TỐI ĐA HÓA CÔNG NGHỆ VÀ THÀNH QUẢ KINH DOANH CÓ THỂ GIÚP KINH DOANH BỀN VỮNG TRONG ĐẠI DỊCH KHÔNG?

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Tóm tắt

Mục đích của nghiên cứu này là phân tích tác động của công nghệ và hiệu quả kinh doanh đối với tính bền vững của doanh nghiệp sau thời kỳ đại dịch. Để thực hiện nghiên cứu này, 2038 bảng câu hỏi đã được khảo sát để thu thập thông tin của các Doanh nghiệp siêu nhỏ, nhỏ và vừa (MSMEs), về việc sử dụng công nghệ, năng suất, khả năng phục hồi và khả năng tồn tại lâu dài của họ. Phương pháp phân tích nhân tố khám phá EFA, Đánh giá mô hình cấu trúc, Phân tích đường dẫn đã được áp dụng để tìm hiểu tác động của công nghệ đến hiệu quả kinh doanh ở Indonesia. Nghiên cứu này cho rằng tối ưu hóa công nghệ và hiệu quả của tổ chức đều được hưởng lợi từ yếu tố thứ ba là khả năng phục hồi của công ty - thứ có thể giúp công ty phát huy hết tiềm năng của mình. Nhiều doanh nghiệp siêu nhỏ, nhỏ và vừa (MSMEs) trong nhiều lĩnh vực, bao gồm thực phẩm và đồ uống (F&B), thủ công mỹ nghệ, quần áo và phụ kiện, dịch vụ và sản xuất được đặt tại trung tâm Java và DIY, nơi nghiên cứu này được thực hiện.

Từ khóa: *Tối đa hóa công nghệ, Hiệu quả kinh doanh, Đại dịch, Tính bền vững của doanh nghiệp, Đánh giá mô hình cấu trúc, Phân tích đường dẫn.*

CAN TECHNOLOGY MAXIMATION AND BUSINESS PERFORMANCE HELP BUSINESS SUSTAINABILITY POST PANDEMIC ERA?

Abstract

The purpose of this research is to analyze the impact that technology and business performance have on Business Sustainability post pandemic era. To conduct this study, 2038 questionnaires were surveyed to gather information of Micro, Small and Medium Enterprises (MSMEs) on their technology use, productivity, resilience, and long-term viability. Explanatory Factor Analysis (EFA), Structural Model Evaluation, Path Analysis were applied to investigate the impact of technologies to business performance in Indonesia. This research contends that technology Maximation and organizational effectiveness both benefit from a third factor namely, company resilience that can help them achieve their full potential. Many micro, small and medium-sized enterprises (MSMEs) in many sectors, including food and beverage (F&B), handicraft, clothing and accessories, service and manufacturing, and so on, are located in central Java and DIY, where this research was conducted.

Keywords: *Technology Maximation, Business Performance, Pandemic, business sustainability, Structural Model Evaluation, Path Analysi.*

JEL classification: O; O14; O3; O33.

1. Introduction

Technology maximization in business is rapidly increasing in this 4.0 era. In Indonesia, community has been able to create or build their own business by only accessing information from the internet. This is evidenced by the increasing number of economic actors from households, communities, companies that jump to digital business. One sector that can be seen massively growth is Micro, Small and Medium Enterprises (MSMEs). Kompas (2021) reported that 17,25 million MSMEs in Indonesia have transformed to digital business (Kompas, 2021). MSMEs contribution to country's GDP is elevated yearly as seen in figure below:

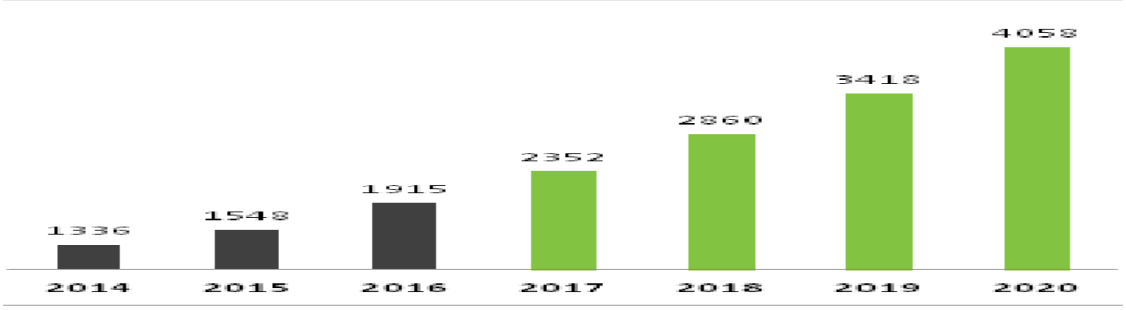

Figure 1: MSMEs go digital (Kompas, 2021)

Above figure indicates the GDP contribution from MSMEs through years which showing increasing number to reach around USD 4 million in 2020. Of course, Indonesian MSME have been proven to play an important role in improving national economy to make them into priority for Indonesian Government. Efforts such as providing training or managing land permits for businesses can help entrepreneurs to get more convenience in starting a business. With this special attention, generally, it will impact on the wider community where there will be many jobs and opportunities to improve the national economy will be even greater. Previous researchers also claimed the positive effect between the usage of technology or technology maximation in business sustainability (Bamgbade et al., 2022).

However, Covid-19 pandemic results a challenging situation for MSMEs, data shows that more than 11 million MSMEs went bankrupt (Natalia, 2021). By looking at the facts, business sustainability is essential for every business actor in order to survive all the risks. This study draws on sustainability theory which create Triple Bottom Line (TBL) model. TBL was firstly introduced by John Elkington in a book entitled Cannibals with Forks: The Triple bottom line in 21st Century Business in 1997 (Jhon Elkington, 1997). This is based on the shifting perception of economic growth

towards the concept of sustainable development (Jaya, 2004). Along the times, research related to sustainable development continues to be carried out as in the study of Zanny & Kartawijaya, (2016) which states that the concept of sustainable development confronts companies with their responsibilities towards economic, social and environmental conditions or the triple bottom line, not only related to economic conditions. alone or a single bottom line that is not sufficient for the fulfillment of sustainable corporate values. Then, Michael et al (2019) indicates the efforts in sustainable development can be achieved by one of them implementing the triple bottom line or by paying attention to financial conditions and their social and environmental responsibilities.

The 3P criteria, or which includes Planet, People and Profit in TBL can be used as a benchmark for the success of a company that was previously only limited to financial profit. With 3P, companies can assess the impact of the business they run, both in terms of financial, social or environmental which can be used as material for future evaluations. Profit in the triple bottom line indicates that company's financial condition is not merely the main goal, considering that there are still social and environmental aspects that must also be considered in a balanced manner. As in Michael et al (2019) who explained that in fulfilling profits, companies must pay attention from the production side, such as in terms of buying raw materials, companies must know the source of the raw materials used, such as if the raw materials are obtained from the exploitation of natural resources, then the company will not make a transaction because it will be contrary to the value of the profit in the triple bottom line itself. People in the triple bottom line can be divided into two, namely from the internal and external sides of the company. From the internal side, the value of people here relates to how the company applies its workforce, such as by providing reasonable wages or salaries, providing a safe work environment, enforcing accountable working hours and not employing minors (Felisia & Limijaya, 2014). From the external side, company certainty must understand the condition of the surrounding community in order to maintain good relations which will have a positive impact on business sustainability (John Elkington, 2013). Planet in the triple bottom line here can be interpreted as a form of corporate responsibility for the impact given to the environment. In Felisia & Limijaya, (2014) it is stated that one of the implementations that companies can do in fulfilling the value of this planet is by reducing or reprocessing the waste produced so that it is safe for the environment.

Following to all elements in TBL that may support business to sustain, business sustainability also can prevent us from competitors who are increasing all the time without us realizing it. This is similar to the opinion of Abubakar (2018) which states that the obstacle to business success stems from the inability of entrepreneurs to manage business in intense competition. One of the effective way in handling competitors is by maximizing technology in business and this recent Covid-19 pandemic has helped us to realize that despite of all restriction and limited movement, technology has been a support system to business sustainability (Štalmachová et al., 2021).

For that issue, this study tries to strengthen previous research regarding the importance of technology imperatives in business (Abbu et al., 2021; Galanakis et al., 2021; Habib & Hamadneh, 2021; Turner, 2022; Utami, 2021). Following to that, this study also eager to enhance TAM (Technology Acceptance Model) developed by Fred Davis (1989). This model basically intends to elaborate the business journey to finally adapt technology in its daily operation by using elements such as perceived usefulness as stimulus in order to encourage business owner or in this case entrepreneur to accept technology maximation in their business, perceived ease of use as organism or support system in helping the acceptance process and actual usage as response to the technology in the business (Davis, 1989).

Moreover, business owners must be able to have their own strategies in an effort to have a sustainable business. Hence, business performance will be taken seriously to measure the effectiveness of the strategies as mentioned by previous literatures (Addison et al., 2020; Martinez-Martinez et al., 2019; Murthy, 2012). Business performance can also be the best indicator for sustainable business. Business performance can show how well business handle certain situation (Meza-Ruiz et al., 2017). Hence, we can declare that decreasing in business performance can lead to business closure.

However, when business performance is stagnant or even decline these past three years due to the pandemic, we need a strong element to support both technology maximation and business performance to achieve its sustainability. This study argues the element is business resilience as Winnard et al (2015) and Prastian et al (2022) mentioned business resilience has a significant effect on business sustainability (Winnard et al., 2015) (Prastian et al., 2022). Business resilience explains the ability of entrepreneurs and business to survive uncertainty. Resilience is a basic need to prevent entrepreneurs to give up their business. on the same time, resilience can also be a trigger for recovery and transformation process (Martin, 2012; Rose & Liao, 2005; Setiawan et al., 2022). Resilience in business focus to corporate attribute, risk protection and awareness, supply chain and competitive advantage (Demmer et al., 2011; Pettit et al., 2010; Reinmoeller & Van Baardwijk, 2005).

This study tries to discover intermediary role of business resilience in the relationship between technology maximation and business performance towards business sustainability. In addition, in Indonesia itself, there is still a lack of research that discusses the relationship between business performance and sustainability which can make this research a new reference.

This research was conducted by targeting MSME actors spread across the provinces of Central Java and DIY, considering that the number of MSMEs which increases every year is very large for the country's economy(Nurhaliza, 2022). Based on data from the Ministry of Small and Medium Enterprises that in March 2021, the number of MSME actors in Indonesia

have reached 64.2 million and contributed 61.07% or Rp. 8,573.89 trillion to gross domestic product (GDP), it is also said that MSMEs are able to absorb 97% of the total workforce and are able to collect up to 60, 42% of the total investment in Indonesia. This study targets various types of MSMEs such as food and beverage businesses, trade to arts and crafts businesses.

This research was conducted to find out how the business resilience variable can mediate the use of technology and business performance in influencing business sustainability

Therefore, some hypotheses have been stated for this research, such as:

H1: Technology maximation affect business sustainability

H2: Business performance affect business sustainability

H3: Technology maximation affect business resilience

H4: Business performance affect business resilience

H5: Business resilience affect business sustainability

H6: Business resilience mediate technology maximation on business sustainability

H7: Business resilience mediate business performance on business sustainability

Hence, the research model for this study as follow:

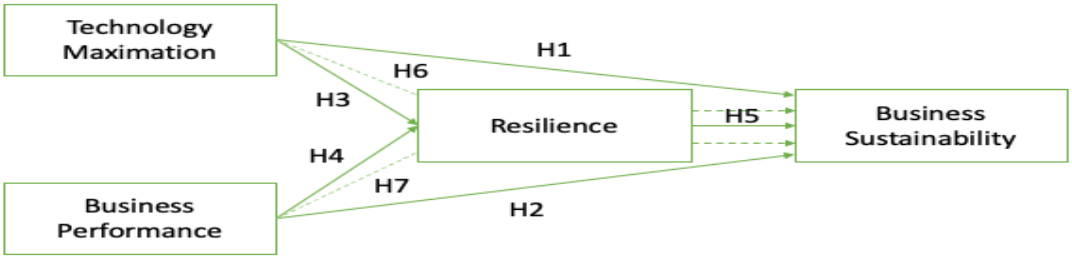

Figure 1. Research Model

Then, to answer these hypotheses, this article will begin by outlining the research method and then displaying the results of the data analysis to provide conclusions and arguments about the results obtained. The limitations of this research will be stated later which is expected to open the door for further in-depth research on related issues.

2. Research method

To answer the hypotheses, firstly we test the outer model's validity by using convergent validity to test the validity of each variable, discriminant validity and composite reliability to test the reliability of the model. Following to that, to discover matching data to the model, we use Structural Model Evaluation. Path analysis is employed next to test the mediatory effect and to test each hypothesis.

The population in this study were MSMEs across Central Java and Yogyakarta Provinces. The sampling used was stratified random sampling technique to determine residency in Central Java which was then selected from each residency area with the highest number of MSMEs.

***Table 1**: Total regencies and number of MSMEs in research location*

Regency in Central Java and DIY	Number of MSMEs	Regency in Central Java and DIY	Number of MSMEs
Kota Magelang	3488	Kudus	988
kabupaten Magelang	1074	Jepara	1910
Temanggung Wonosobo	3074	Pati	1821
Purwokerto	1439	Rembang	931
Purworejo	7987	Blora	3466
Kebumen	1250	Cepu	2064
Kota Semarang	11901	Banyumas	8530
Kabupaten Semarang	2652	Banjarnegara	2861
Salatiga	823	Cilacap	2095
Demak	13009	Purbalingga	2597
Kendal	3957	Pemalang	6428
Sukoharjo	2654	Kota Pekalongan	1644
Surakarta	17964	Kabupaten Pekalongan	1905
Boyolali	939	Batang	886
Klaten	1473	Brebes	8376
Wonogiri	1718	Kota Tegal	1005
Sragen	1976	Kabupaten Tegal	1833
DIY	1850		

Among those 31 regencies and cities in Central Java and DIY, we then chose 7 regencies which represent 7 administrative territories. Below are the chosen regencies based on the highest number of MSMEs in each administrative territory:

Table 2: *Selected Regencies*

Selected Regencies/Cities	Number of MSMEs
Purworejo	7987
Demak	13009
Surakarta	17964
Blora	3466
Banyumas	8530
Brebes	8376
DIY	1850

Then the next step was to use the slovin formula to determine the sample for each area with the highest number of MSMEs. many. The slovin formula used in this study.

$$n = \frac{N}{1 + Ne^2}$$

Information:
n = Number of Samples
N = Total Population
e = Margin Error

Table 3: *Number of samples*

Selected Regencies/Cities	Samples
Purworejo	381
Demak	389
Surakarta	391
Blora	359
Banyumas	382
Brebes	382
DIY	400

Thus, based on the calculation of the formula, the number of samples in this study was 2684 samples. Data collection is done by going directly to the respondent or sample to get primary data.

Data collection technique

The data collection technique used to distribute questionnaires to MSMEs which contained several statements related to the use of technology, business performance, business resilience and business sustainability. The measurement scale in this questionnaire uses a Likert scale with five categories, including Strongly Disagree (STS); Disagree (TS); Neutral (N); Agree (S); and strongly agree (SS). The questionnaires that have been filled out by the respondents are then selected in advance with the aim that incomplete questionnaires are not included in the data analysis. Data collection took around 2 months in March – April 2022 by visiting each area in person and giving put the hardcopy questionnaire to the samples.

3. Result and discussion

Data obtained by distributing questionnaires directly to respondents. The number of questionnaires distributed was 2684 questionnaires. Questionnaires were returned with a total of 2684 questionnaires and after checking, all questionnaires could be processed as many as 2038 questionnaires. Then the results of the respondents' answers to the questionnaires received were processed for data analysis purposes. The questionnaire distributed consisted of four variables, namely technology maximation with 2 (two) statements, business performance with 3 (three) statements, business resilience with 6 (six) statements and business sustainability with 5 (five) statements. Below are indicators of each variable:

Table 4*: Research Indicators*

Research Indicators			
Business Sustainability	**Technology Maximation**	**Business Performance**	**Business Resilience**
Management Entrepreneurship Leadership	Technology usage Technology variation	Financial Market Entrepreneurial performance	Adaptation Resource System

Evaluation of the Measurement Model (Outer Model)

The evaluation stage of the measurement model is carried out by testing the validity and reliability of each variable and its indicators through 3 criteria, namely convergent validity, discriminant validity and composite reliability.

Convergent Validity Result

Convergent Validity is a correlation between reflexive indicator scores and latent variable scores, while Discriminant Validity is a reflexive indicator measurement with latent variable scores (Solimun et al., 2017).

Table 5: *convergent validity result on technology maximation*

Item	Loading	Minimum Requirements	Note
PT1	0,893	0,5	Valid
PT2	0,893	0,5	Valid

Source: Processed data WarpPLS 8.0

Table above indicates that all of the above variable items are valid. The cross-loading value for each independent variable using technology (X1) is 0.893. Therefore, it can be concluded that all items of the independent variable of technology use (X1) have a high level of validity and can be used for further research.

***Table 6**: Convergent Validity Result on Business Performance*

Item	Loading	Minimum Requirements	Note
KU1	0,807	0,5	Valid
KU2	0,730	0,5	Valid
KU3	0,843	0,5	Valid

Source: Processed data WarpPLS 8.0

Table above shows that all of the above variable items are valid. The value of cross loading for each independent variable of business performance (X1) is ranging from 0.807 to 0.843. The calculated r value of each item is greater than r table (0.5). Therefore, it can be concluded that all items of the independent variable business performance (X2) have a high level of validity and can be used for further research.

***Table 7:** Convergent Validity Result on Business Resilience*

Item	Loading	Minimum Requirements	Note
KT1	0,704	0,5	Valid
KT2	0,648	0,5	Valid
KT3	0,704	0,5	Valid
KT4	0,724	0,5	Valid
KT5	0,705	0,5	Valid
KT6	0,667	0,5	Valid

Source: Processed data WarpPLS 8.0

Above table underlines that all of the above variable items are valid. The value of cross loading for the mediating variable of business resilience (Z1) ranges from 0.704 to 0.667. Meanwhile, the calculated r value for each item is greater than the r table (0.5). Therefore, it can be concluded that all items of the mediating business resilience variable (Z1) have a high level of validity and can be used for further sustainability research.

***Table 8:** convergent validity result on Business Sustainability*

Item	Loading	Minimum Requirements	Note
KB1	0,718	0,5	Valid
KB2	0,654	0,5	Valid
KB3	0,655	0,5	Valid
KB4	0,727	0,5	Valid
KB5	0,723	0,5	Valid

Source: Processed data WarpPLS 8.0

Above table states that all of the above variable items are valid. The cross-loading value for the dependent variable of business sustainability (Y1) ranges from 0.718 to 0.723. Meanwhile, the calculated r value for each item is greater than the r table (0.5). Therefore, it can be concluded that all items of the business sustainability dependent variable (Y1) have a high level of validity and can be used for further sustainability research.

***Table 9**: Discriminant Validity Result*

Variable	PT	KU	KT	KB
PT	(0,893)	0,218	0,268	0,251
KU	0,218	(0,795)	0,575	0,462
KT	0,268	0,575	(0,693)	0,638
KB	0,251	0,462	0,683	(0,695)

Source: Processed data WarpPLS 8.0

Above table pinned out that the value of the combined loading view on the technology use variable is 0.893 which is greater than the loading value on other constructs, namely 0.218, 0.268, 0.251. Likewise with the value of other variables where the value of each variable is greater than the value of other variables. Therefore, the discriminant variable is met and can be said to be valid.

Composite Reliability

Composite reliability is a step in outer model to determine whether a research construct is reliable or not. The construct can be said to be reliable by looking at the composite reliability value and Cronbach's alpha > 0,70 (Sholihin & Ratmono, 2021).

***Table 10:** Composite Reliability*

	PT	KU	KT	KB
Composite Reliablity	0,887	0,837	0,847	0,824
Cronbach's Alpha	0,742	0,706	0,782	0,733

Source: Processed data WarpPLS 8.0

A reliable composite test is carried out to show the consistency of an indicator variable. Based on the table above, it can be seen that the value of Cronbach's alpha on each variable has met the criteria of more than 0.7

and composite reliability according to which it can be said to be reliable in the sense that all respondents' answers do not target certain answers so that if research is carried out at different times, the respondent will give the same answer as the current study.

Structural Model Evaluation

The structural model evaluation phase includes a fit test to find out whether a model has a match with the existing data. There are three tests, namely the average path coefficient and the average R-squared where the value in this test is said to be accepted with the condition that the p-value <0.05 (Solimun et al., 2017). The average variance factor test where the value as a condition for acceptance in this test is less than five. The following results from the fit test can be seen from the following table:

***Table 11**: Fit test results*

Index		p-values
Average Path Coefficient	0,289	< 0,001
Average R-squared	0,389	< 0,001
AVIF	1,247	

Source: Processed data WarpPLS 8.0

Based on the table above, it can be seen that the APC value shows a value of 0.289 with p-values < 0.001 and for the ARS value of 0.389 with p-values < 0.001, while the AVIF value is 1.247 where the value is less than 5. With these results, the model in this study has a match to the data used. Then in the evaluation of the structural model as for the test used to determine the magnitude of the influence of the independent variable in influencing the dependent variable by looking at the coefficient of determination (R2). The results of the coefficient of determination can be seen from the following table:

***Table 12:** Coefficient of Determination R^2*

Relation	R-square
PT → KT KU → KT	0,352
PT → KT → KB KU → KT → KB	0,426

Source: Processed data WarpPLS 8.0

Above table describes the R-square value is 0.352 which shows that the variables of technology maximation and business performance are able to explain business sustainability by 35.2% while 64.8% is explained by other things or outside the variables examined in this study. Then the R-square value of the business resilience variable shows a value of 0.426 where it can be said that the technology maximation and business performance as independent variables with business resilience as an intervening variable can explain business sustainability by 42.6% while 57.4% is explained by other things or outside of the variables studied in this study.

Path Analysis

Path analysis was also carried out to see the direct and indirect effects of technology maximation and business performance variables on business sustainability through business resilience. In seeing the direct effect, it is shown by testing each hypothesis between the influence of the independent variable and the dependent variable on the probability value. According to Baron & Kenny (1986) if the independent variable does not have a direct influence on the dependent variable after controlling for the mediating variable, it can be declared as perfect or complete mediation. Meanwhile, if the influence of the independent variable on the dependent variable after controlling for the mediation variable is reduced but still significant, then it is declared as partial mediation. Meanwhile, to see the indirect effect, it is shown by conducting a mediation test according to the model used. The results of direct and indirect effects can be seen from the model which is then explained in the figure below:

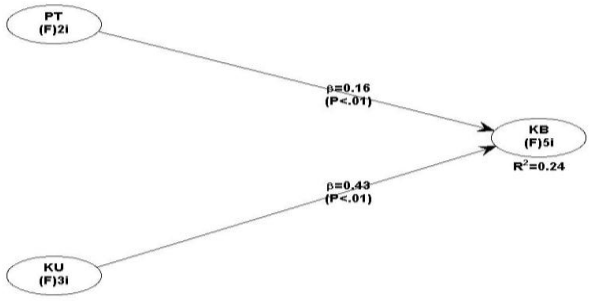

Figure 2. Direct effect result

Source: Processed data WarpPLS 8.0

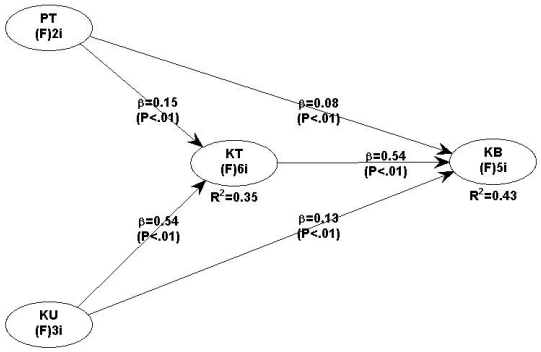

Figure 3. Indirect Effect Result

Source: Processed data WarpPLS 8.0

***Table 13:** Path Analysis Result*

Relationship	β	p-values	Note
PT → KB	0,16	0,01	Positive
KU → KB	0,43	0,01	Positive
PT → KT	0,15	0,01	Positive
KU → KT	0,54	0,01	Positive
KT → KB	0,54	0,01	Positive
PT → KT → KB	0,08	0,01	Partial Mediation
KU → KT → KB	0,13	0,01	Partial Mediation

Source: Processed data WarpPLS 8.0

Based on the results of the path analysis can be explained as follows:

1. The Influence of Technology Maximation and Business Performance on Business Sustainability

a. The Effect of Technology Maximation on Business Sustainability

The hypothesis in this relationship states that technology maximation affects business sustainability. Based on the path analysis result, the variable of technology maximation has a positive effect on business sustainability. This can be seen from the results which show the path coefficient (β) of 0.16 with a p-value of 0.001 where the value is less than 0.05. Thus, it can be said that the use of technology has a positive and significant impact on business sustainability. **Then H1 is accepted.**

b. The Influence of Business Performance on Business Sustainability

The hypothesis in this relationship states that business performance has an effect on business sustainability. Based on the path analysis result, business performance variable has a positive effect on business sustainability. This can be seen from the results which show the path coefficient (β) of 0.43 with a p-value of 0.001 where the value is less than 0.05. Thus, it can be said that business performance has a positive and significant effect on business sustainability. **Then H2 is accepted.**

2. The Effect of Technology Maximation and Business Performance on Business Resilience

a. The Effect of Technology Maximation on Business Resilience

The hypothesis in this relationship states that technology maximation affects business resilience. Based on the results of the path analysis, the variable of technology use has a positive effect on business resilience. This can be seen from the results that show the path coefficient (β) of 0.15 with a p-value of 0.001 where the value is less than 0.05. Thus, it can be said that the use of technology has a positive and significant effect on business resilience and H3 is accepted.

b. The Effect of Business Performance on Business Resilience

The hypothesis in this relationship states that business performance has an effect on business resilience. Based on the path analysis result, business performance variable has a positive effect on business resilience. This can be seen from the results which show the path coefficient (β) of 0.54 with a p-value of 0.001 where the value is less than 0.05. Thus, it can be said that business performance has a positive and significant effect on business resilience and H4 is accepted.

3. The Effect of Business Resilience on Business Sustainability

The hypothesis in this relationship states that business resilience has an effect on business sustainability. Based on the path analysis result, business resilience variable has a positive effect on business sustainability. This can be seen from the results which show the path coefficient (β) of 0.54 with a p-value of 0.001 where the value is less than 0.05. Thus, it can be said that business resilience has a positive and significant effect on business resilience and **H5 is accepted.**

4. The effect of technology maximation and business performance on sustainability through business resilience

a. The effect of technology maximation on business sustainability through business resilience

The hypothesis in this relationship states that the use of technology affects business sustainability through business resilience. Based on the results of the path analysis, the direct effect shows the path coefficient value (β) of 0.16 with p-value < 0.001. Meanwhile, the

indirect effect shows the path coefficient value (β) of technology use on resilience of 0.15 with p-value < 0.001, then for the effect of business resilience on business sustainability is 0.54 with p-value < 0.001 and the use of technology on sustainability shows a coefficient value of 0.08 with p values < 0.001.

Based on the mediation model in Baron & Kenny's (1986) research, these results show that the path coefficient value for the direct effect is greater than the indirect effect with a p-value < 0.001. So, it can be said that the effect of using technology on sustainability through resilience is partial mediation. Thus, it can be said that H6 is accepted.

b. The influence of business performance on business sustainability through business resilience

Based on the results of the path analysis, on the direct effect, for the business performance variable, the path coefficient value (β) is 0.43 with a p-value <0.001 in influencing business sustainability. Meanwhile, for the indirect effect (indirect effect) on business performance variables on resilience, the path coefficient value (β) is 0.15 with p-value < 0.001, then for the effect of business resilience on business sustainability is 0.54 with p -value < 0.001 and business performance on sustainability shows a coefficient value of 0.13 with p-values < 0.001.

Based on the mediation model in Baron & Kenny's (1986) research, these results show that the path coefficient value for the direct effect is greater than the indirect effect with a p-value < 0.001. So, it can be said that the effect of business performance on sustainability through resilience is a partial mediation. Thus, it can be said that H7 is accepted.

Above findings indicate the relationship between technology maximation, business performance mediated by business resilience to business sustainability show a positive relationship. In order to achieve business sustainability, entrepreneurs need to aware to the importance of the technology adaptation in business and try their best to exploit technology to their operation, marketing, research and else. This finding is in line with previous literatures about the importance of technology maximation in business (Lailah & Soehari, 2020; Perdana & Mokhtar, 2022; Suhaeli & Bachtiar, 2019). Following to that, business performance impacts business resilience as mentioned in the result of this research as strong indicator of one business to survive. By having a good business performance or in this case, a good and stable growth, business may be able to sustain their business in industry. This finding strengthens previous studies in relation to business performance and business sustainability (Martinez-Martinez et al., 2019; Tseng et al., n.d.).

Following to that, this research also digs deeper to the resilience role towards business sustainability. We argue that resilience takes a major role in supporting technology maximation and business performance as a mediator. However, this research indicated that even though business resilience positively affects business sustainability, and both technology maximation and business performance positively affect business resilience, but the result of resilience as mediator was not fully mediating but only partial mediating. This means that, even though without business resilience, technology maximation and business performance can still bring major impacts to business sustainability. This finding does not support previous study that claim resilience affect business sustainability (Batool et al., 2022).

4. Conclusion

This recent Covid-19 pandemic tested business survival to the limit. Countless business experience downturn even bankruptcy these past two years due to various reasons such as movement restriction that decrease busines income, rapid competition, market closure, changing customer preference to the emerging of substitute product. Various strategies have been adapted to answer the challenges, increasing technology maximation and business performance are some of strong strategies to maintain business sustainability.

However, this study argues that both technology maximation and business performance need a supporting element to strengthen its effect which is business resilience. This study was conducted in central Java and DIY which have a big number of MSMEs in various industry from F&B, hand craft, fashion, service, manufacture and so on. It was taken of 2684 samples but among that total, only 2038 valid questionnaires can be processed for the next step. By utilizing WarpPLS, this study tried to test 7 hypotheses in measuring the direct and indirect effect on technology maximation, business performance and business resilience towards business sustainability.

The result shows that business resilience partially mediate technology maximation and business performance towards business sustainability. Even though the model has been tested in large number of samples, but to be able to apply the model in general, comparative study is required. Further study can try to implement more elements to the model and set a comparative study with another region or country to set more stable model.

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