 48(1), 97-113. https://doi.org/10. 1007/s40622-020-00266-2
- Peng, H., & Walid, L. (2022). The effects of entrepreneurs' perceived risks and perceived barriers on sustainable entrepreneurship in Algeria's SMEs: The mediating role of government support. Sustainability, 14(17), 11067. https://doi.org/10.3390/su141711067
- Radukić, S., & Petrović, J. (2019). An analysis of the development of entrepreneurship in the republic of Serbia with a special focus on female Entrepreneurship. Journal of Women's Entrepreneurship and Education, 1(1–2), 1–16. https://doi.org/10.28934/jwee19.12.pp1-16
- Shah, S. F. A., Ginossar, T., Bentley, J. M., Zimet, G., & McGrail, J. P. (2021). Using the Theory of Planned behavior to identify correlates of HPV vaccination uptake among college students attending a rural university in Alabama. *Vaccine*, 39(51), 7421–7428. https://doi.org/10.1016/j.vaccine.2021.10.082
- Shanka, M. S., & Gebremariam Kotecho, M. (2023). Combining rationality with morality - integrating theory of planned behavior with norm activation theory to explain compliance with COVID-19 prevention guidelines. Psychology, Health and Medicine, 28(2), 305–315. https://doi.org/10.1080/13548506. 2021.1946571
- Sharma, A., Dwivedi, Y. K., Arya, V., & Siddiqui, M. Q. (2021). Does SMS advertising still have relevance to increase consumer purchase intention? A hybrid PLS-SEM-neural network modelling approach. Computers in Human Behavior, 124, 106919. https:// doi.org/10.1016/j.chb.2021.106919
- Shi, H., Fan, J., & Zhao, D. (2017). Predicting household PM2.5-reduction behavior in Chinese urban areas: An integrative model of theory of planned behavior and norm activation theory. *Journal of Cleaner Production*, 145, 64–73. https://doi.org/10.1016/j.jcle pro.2016.12.169
- Suratno Narmaditya, B. S., & Wibowo, A. (2021). Family economic education, peer groups and students' entrepreneurial intention: The mediating role of economic literacy. *Heliyon*, 7(4), e06692–e06692. https://doi.org/10.1016/j.heliyon.2021.e06692
- Tahar, A., Riyadh, H. A., Sofyani, H., & Purnomo, W. E. (2020). Perceived ease of use, perceived usefulness, perceived security and intention to use E-Filing: The role of technology readiness. The Journal of Asian Finance, Economics & Business, 7(9), 537–547. https://doi.org/10. 13106/jafeb.2020.vol7.no9.537
- Taufik, N., & Hanafiah, M. H. (2019). Airport passengers' adoption behavior towards self-check-in Kiosk Services: The roles of perceived ease of use, perceived usefulness and need for human interaction.

- Heliyon, 5(12), e02960-e02960. https://doi.org/10.1016/j.heliyon.2019.e02960
- Taylor, S., & Todd, P. (1995). Decomposition and crossover effects in the theory of planned behavior: A study of consumer adoption intentions. *International Journal of Research in Marketing*, 12(2), 137–155. https://doi.org/10.1016/0167-8116(94)00019-K
- Toraman, Y. (2022). User acceptance of metaverse: insights from technology acceptance model (TAM) and Planned Behavior Theory (PBT). Emerging Markets Journal, 12(1), 67–75. https://doi.org/10.5195/emaj.2022.258
- Turulja, L., Veselinovic, L., Agic, E., & Pasic-Mesihovic, A. (2020). Entrepreneurial intention of students in Bosnia and Herzegovina: What type of support matters? Economic Research Ekonomska Istraživanja, 33(1), 2713–2732. https://doi.org/10.1080/1331677X.2020.1730216
- Vamvaka, V., Stoforos, C., Palaskas, T., & Botsaris, C. (2020). Attitude toward entrepreneurship, perceived behavioral control, and entrepreneurial intention: Dimensionality, structural relationships, and gender differences. *Journal of Innovation and Entrepreneurship*, 9(1), 1–26. https://doi.org/10.1186/s13731-020-0112-0
- Vicente, P., Marques, C., & Reis, E. (2021). Willingness to pay for environmental quality: The effects of pro-environmental behavior, perceived behavior control, environmental activism, and educational level. SAGE Open, 11(4), 215824402110252-. https://doi.org/10.1177/21582440211025256
- Wang, L., Zhang, Q., & Wong, P. P. W. (2022). Purchase intention for green cars among Chinese millennials: Merging the value-attitude-behavior theory and theory of planned behavior. Frontiers in Psychology, 13, 786292–786292. https://doi.org/10.3389/fpsyg.2022. 786292
- Yarmohammadi, S., Mousavi, S., Ajori, L.,
 Mohammadzade, F., & Marashi, T. (2021). Impact of
 attitude, subjective norms and perceived behavioral
 control on health behaviors among women with
 low-risk HPV, and the mediating role of behavioral
 intention: An interventional study. International
 Journal of Health Promotion and Education, AheadOf-Print(ahead-Of-Print), 1–13. https://doi.org/10.
 1080/14635240.2021.1995776
- Yarmohammadi, S., Mousavi, S., Ajori, L., Mohammadzade, F., & Marashi, T. (2023). Impact of attitude, subjective norms and perceived behavioral control on health behaviors among women with low-risk HPV, and the mediating role of behavioral intention: An interventional study. International Journal of Health Promotion and Education, 61(2), 70–82



APPENDIX RESPONDENTS' DEMOGRAPHICS AND CHARACTERISTICS Your gender?

Your gender?
(1) Male
(2) Female
What is your current education-level?
(1) Master
(2) Bachelor
(3) Diploma
(4) Intermediate
Which of the following age groups are you in?
(1) <20
(2) 21 – 23
(3) >24
Are you currently running your own business?
(1) Yes
(2) No
If given the opportunity, would you like to supplement your knowledge of digital marketing in today's digital age?
(1) Absolutely yes.
(2) No, because I have already learnt this.
(3) No, I have no need.
MESUREMENT ITEMS Group C—Startup Intentions (Ayeh, J. K., Bondzi-Simpson, A., and Baah, N. G. (2022)
(1) Do you have serious intentions of starting a business after graduation so that you can apply the

- (1) Do you have serious intentions of starting a business after graduation so that you can apply the knowledge you have learned in practice after completing the Digital Marketing program/course?
- (2) Are you ready to set up a company in the near future so that you can apply your trained knowledge in practice after completing the Digital Marketing program/course?
- (3) Do you intend to run your own business in the near future so that you can put your training knowledge into practice after completing the Digital Marketing program/course?



Group B – Planned Behaviour towards startup intentions (Ayeh, J. K., Bondzi-Simpson, A., and Baah, N. G. (2022)

- (1) Do you think starting a business after acquiring knowledge of Digital Marketing so that you can apply what you have been trained in is a good idea?
- (2) Starting a business after acquiring the knowledge of Digital Marketing to be able to apply what has been trained in practice is very wise.
- (3) Starting a business after acquiring the knowledge of Digital Marketing into practice is a great advantage compared to those who do not learn about it.
- (4) Are you confident that you will have enough knowledge to apply what you have been trained in the Digital Marketing program/course into practice? This is definitely a solid foundation for your startup intention.
- (5) Putting your trained Digital Marketing knowledge into practice (business startups) is not a big challenge for you, is it?
- (6) Do you think the intention to start a business will be stronger when you have acquired the knowledge from the Digital Marketing program/course? Thereby you are confident enough to make important decisions by applying them to your future startup.
- (7) Most of the people who are important to you think that you will be successful when planning to start a business if you apply the knowledge you have been trained in Digital Marketing to your own startup.
- (8) You think other students in your class will naturally be willing to put their training in Digital Marketing into practice if they have the same intention of starting a business as you.
- (9) Most of the people who are important to you will support you applying your digital marketing training to your startup project.

Group A – The willingness to use digital marketing tools (Moses et al. (2013); Joo and Sang (2013)

- (1) Learning how to effectively use Digital Marketing tools is easy for you.
- (2) You will easily become proficient in using Digital Marketing tools to apply to your work.
- (3) You can flexibly interact with Digital Marketing tools.
- (4) Using digital marketing tools allows you to get things done faster.
- (5) Use Digital Marketing tools to make your job easier.
- (6) Use Digital Marketing tools to improve your efficiency at work.