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Chapter

Digital Entrepreneurship in Vocational High School Student Level

Darma Rika Swaramarinda, Badrul Isa, Noorhayati Mohd. Yusof and Mohd. Ali Bahari Abdul Kadir

Abstract

Digital entrepreneurship is becoming more popular, so now is a great time to learn more about it. This research aims to find out how digital entrepreneurship knowledge in Vocational High School Students. The novelty of this present study is that it looks at digital entrepreneurship using a mixed-methods and focuses on Vocational High School Students as its subject. The sample used was twelve student respondents who had met the saturation criteria in the qualitative phase; from the results of the qualitative phase, several themes came up from the interview process using inductive code on the thematic analysis. However, the researchers only focused on the digital entrepreneurship theme based on the need for this theme at the vocational high school level. Then, the quantitative phase investigates in deep of other data and is processed using questionnaires. The result begins with a validity test in which R calculates each indicator its value above the table R-value of 0.576, while for the test the reliability of Cronbach's Alpha value 0.966 has high reliability. Furthermore, using the Kolmogorov-Smirnov normality test found the data was normally distributed and homogeneous. Independent Sample t Test is known that there is a difference in digital entrepreneurship knowledge between Male and Female Students.

Keywords: digital entrepreneurship, students, vocational high school

1. Introduction

In the twenty-first century, often known as the era of technological advancement, there are numerous elements and sciences pertaining to everything, one of which is the digital area. In this digital era, everyone is essential to keep up with technological advancements and improve their skills, as the digital area is currently very beneficial to the advancement of science. The use of mobile phones, laptops, electronic gadgets, and social media devices is one of the innovations we can observe nowadays.

Since digital entrepreneurship has become more prevalent in recent years, now is a great time to study this topic. So, digital entrepreneurship can be a growth driver in a world after a pandemic [1]. The topic of digital entrepreneurship in the field of



Figure 1. Google trends of digital entrepreneurship. Source: (https://www.google.com/trends).

industry and business in the world is also exciting in line with the covid 19 pandemic, where digital is inevitably applied in people's daily lives today. The following google trends also show that people's interest in digital entrepreneurship has started to increase since the beginning of the pandemic in 2020 (**Figure 1**).

Next, with a population of 273 million, the Unitary State of the Republic of Indonesia is one of the countries with the most significant population; hence it can be argued that Indonesia has a tremendous human resource potential. However, the government needs to maximize this potential. In addition, many Indonesian residents are forced to study for up to twelve years, following which they are free to attend college or seek employment. Currently, numerous infractions are committed by Vocational High School Students; consequently, issues result from the above causes. Many graduates of vocational high schools lack the necessary knowledge, making it difficult for them to make decisions about their future. According to statistics from the Central Statistics Agency from 2022, The level of Open Unemployment for Secondary Students is 10.38%, and the unemployment rate for vocational high school students is higher than for other education graduates [2].

One way to deal with this is for vocational high school graduates to start their businesses so they can stay alive in a world that is becoming more advanced. This aligns with the government's efforts to help these graduates run their businesses through the MSME program. One way to help a country develop is to stop it from being a consumer country. However, Indonesia still needs to work on moving forward because only 3.18 percent of its people are entrepreneurs, which is far behind Singapore and even other ASEAN countries [3]. At the moment, Indonesia is one of the best places for the creative industry to grow. This industry can make a significant economic difference, create more jobs, and increase the country's GDP. If people want to start their business in this digital age, they can use marketplaces like Shopee and even Tiktokshop to help them. So that it can help promote the process and use marketing to put it into place. In this digital age, entrepreneurs can make a lot of money quickly because Indonesians are very consumerist and have never been without their own gadgets. As Hassan [4] stated that with all the different apps that can be accessed through the internet, it helps a business grow all over the world. Through digital entrepreneurship, many traders or business owners use online tools like blogs, Facebook, Instagram, and even e-business apps to reach more customers and make it easier to sell and buy goods.

Nevertheless, technology development in Indonesia needs to keep up with the culture, so the 2016 National Financial Survey by the Ministry of Development and Protection of Consumers found that openness to public information still needs improvement. Only 4.4% of Indonesians are financially and economic literate [5]. Then, anyone can do digital entrepreneurship, including students and the general public. This means that people can do these activities to buy things they need and get better at what they already know how to do. Vocational students also learn about entrepreneurship so that they are ready to start their own businesses in this digital age. It's easy to run a business from anywhere as long as you can get online. The phenomenon in the field is that there is already a policy to study entrepreneurship in vocational schools for twelve hours a week for two years, but the reality is that graduates who become entrepreneurs is still low. Therefore, this present study also needs to examine about what vocational high school students know about digital entrepreneurship. This present study aims at what both male and female vocational high school students' digital entrepreneurship knowledge. Furthermore, this present study focuses on digital entrepreneurship at the vocational high school level, which students do.

So that the researcher reviewed at past studies to figure out what new research will be done. In the study, Jaenudin [6] discussed about how students' interest in business and digital technology affects them. Zulafwan [7] researched Digital Entrepreneur Training during the COVID-19 Pandemic at Informatics and Computer Management Academy Dharma, and Ninik et al. [8] researched Digital Entrepreneur Training with 240 students from 91 different colleges. In line with Gunawan's [9] following research on digital entrepreneurship training to create an entrepreneurial generation at Cikarang High School, the research above is also accurate. Hazwardy [10] also talked about how the Digital Entrepreneurship training at Senior High School 1 Cikarang helped millennials learn how to be entrepreneurs. Also, Netrawati et al. [11] said that digital business was introduced to younger people to help Alawiyah Madrasah students develop an entrepreneurial spirit. Yusuf et al. [12] said that counseling was done to help students improve their ability to be entrepreneurs. Hence, it can be seen that past studies used training and counseling to change students' minds about starting their own businesses, and much research is still done on college and senior high school students. Based on what has been said about previous studies, the new thing about this present study is that it looks at digital entrepreneurship by using mixed-methods research method and focuses on Vocational High School Students as its subject. As Vejayaratnam et al. [13] stated that there are not many studies on digital entrepreneurship, especially among students in TVET programs. This is the contribution of this study for the current literatures. This present study can also be used by the government and school administrators to find out how much students know about digital entrepreneurship. This will help them make better changes to improve the quality of human resources, especially students, in business, which will reduce unemployment. Moreover, Handaru et al. [14] said that vocational high school has the chance to meet the challenges of industry 4.0 because it prepares students to enter the workforce and compete in their fields of expertise.

Next section, this present study will provide a literature review regarding entrepreneurship, digital entrepreneurship, and other constructs related to the findings; then, it will explain the study method used and display the findings that occurred in the field, finally providing conclusions and research recommendations that can be used for future research.

2. Literature review

Before discussing digital entrepreneurship, we must know the meaning of Digital and Entrepreneurship. According to Rahayu [15], the digital era is an era or time when some people in that era have used digital systems in their daily lives. Muhasim [16] said that digital is a concept that starts with 0 and 1 and describes life and death. The digital process is based on algorithmic logic, and digital can do many different things, such as the process of consumption, distribution, and production, all in one system. Danuri [17] said that digital technology contains information whose use is more critical with digital than with human labor because an operating system with a computerized system is already automated. Meanwhile, in [18], it is said that digital technology has made it possible for people to connect and interact in new ways in cities and around the world. Digital means we can go beyond the physical and focus on interaction and new regional and global possibilities. Krismono [19] said that digital technology makes all processes more effective and efficient, from making the product to distributing it. It also gives business actors access to the market. Based on what the above experts said, it can be concluded that digital technology is an era when individuals use technology every day, and every process is done with technology. It has been advantageous and helpful, which has been helped by the use digital tools.

Drucker [20] asserts that the idea of entrepreneurship is to make something new and different. While Diandra [21] said that entrepreneurship is a part of the business that helps set up a successful business, people involved in most business activities are responsible for making their vision come true. In addition, according to Prince [22], the definition of entrepreneurship today includes many different things, such as looking for opportunities, starting a business, dealing with uncertainty, trying to make money, and much more. This shows the many different points of view that exist in entrepreneurship and beyond. In line with what was said above, Onouha [23] said that entrepreneurship is the practice of starting a new organization or reviving an old one, especially a new business, usually in response to opportunities that have been seen. Entrepreneurship is a complicated term that is hard to define. This makes it hard to measure the amount of entrepreneurial activity and, as a result, its effect on the economy [24].

Entrepreneurs are known for the fact that they start and run their own businesses. Asia's economic growth can be continued with innovative business owners' help. Asia, which is still developing, has reached a point where the private sector usually plays a more significant role in economic growth. The ongoing digitalization of economic activity, which sped up during the coronavirus disease (COVID-19), has made it easier and cheaper to start a business and given entrepreneurs a lot of new options. So, digital entrepreneurship can be a growth driver in a world after a pandemic [1].

After gaining knowledge of what digital and entrepreneurship mean, Nedumaran [25] said that digital entrepreneurship is creating new businesses and changing existing ones by developing new digital technologies and new ways to use them. Yeboah et al. [26] claim that digital entrepreneurship is generally defined as using digital technology to look for business or economic opportunities. Digital entrepreneurship is very current because new technologies and improvements in infrastructure open up many business opportunities [27] and other understandings from Digital Entrepreneurship that is finding new business opportunities on the internet and in new media and taking advantage of them. Hussain et al. [28] said that it was discussed how digital entrepreneurship involves new ways of building and running a business that is made possible by technological advances. Long [29] said that digital entrepreneurship is a new way that digital technology and entrepreneurship are coming together to change

the real economy and how industries are set up. Based on what the experts said above, researchers concluded that digital entrepreneurship is the process of starting a new business using technology in the best way possible. Hassan [4] stated that if cost and time were issues in the past, they limited trade. When digital entrepreneurship is used, costs for things like transportation, maintenance, and advertising can be cut. Different time zones no longer make it hard to do business. This is because of digital entrepreneurship, which is a way to speed up business activities. During COVID-19, ICT was a critical factor in how resilient entrepreneurs and businesses were. When entrepreneurs needed help moving around like they used to, the internet allowed them to sell their products, talk to their employees, and meet potential business partners online. In this way, digital technology helped lessen the pandemic's effects, which were very bad for business. In fact, it saved the businesses of many people who would have gone out of business without it. In reality, many stores that had to close because of a lockdown turned to online orders to make sales and money [1].

Things that digital entrepreneurship works, according to Syamsyuri et al. [30], are a financial plan, finding the business's strengths, choosing a market niche, evaluating supply and demand, evaluating the market, following market trends, analyzing the market and competitors, making idea prototypes, and promoting the business. According to Raut [31], these are cultural and informal institutions, market conditions, physical infrastructure, human capital, knowledge creation and dissemination, finance, networking and support, and formal institutions. Vineela [32] agreed with what was said above and said that the five pillars of digital entrepreneurship are the digital knowledge base and ICT market, digital business environment, access to finance, digital skills, e-leadership, and entrepreneurial culture.

3. Research methods

This present study used the mixed methods research, qualitative phase first, then quantitative in the second phase. This present study used a quantitative approach with the survey method in the quantitative phase, which is carried out with twelve respondents from Vocational High School students who have met the saturation criteria of the qualitative phase in the first phase. According to Creswell [33], qualitative data saturation occurs when the researcher stops collecting data because new data no longer generates new ideas or properties. Guest et al. [34] reported that saturation around 12 responders. After twelve informants, data becomes saturated.

The data collection using interviews and the survey method. The data analysis technique in this present study is thematic analysis and descriptive analysis. For the qualitative using interview then analyzed using NVivo tools, meanwhile the quantitative phase using a questionnaire, then analyzed using SPSS (Statistical Program for Social Science). Then, in the test that will be carried out, namely by doing one t-test and looking at the regression test.

4. Research results

The idea for the theme of digital entrepreneurship came from the results of a thematic analysis that was conducted by researchers in the qualitative phase. The present study then coded the most often referenced and relevant themes, which it considered essential to the project's overall subject (**Figure 2**).



Figure 2.

Word cloud of themes. Source: The data analyzed by researchers using NVivo.

The researcher also explored the codes into themes that came up from the interview process using inductive code. **Figure 3** summarized the coding of the thematic analysis results in interviews with all twelve respondents in this study (each respondent is coded R, for example, respondent 1 is coded R.1). The **Figure 3** showed that several themes discovered from the interview in this present study. The researcher summarized the codes from SSI into ten themes that relevant to this present study, namely digital entrepreneurship; entrepreneurship role model; practice in learning process; entrepreneurship events; entrepreneurship club; time management; lack of communication; women entrepreneurship; family mindset of career option; and government support.



Figure 3. *Matrix coding query - results preview.*

This theme about digital entrepreneurship came out of what different respondents said. When the researcher asked R.7 if the school had ever done things like entrepreneurship seminars or digital webinars, he said yes. He also said that digital entrepreneurship was a popular topic right now (R.7: D.U.54). R.12 and R.11 added that in the pandemic era, where everything is online (R.11: D.U.66), schools must teach students how to be ready to be all digital and online (R.12: D.U.68). For someone with digital skills to become an entrepreneur, they also need to be able to talk to other people, especially customers (R.6: D.U.38). When R3 was asked if the school had online materials. R.3 said that the material already exists but has not been used, so he only knows how to sell things online in theory (R.3: D.U.57). R.10 has had the same experience, which is that schools are teaching about digital entrepreneurship but have not yet done it. He suggested that schools be able to put more emphasis on online business strategies (R.10: D.U.58). When R.4 was asked what he thought a good business idea would be during a pandemic (R.4: D.U.84). Then the researchers asked R.11 if she had ever had her own business. It turns out that R.11 already has an online system for running a business (R.11: D.U.12).

Furthermore, the researchers decided to gain and learn more about how male and female students differ from quantitative analysis. This digital entrepreneurship theme was chosen because of state of the art or the need for this theme to study in-depth, as researchers stated before in the introduction section. As [35] highlighted that most researchers must narrow their emphasis. Because focusing on one issue or theme dimension is more effective than tracing many themes. The purpose of this study is to find out how digital entrepreneurship is at the level of vocational high school students. To do this, twelve students from a vocational high school were asked to fill out a survey about digital entrepreneurship (**Table 1**).

From the data above, it is known that in the number of twelve respondents who have been obtained that the gender of the respondents is six male students or 50% while female students totaling six people or 50% (**Table 2**).

From the data above, it is known that in the number of twelve respondents who have been obtained that the age of the respondents ranges from 16 to 18 years with

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Men	6	50.0	50.0	50.0
	Woman	6	50.0	50.0	100.0
	Total	12	100.0	100.0	
Source: The da	ata calculated by 1	researchers.			

Table 1.

Gender of respondents.

	Freque	ency	Percent	Valid Percent	Cumulative Percent
Valid	16	2	16.7	16.7	16.7
	17	5	41.7	41.7	58.3
	18	5	41.7	41.7	100.0
	Total	12	100.0	100.0	
Source: The dat	a calculated by 1	researchers			

Table 2.Age of respondents.

						Correlation	s			
		DE1	DE2	DE3	DE4	DE5	DE6	DE7	DE8	TotalDE
DE1	Pearson Correlation		.842**	.938**	.735**	.701*	.813**	.842**	1000**	.929**
	Sig. (2-tailed)		.001	.000	.006	.011	.001	.001	.000	.000
	Ν	12	12	12	12	12	12	12	12	12
DE2	Pearson Correlation	.842**	1	.914**	.962**	.769**	.761**	1000**	.842**	.964**
	Sig. (2-tailed)	.001		.000	.000	.003	.004	.000	.001	.000
	Ν	12	12	12	12	12	12	12	12	12
DE3	Pearson Correlation	.938**	.914**	1	.847**	.717**	.772**	.914**	.938**	.952**
	Sig. (2-tailed)	.000	.000		.001	.009	.003	.000	.000	.000
	Ν	12	12	12	12	12	12	12	12	12
DE4	Pearson Correlation	.735**	.962**	.847**	1	.686*	.610*	.962**	.735**	.884**
	Sig. (2-tailed)	.006	.000	.001		.014	.035	.000	.006	.000
	Ν	12	12	12	12	12	12	12	12	12
DE5	Pearson Correlation	.701*	.769**	.717**	.686*	1	.715**	.769**	.701*	.845**
	Sig. (2-tailed)	.011	.003	.009	.014		.009	.003	.011	.001
	Ν	12	12	12	12	12	12	12	12	12
DE6	Pearson Correlation	.813**	.761**	.772**	.610*	.715**	1	.761**	.813**	.862**
	Sig. (2-tailed)	.001	.004	.003	.035	.009		.004	.001	.000
	Ν	12	12	12	12	12	12	12	12	12
DE7	Pearson Correlation	.842**	1000**	.914**	.962**	.769**	.761**	1	.842**	.964**
	Sig. (2-tailed)	.001	.000	.000	.000	.003	.004		.001	.000
	Ν	12	12	12	12	12	12	12	12	12
DE8	Pearson Correlation	1000**	.842**	.938**	.735**	.701*	.813**	.842**	1	.929**

						Correlation	S			
		DE1	DE2	DE3	DE4	DE5	DE6	DE7	DE8	TotalDE
	Sig. (2-tailed)	.000	.001	.000	.006	.011	.001	.001))	.000
	Ν	12	12	12	12	12	12	12	12	12
TotalDE	Pearson Correlation	.929**	.964**	.952**	.884**	.845**	.862**	.964**	.929**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.001	.000	.000	.000	
Ν	12	12	12	12	12	12	12	12	12	
 Correlation is st Correlation is so Source: The data c 	ignificant at the 0.05 level (2-1 significant at the 0.01 level (2- calculated by researchers.	tailed). -tailed).						SL'		
able 3. igital entrepren	eurship validity test.									

a breakdown of 16 years totaling 16.7%, students 17-year-olds totaled 41.7%, while 18-year-olds were 41.7%.

From the data that researchers have taken previously, it is known that from twelve respondents of Vocational High School Students the interest in entrepreneurship male students is five students different from female students in number three people with differences who are not too far, while the rest are not interested in doing entrepreneurship is indeed, because there is a difference in motivation between male and female if want to do entrepreneurship as stated by Yuhendri [36] and Adha et al. [37].

Next steps are validity and reliability test. If the value of R is calculated > the value of the table R, then the item on the question instrument is said to be valid. But if the value of R is calculated < R of the table, then the item on the question instrument is said to be invalid and uses a sign of 5% or 0.05. (df = n-2) with data owned by twelve then the value of R table is 0.576 then the value of R counts more than R of the table or it can also be called R count >0.576. As for the reliability test with a significance of 5% or 0.05 that the Cronbach Alpha value > the R value of the table is known to be the Cronbach Alpha value >0.576 then the data is declared Reliable while if the Cronbach Alpha value > 0.576 is declared unreliable.

From the **Table 3**, the data of the Digital Entrepreneurship validity test, it can be concluded that (**Table 4**):

So, it can be concluded that the item validity test from digital entrepreneurship is declared valid with the value of r count > r table.

From the reliability test table above, it can be seen that the value of Cronbach's Alpha is 0.966 while the value of the table R is 0.576 so that the research reliability test can be known this is 0.966 > 0.576 then the above reliability data is declared Reliable (**Table 5**).

In the search for results carried out to test the One Sample t Test, we must know that from the data above it is normally distributed so that data testing is carried out as follows (**Table 6**):

The decision basis of the normality test is if the value of Sig. > 0.05 then the data is normally distributed while if the value of Sig. < 0.05 then the data is not normally distributed. So, from the table above, it can be concluded that the Kolmogorov-Smirnov normality test value has a value of 0.078 > 0.05 in other words, the normality test is normally distributed while in the test Shapiro-Wijk normality has a Sig value. by 0.080 > 0.05 then the data is normally distributed. Next, we will do the Independent

Item Item	Rcount	Rtabel	Information
DE1	0,929	0,576	Valid
DE2	0,964	0,576	Valid
DE3	0,952	0,576	Valid
DE4	0,884	0,576	Valid
DE5	0,845	0,576	Valid
DE6	0,862	0,576	Valid
DE7	0,964	0,576	Valid
DE8	0,929	0,576	Valid

Source: The data calculated by researchers.

Table 4.

Conclusions of the digital entrepreneurship validity test.

Reliability Statistics						
Cronbach's Alpha				N of Items		
.966				8		
Source: The data calculated by research	iers.					
Table 5. Digital entrepreneurship reliability to	est.	9	Tests of 1	Normality		
	Kolmogo	rov-Smirr	nov ^a	Sha	piro-Wilk	
	Statistics	Df	Sig.	Statistics	Df	Sig.
Digital Entrepreneurship (X)	.231	12	.078	.820	12	.080
a. Lilliefors Significance Correction.						

Source: The data calculated by researchers.

Table 6.

Normality test.

	Test of]	Homogeneity of	f Variances	
	Levene Statistics	DF1	DF2	Sig.
Digital Entrepreneurship (X)	3.164	1	10	.106
Source: The data calculated by researchers.				

Table 7.

Homogeneity variation test.

Sample t Test to find out the difference in digital entrepreneurship knowledge in male and female Students, but we must do a homogeneity test as the requirements in the independent t Test analysis, as follows (**Table 7**).

When in homogeneity testing, it is said to contribute homogeneous data if the Significance value >0.05, while if the Significance value is <0.05, the data is not homogeneously distributed. From the data above, it is known that the value of the significance from digital entrepreneurship is 0.106 > 0.05, it can be said that the distribution of the data is homogeneous. Then the requirements to do the Independent Sample t test are met, the independent sample t test is as below (**Table 8**):

In the decision making of the independent sample t test is to find out whether there is an average difference between two unpaired samples, to find out, it can be seen from the value of sig. (2-tailed) < 0.05 then there is a difference between male and female, while if the value of sig. (2-tailed) > 0.05 then there is no difference. Then we see from the table above that the value of sig. (2-tailed) from digital entrepreneurship is 0.026 and 0.036 or it can be mentioned that the value of g. (2-tailed) (0.026) < 0.05 and the value of sig. (2-tailed) (0.036) < 0.05, there is a difference in digital entrepreneurship in male students and female students. These results are supported by research conducted by Adha [37] and Usman [38].

However, schools need to teach digital entrepreneurship to prepare students for business in the 21st century. Several studies support this. Future research on how digital and coding skills and knowledge might help student entrepreneurship could improve

		Levene's Te	est for			Independ	ent Samples Test	ity of Means		
		Equality of Va	ariances				t-test for Equan	ity of Means		
		52						5	95% Confidence the Diffe	e Interval of rence
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Digital Entrepreneurship (X)	Equal variances assumed	3.164	.106	-2.616	10	.026	-8.333	3.185	-15.430	-1.237
_	Equal variances not assumed			-2.616	6.788	.036	-8.333	3.185	-15.913	754
Source: The data calculated	by researchers.									
Table 8. Independent sample t test.										

these ideas [32]. Digital entrepreneurship has had a significant effect on the world economy. Digital entrepreneurship is a new way to run a business that takes advantage of technological advances to give business owners new opportunities [33]. To succeed in digital entrepreneurship, people need to know their strengths. Therefore, it is essential to learn how to use digital technology. Entrepreneurs will do well in the digital world if they can build a solid digital business and understand technology [34]. Also, customers always say that their top priorities are speed, price, ease of use, and good quality. This could be done and met with the assistance of digital entrepreneurship [35].

Ordinary entrepreneurship is not the same as digital entrepreneurship. Digital entrepreneurship must be successful at two main things: making sure that the digital technology used meets the target customers' needs and that the technology can be sold for a profit. Most of the time, ordinary entrepreneurship only involves the second part, which is selling goods or services for a profit. Digital entrepreneurship is not only beneficial in the development of large and sophisticated industries. However, it can also help people with low incomes and improve their quality of life, especially for people who have finished school. So, it is expected that digital entrepreneurship will help with sustainable development. Digital entrepreneurship can have positive effects on the economy, society, and on the environment. The economic effects are an increase in efficiency, productivity, and revenue; the creation of new jobs; the mobilization and creation of business opportunities in other economic sectors; a more productive use of raw materials from Indonesia's natural resources; and a more efficient use of resources, especially energy resources.

5. Conclusions

This present study concludes:

- a. Based on the results of qualitative phase, the themes that came up from the interview process using inductive code. The coding of the thematic analysis results in interviews with all twelve respondents showed that several themes discovered from the interview in this present study. The researcher summarized the codes from SSI into ten themes that relevant to this present study, namely digital entrepreneurship; entrepreneurship role model; practice in learning process; entrepreneurship events; entrepreneurship club; time management; lack of communication; women entrepreneurship; family mindset of career option; and government support. However, the researchers only focused on the digital entrepreneurship theme based on the needed of this theme in the vocational high school level.
- b. Based on the results of quantitative phase on digital entrepreneurship on Vocational High School Students conducted on respondents of Vocational High School students who have met the criteria with the survey method. In the validity test of each indicator, it is known that each indicator >0.05 which states that each item is Valid, while in the Reliability test it has a Cronbach value Alpha is 0.966 > 0.700 which means that the item as a whole is reliable.
- c. Furthermore, as a condition in testing the One Sample t Test that the Kolmogorov-Smirnov Normality Test with a Significance value of 0.78 > 0.05 and Saphiro-Wilk 0.80 > 0.05 which means that the data is Normal distributed as for the requirements in the Independent Sample t Test, namely the homogeneity test, it is known that the Significance value is 0.106 > 0.05 which means that the data is homogeneous.

- d.Meanwhile, in conducting the Independent Sample t Test to find out the difference between male and female students, it is known that the Sig. (2-tailed) (0.026) < 0.05 and Sig values. (2-tailed) (0.036) < 0.05 then there is a difference in digital entrepreneurship in male students and female students. Based on the above values, it is known that the distribution of digital entrepreneurship knowledge in male and female students at the vocational high school level is due to the cause of differences the knowledge of male and female students in entrepreneurship is as in the difference between wishful thinking and motivation, and in entrepreneurship everyone has equal opportunities in carrying out these activities and where in this digital era is very helpful in marketing products and selling entrepreneurs in selling their products in order to achieve share an even wider market.
- e. This study has a limitation in that the sample size is only twelve students. This is because this study is a mixed-methods study that researcher did the qualitative phase first. Future research could use more respondents to strengthen research.
- f. This study is getting closer to its end. In real life, this means that the results of the study may be of interest to the government, school administrators, and researchers. After COVID-19, the results will help these groups figure out what they need to do to make things better. This research can be used by the government and school administrators to find out how much students know about digital entrepreneurship. This will help them make better changes to improve the quality of human resources, especially students, in business, which will reduce unemployment. This present study could be a first way to find out more about other factors and should incorporate proper variables that have to do with digital entrepreneurship for further research.

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Conflict of interest

The authors declare no conflict of interest.

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Author details

Darma Rika Swaramarinda¹*, Badrul Isa², Noorhayati Mohd. Yusof² and Mohd. Ali Bahari Abdul Kadir²

1 Universitas Negeri Jakarta, Jakarta, Indonesia

2 Universiti Teknologi MARA, Selangor, Malaysia

*Address all correspondence to: darmarikas@gmail.com

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