

## The Influence of Digital Transformation and Business Model Innovation on the Operational Performance of Msmes: A Case Study of a Coffee Shop in Yogyakarta

Muhammad Marshall Alamsyah<sup>1\*</sup>, Anjar Priyono<sup>2</sup>  
Universitas Islam Indonesia

**Corresponding Author:** Muhammad Marshall Alamsyah  
[21311612@students.uii.ac.id](mailto:21311612@students.uii.ac.id)

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### ABSTRACT

This study aims to analyze the influence of digital transformation and business model innovation on the operational performance of MSMEs, specifically in the coffee shop sector in Yogyakarta. The research is motivated by the increasing competition among coffee shop in the region, which demands business owners to continuously innovate and adapt to technological advancements. The study employed a quantitative method using a survey approach, collecting data from 112 coffee shop entrepreneurs through questionnaires. Data analysis was conducted using Structural Equation Modeling with the Partial Least Squares (SEM-PLS) technique. The results indicate that digital transformation has a positive and significant effect on operational performance, although its influence is not as strong as that of business model innovation. Business model innovation shows a highly significant impact on operational performance. Moreover, digital transformation also indirectly influences operational performance through business model innovation.

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## **INTRODUCTION**

In recent years, the emergence of coffee shops in various corners of Yogyakarta has increased. However, not all coffee shops get attention or visits from coffee lovers. Only a few specific places have managed to attract consumer interest. The choice of coffee shop by consumers is influenced by various factors such as brand, product quality, service, promotion strategy, location and price.

Fierce competition in the coffee shop business in Yogyakarta requires business owners to make proper control efforts. In this industry, it is important for business actors to ensure that the quality of coffee and service to customers are maintained. Therefore, innovation is needed to maintain the taste of coffee and customers. This industry has a high level of operational risk, so business actors are required to continue to innovate and create competitive advantages in order to survive.

In the modern era like now, digitalization is a major need in various sectors that include large, medium, and small companies. Digitalization requires an innovation process in the business model that can achieve the goals of a company. In addition to digital transformation, business model innovation also has an important role in determining the success of a company.

According to (Latifi et al., 2021) it is mentioned that Continuous technological advancements and rapid changes in the rules and behavior of customers and competitors alike face serious challenges for companies that want to run a business. Digital Transformation and Business Model Innovation can be a major factor in improving the operational efficiency, competitiveness, and sustainability of MSMEs.

This not only provides opportunities for MSMEs to compete in the wider market, but also becomes a challenge, especially for MSMEs who are not ready to face this change. Despite having a link between digital transformation and Business Model Innovation, there is evidence of their relationship and their role in explaining the performance of innovative MSMEs (Merín-Rodrigáñez et al., 2024). In addition, according to (Santarsiero et al., 2024), Digital Transformation in MSMEs refers to the incorporation of digital technology in all business fields, which can fundamentally change the way organizations operate and provide value to customers so that their ability can achieve their long-term goals.

The Digital Transformation and Business Model Innovation process has changed the nature of strategy-making, as many digital products offer new features and functions by incorporating digital components into physical products simultaneously (Vaska et al., 2021). These changes emphasize adapting more innovative strategies to meet challenges and seize opportunities for more digital business development.

This research is based on survey data collected from coffee shop business actors in Yogyakarta. This study aims to delve deeper into the forms of entrepreneurial innovation that are developing in this sector. Yogyakarta is also a student city as well as a tourist destination, becoming a magnet for many business actors to pioneer and expand their coffee shop business. This condition triggers fierce competition in the coffee shop industry.

In this context, Business Model Innovation is an important strategy pursued by coffee shop players to improve their Operational Performance. Therefore, innovative strategies need to be applied consistently to encourage business competitiveness.

Digital Transformation also plays a key role in supporting the Innovation of the coffee shop Business Model. Through digitalization, business actors can optimize various operational aspects such as ordering, customer service, digital promotions, as well as stock and financial management systems. Business Model innovations that utilize technology enable MSMEs to improve operational efficiency, create new value for customers, and maintain a competitive advantage in the long term.

From the background description that has been explained earlier, the author is interested in conducting research related to the rapid development of coffee shops in Yogyakarta. This research aims to understand and examine the extent of the influence of Digital Transformation and Business Model Innovation on the Operational Performance of MSMEs, especially in the coffee shop sector. Therefore, the author writes a study entitled "The Influence of Digital Transformation and Business Model Innovation on MSME Operational Performance: A Case Study of Coffee Shop in Yogyakarta"

## **LITERATURE REVIEW**

### ***Dynamic Capability Theory***

Dynamic capability refers to a company's strategic capacity to effectively combine, develop, and reorganize internal and external resources and competencies in order to respond to immediate and unexpected changes in the business environment. This framework highlights the important role of unique organizational processes, shaped by the company's specific asset position as well as the historical development trajectory that it has chosen or inherited over the course of its business journey. In a context characterized by the acceleration of technological change and the pressure to accelerate time to market, the ability of companies to continuously update and adapt their competencies is the key to maintaining relevance and competitive advantage in the midst of constantly changing market dynamics (Teece et al., 1997).

### ***Digital Transformation***

Digital Transformation is a process of fundamental and comprehensive change that occurs in an organization when technology, human resources, and operational systems are strategically utilized to create significant leaps in business work. This process is not only the digitization of activities, but also touches the core of the business model and the way the organization interacts with the external environment. Digital Transformation involves optimizing all assets and capabilities owned by the organization, including the use of the latest digital technology to create real added value for consumers. This is reflected in improving the quality of customer experience, such as ease of making transactions, convenience when shopping, and faster and more responsive interactions through various digital communications (Hadiono et al., 2020).

### ***Business Model Innovation***

Business Model Innovation is a fundamental change in the way businesses create, deliver, and earn value. In the digital age, these innovations often involve the use of technologies such as e-commerce, mobile applications, and social media to increase efficiency and expand market reach. For MSMEs, this technology helps reach more customers and build more effective interactions (Putri & Widadi, 2024).

### ***Operational Performance***

Operational Performance is related to the Company's internal operational efficiency, which can increase competitiveness and profitability in the market. By optimizing internal processes, such as resource management, technology use, and improving the quality of service products, the Company can reduce production costs and time (Kareem & Kummitha, 2020).

### ***Digital Transformation and MSME Operational Performance***

Digital Transformation has the potential to improve almost all business activities, but the impact is different for each company. Success requires high commitment and adequate resources, such as capital, skilled manpower, and a strong digital culture. Innovative MSMEs need to implement it efficiently so that technology investment provides optimal results. Market competition encourages MSMEs to innovate and create unique products to build long-term relationships with customers. Digital Transformation has been proven to drive efficiency, asset utilization, and innovation (Zheng et al., 2023).

H1: Digital Transformation has a positive effect on the Operational Performance of MSMEs.

### ***Digital Transformation and Business Model Innovation***

Digital Transformation drives changes in business structures and strategies, creates new value, strengthens networks, and opens up digital opportunities (Ciacci & Penco, 2023). The integration of technology into business models gives rise to new revenues, higher efficiency, and market engagement innovations (Nsisong Louis Eyo-Udo, 2024). The development of disruptive technologies demands that organizations redesign business models to be relevant and superior, with strategic capabilities to update value propositions, increase efficiency, and provide better customer experiences (Emma, 2024).

H2: Digital Transformation has a positive effect on Business Model Innovation.

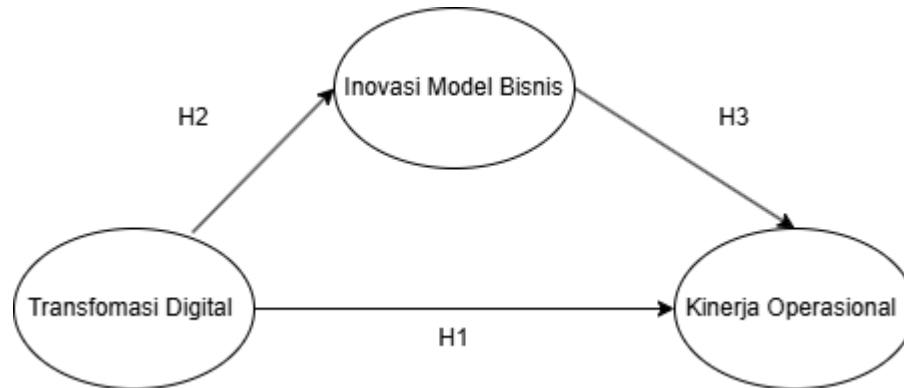
### ***Business Model Innovation and MSME Operational Performance***

Business Model Innovation increases the competitiveness of MSMEs through adaptation to consumer needs, technology, and industry dynamics. Companies that implement new business models tend to have superior performance than those that maintain traditional models (Anwar, 2020). Research shows that innovation in value creation is positively and significantly related to SME performance (Salfore et al., 2023).

H3: Business Model Innovation has a positive effect on the Operational Performance of MSMEs.

### **Research Framework**

Based on the results of the study from previous research and the theories that have been described in the previous section, this research framework was prepared which aims to examine Digital Transformation and Business Model Innovation on the Operational Performance of MSMEs: COFFE SHOP in Yogyakarta:



**Figure 1. Research Framework**

### **METHODOLOGY**

This study uses a quantitative method with a survey approach to test the influence of Digital Transformation and Business Model Innovation on the Operational Performance of MSMEs in the coffee shop sector in the Special Region of Yogyakarta. The research population is all MSMEs coffee shops in the region, with purposive sampling techniques based on the criteria of coffee shop owners or managers who are actively operating. The number of samples was determined to be 112 respondents according to the calculations of Hair Jr. et al. (2022) based on 16 variable indicators. Primary data were collected through a Likert scale questionnaire (1-5) containing variable indicators, while secondary data was obtained from relevant literature, journals, and documents.

The research variables consist of Digital Transformation (5 indicators), Business Model Innovation (7 indicators), and Operational Performance (4 indicators). The instrument was tested by validity (loading factor  $\geq 0.70$ , AVE  $\geq 0.50$ ) and reliability (Composite Reliability  $\geq 0.70$ , Cronbach's Alpha  $\geq 0.70$ ). Data analysis was carried out with Structural Equation Modeling-Partial Least Squares (SEM-PLS) which included the evaluation of the outer model (convergent validity, discriminant validity, and composite reliability) and the inner model (collinearity test, R-Square, Q-Square, and hypothesis test with bootstrapping technique).

### **RESEARCH RESULT**

#### **Data Collection**

The questionnaire was sent directly to the respondents through digital communication channels such as email, WhatsApp, and other social media that are commonly used by MSME actors. Of the total 112 questionnaires distributed, all of them were successfully returned in complete condition and worthy of further analysis. This shows that the questionnaire return rate is 100%, which is a very ideal number and supports the quality of the data obtained in this study.

Table 1. Questionnaire Return Rate

Criterion	Sum	Presentase
Number of questionnaires distributed	112	100%
The number of questionnaires is incomplete	0	0%
The number of questionnaires did not return	0	0%
Questionnaire is eligible	112	100%

Source: Primary Data processed, 2025

### Descriptive Analysis

Table 2. Respondent Characteristics

Respondent Characteristics	Frequency	Presentase (%)
<b>Gender</b>		
1. Man	47	41,96%
2. Woman	65	58,04%
<b>Age</b>		
1. 21-25 Years	37	33,04%
2. 26-30 Years	43	38,39%
3. 31-35 Years	12	10,71%
4. 36-40 Years	8	7,14%
5. > 40 years old	12	10,71%
<b>Final Education</b>		
1. SMA	22	19,64%
2. Diploma	40	35,71%
3. Bachelor	25	22,32%
4. S2	25	22,32%
<b>Functional Positions</b>		
1. Investor	1	0,89%
2. Employee	79	70,54%
3. Manager	21	18,75%
4. Owner	11	9,82%
<b>Total</b>	<b>112</b>	<b>100%</b>

Source: Primary Data processed, 2025

This study involved 112 respondents who were business actors and coffee shop managers in Yogyakarta, with characteristics based on gender, age, education, and functional position. The majority of respondents were women (58.04%), aged 26–30 years (38.39%), and with a Diploma (35.71%). In terms of position, most of them are employees (70.54%), followed by managers (18.75%),

owners (9.82%), and investors (0.89%). This data shows the dominance of the young generation with formal education in coffee shop management, which tends to be adaptive to Digital Transformation and open to Business Model Innovation.

**Outer Model Testing**  
*Convergent Validity Test*

The convergent validity test is carried out in two ways. First, by looking at the Average Variance Extracted (AVE) value. Second, by looking at the loading factor, the AVE value must be greater than 0.50. Ideally, the loading factor value should be greater than 0.70. However, statement items with a value of 0.70 can be retained and declared valid if the AVE value is greater than 0.50. All loading factor values are above 0.70 and this means that all constructs are valid.

Tabel 3. Outer Loadings

	Digital Transformation	Business Model Innovation	Operational Performance
BMI1		0,883	
BMI2		0,929	
BMI3		0,850	
BMI4		0,903	
BMI5		0,921	
BMI6		0,798	
BMI7		0,854	
DT1	0,873		
DT2	0,888		
DT3	0,873		
DT4	0,807		
DT5	0,834		
OP1			0,827
OP2			0,914
OP3			0,895
OP4			0,890

Source: Primary Data processed, 2025

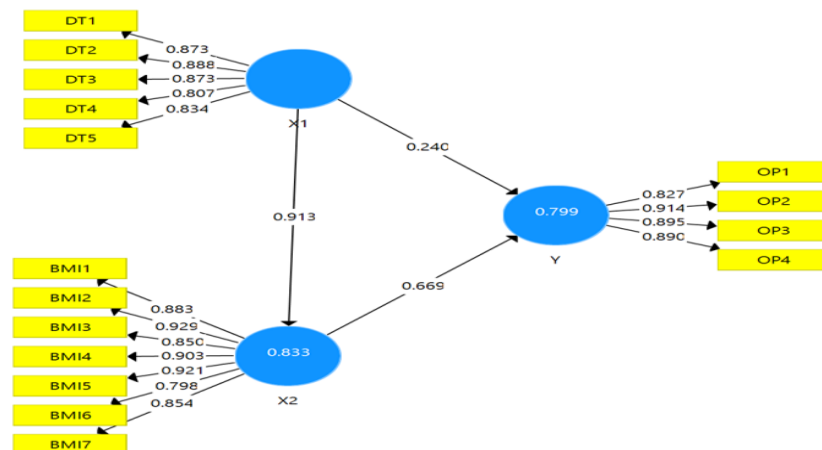


Figure 1. Outer Model Testing  
 Source: Primary Data processed, 2025

**AVE**

If the square root value of a construct is higher than its correlation value with other constructs, then it shows that each construct is able to distinguish itself clearly from other constructs, which means that the discriminant validity of the model can be categorized as good.

Table 4. Average Results Variance Extracted

Variabel	AVE	Critical Values	Information
Digital Transformation (X1)	0,732	> 0,5	Valid
Business Model Innovation (X2)	0,771	> 0,5	Valid
Operational Performance (Y)	0,778	> 0,5	Valid

Source: Primary Data processed, 2025

**Discriminating Validity Test**

The discriminant validity test assesses the extent to which each construct can be distinguished from other constructs, with the indicator having a higher load on its own construct ( $\geq 0.70$ ) than other constructs. The test can also be done by comparing the square root of AVE of each construct with the correlation between variables.

Table 5. Results of the Discriminant Validity Test

Statement	X1	X2	And
<b>BMI1</b>	0,843	0,883	0,780
<b>BMI2</b>	0,840	0,929	0,793
<b>BMI3</b>	0,785	0,850	0,762
<b>BMI4</b>	0,840	0,903	0,801
<b>BMI5</b>	0,836	0,921	0,810
<b>BMI6</b>	0,706	0,798	0,784
<b>BMI7</b>	0,746	0,854	0,725
<b>DT1</b>	0,873	0,808	0,781
<b>DT2</b>	0,888	0,806	0,755
<b>DT3</b>	0,873	0,801	0,757
<b>DT4</b>	0,807	0,752	0,692
<b>DT5</b>	0,834	0,732	0,644
<b>OP1</b>	0,638	0,695	0,827
<b>OP2</b>	0,798	0,814	0,914
<b>OP3</b>	0,746	0,775	0,895
<b>OP4</b>	0,806	0,841	0,890

Source: Primary Data processed, 2025

Based on the results of data analysis, all cross loading values showed a number above 0.70 and were consistently higher in the measured construct compared to other constructs. This indicates that each indicator is able to present its constructs clearly and does not overlap with other constructs. Therefore, it can be concluded that each variable in this study meets the criteria of good

discriminant validity, which shows that the measurement model has reliability in distinguishing between constructs conceptually.

**Composite Reliability Test**

Table 6. Composite Reliability

Variabel	Composit Reliabilit y	Rule of Thumb	Result
Digital Transformation (X1)	0,932	> 0.70	Reliabel
Business Model Innovation (X2)	0,959	> 0.70	Reliabel
Operational Performance (Y)	0,933	> 0.70	Reliabel

Source: Primary Data processed, 2025

The results of data processing showed that all cross loading values were above the threshold of 0.70. These findings confirm that each indicator has a stronger correlation with the construct it represents compared to the other. Thus, it can be concluded that the variables in the study have met good criteria.

**Cronbach's Aplha**

Table 7. Cronbach's Alpha Results

Variabel	Cronbach's Alpha	Rule of Thumb	Result
Digital Transformation (X1)	0,908	> 0.7	Reliabel
Business Model Innovation (X2)	0,950	> 0.7	Reliabel
Operational Performance (Y)	0,905	> 0.7	Reliabel

Source: Primary Data processed, 2025

Based on table 4.7, all variables in this study were proven to be reliable, shown by Cronbach's Alpha value which exceeded the threshold of > 0.7. Thus, it can be concluded that the data has met the reliability test criteria, making it feasible to use at the next stage of analysis.

**Inner Model Testing**

*Cholinarity test*

Table 8. Cholinity Test

Statement	BRIGHT
BMI1	3,889
BMI2	2,446
BMI3	3,232

BMI4	2,216
BMI5	1,204
BMI6	2,487
BMI7	2,867
DT1	3,011
DT2	3,888
DT3	2,929
DT4	2,351
DT5	2,487
OP1	2,339
OP2	3,461
OP3	3,128
OP4	3,020

Source: Primary Data processed, 2025

Based on Table 8, all indicators have a VIF value of  $< 5$ , so there are no collinearity problems. The highest values were found in BMI1 (3,889) and DT2 (3,888), while the lowest was in BMI5 (1,204). All values are within tolerance limits, so the model is free of multicollinearity and the entire indicator is worth preserving for further analysis.

### R-Square Value

Tabel 9. Nilai R-Square

Variabel	R Square	R Square Adjusted
Business Model Innovation (X2)	0,833	0,756
Operational Performance (Y)	0,799	0,573

(Source: PLS Output, 2025)

Based on the results of the R-Square test presented in table 4.9, it is known that the Business Model Innovation (X2) variable has an R-Square value of 0.833 and Adjusted R-Square of 0.756. This shows that 75.6% of variations or changes in Business Model Innovation can be explained by independent variables used in the model, while the rest, namely 24.4%, are influenced by other factors that are not included in this research model.

### Q-Square Value

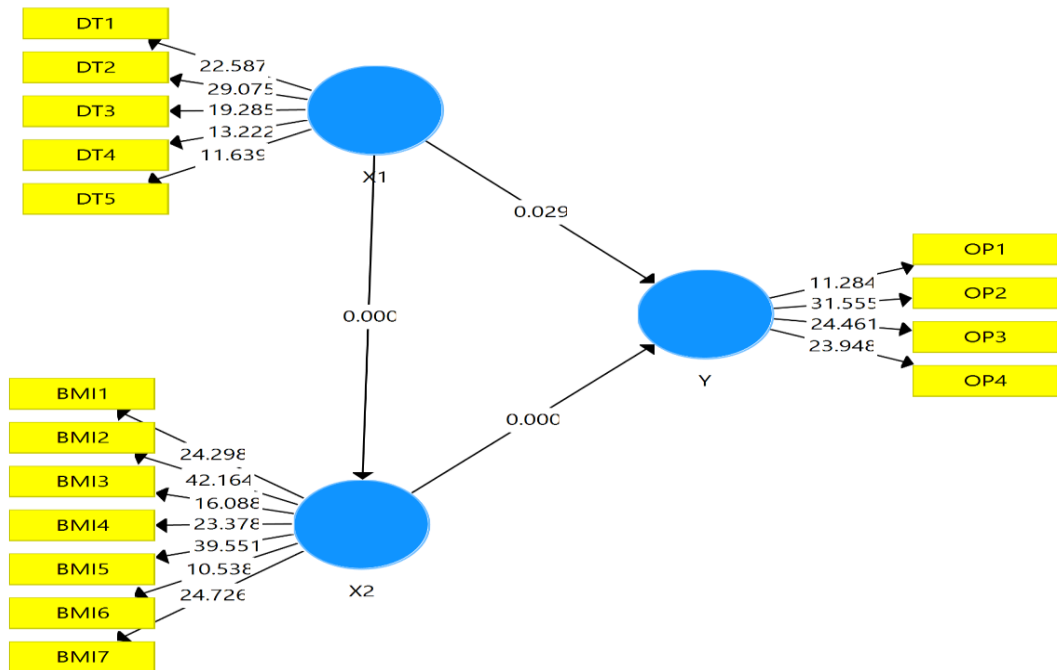
Table 10. Q-Square Value

	SSO	SSE	Q <sup>2</sup> (=1-SSE/SSO)
<b>X1</b>	560,000	560,000	
<b>X2</b>	784,000	290,113	0,630
<b>And</b>	448,000	178,126	0,602

Based on Table 4.10, it is known that the Q<sup>2</sup> value for variable X2 is 0.630 and for variable Y is 0.602. Meanwhile, the variable X1 does not have a Q<sup>2</sup> value

because it is an exogenous variable that is not predicted by the other variables in the model.

**Uji Hypothesis (Bootstrapping)**



**Figure 2. Hypothesis Test**  
 Source: Primary Data processed, 2025

The criteria for decision-making are as follows:

1. If the significance value < 0.05, then the hypothesis is accepted, which shows a significant influence between variables.
2. If the value of the infection > 0.05; then the hypothesis is rejected, which means that there is no significant influence between variables.

**Direct Effect**

Table 11. Direct Effect Hypothesis Test Results

Variabel	Original Sampel	T Statistics (O/STDEV)	P Values	Result
Digital Transformation (X1) -> Operational Performance (Y)	0,240	2,290	0,022	Signifikan
Business Model Innovation (X2) -> Operational Performance (Y)	0,669	5,856	0,000	Signifikan

Source: Primary Data processed, 2025

**Digital Transformation (X1) has no significant influence on Operational Performance (Y)**

Referring to table 4.11, the significance value of the influence of Digital Transformation (X1) on Operational Performance (Y) was recorded at 0.022

which is below the threshold of 0.05. These findings indicate a significant influence between Digital Transformation and MSME Operational Performance. With the original sample value of 0.240, it can be concluded that the more optimal the implementation of Digital Transformation in coffee shop management, the higher the effectiveness of the Operational Performance achieved.

**Digital Transformation (X1) has no significant influence on Operational Performance (Y)**

The significance value for the influence of Business Model Innovation (X2) on Operational Performance (Y) was recorded at 0.000, which is below the limit of 0.05. This means that there is a very significant influence between Business Model Innovation on Operational Performance. With a coefficient of 0.669, it can be concluded that Business Model Innovation has a greater contribution than Digital Transformation in improving the Operational Performance of coffee shop MSMEs in Yogyakarta

**Indirect Effect**

Table 12. Indirect Effect Hypothesis Test Results

Variabel	Original Sampel	T Statistics (O/STDEV)	P Values	Result
Digital Transformation (X1) -> Business Model Innovation (X2) -> Operational Performance (Y)	0,610	5,862	0,000	Signifikan

Source: Primary Data processed, 2025

Based on table 12, the results of hypothesis testing indicate a significant influence between Digital Transformation (X1) on Operational Performance (Y) through Business Model Innovation (X2). A significance value of 0.000 that is smaller than 0.05 confirms that the effect is statistically significant. With the original sample value of 0.610 and the T statistics of 5.862, it can be concluded that Business Model Innovation has a strong mediating role in strengthening the relationship between Digital Transformation and Operational Performance.

Table 13. Recapitulation of Hypothesis Test Results

Hipotesis	P value	Information
There is a significant influence between Digital Transformation (X1) and Operational Performance (Y)	0,022	H1 Accepted
There is a significant influence between Business Model Innovation (X2) on Operational Performance (Y)	0,000	H2 Accepted
There is a significant influence between Digital Transformation (X1) and Business Model Innovation (X2) on Operational Performance (Y)	0,000	H3 Accepted

Based on the results of the hypothesis test presented in Table 4.13, it was obtained that the p-value for the effect of Digital Transformation (X1) on Operational Performance (Y) was 0.022, which was below the significance limit of 0.05. This shows that there is a significant influence between Digital Transformation on Operational work, so H1 is accepted. Furthermore, for Business Model Innovation (X2) on Operational Performance (Y), a p-value of 0.000 was obtained, which also showed a significant influence, so H2 was accepted. Finally, for the simultaneous influence between Digital Transformation (X1) and Business Model Innovation (X2) Operational Performance (Y), a p-value of 0.000 was obtained, which again showed significance, so that H3 was also accepted. Thus, it can be concluded that both partially and simultaneously, Digital Transformation and Business Model Innovation have a significant influence on Operational Performance in this study.

## **DISCUSSION**

### ***The Effect of Digital Transformation on Coffee Shop Operational Performance in Yogyakarta***

The results of the analysis show that Digital Transformation has a significant effect on the Operational Performance of coffee shops in Yogyakarta (coefficient of 0.240; p-value 0.022). The application of digital technologies, such as online ordering/payment systems, social media, and customer data management, improves efficiency, service, and market reach. However, the impact is smaller than that of Business Model Innovation, possibly because the use of technology is not optimal. These findings are in line with previous research that confirmed that digitalization increases service speed, operational efficiency, and production capacity, although success is greatly influenced by the readiness of human resources and infrastructure.

### ***The Influence of Business Model Innovation on Coffee Shop Operational Performance in Yogyakarta***

Business Model Innovation has a strong and significant influence on Operational Performance (coefficient 0.669; p-value 0.000). Innovations in value delivery, products/services, digital marketing strategies, online distribution, and new collaborations help coffee shops adapt, compete, and operate more effectively. The greater influence of Digital Transformation shows that the renewal of a comprehensive business strategy is the key to success. Innovative practices such as coworking spaces, local MSME collaborations, app-based pre-orders, and subscription packages have been proven to increase customer productivity and loyalty.

### ***The Effect of Digital Transformation and Business Model Innovation Simultaneously on Coffee Shop Operational Performance in Yogyakarta***

Simultaneously, the two variables explain 79.9% variation in Operational Performance ( $R^2=0.799$ ). The synergies of the two complement each other: Digital Transformation accelerates business processes, while Business Model Innovation adds value and flexibility. These results support the Contingency Theory, that the suitability of strategies with the environment increases organizational

effectiveness. Coffee shops that integrate digital technology and business innovation are better prepared to face changing trends, customer needs, and competition. These findings are consistent with previous studies that affirmed the integration of the two creates a competitive advantage in the culinary and beverage sectors.

## **CONCLUSIONS AND RECOMMENDATIONS**

### ***Conclusion***

Based on the results of a study that examines the influence of Digital Transformation and Business Model Innovation on the Operational Performance of coffee shops in Yogyakarta, several important conclusions can be formulated as follows:

1. Digital Transformation has been proven to have a significant influence on operational performance. This indicates that the application of digital technology, from process automation to system integration, is able to increase the efficiency, accuracy, and speed of services so that it has a positive impact on business operational performance.
2. Business Model Innovation shows a very significant influence on operational performance. These findings confirm that business strategy updates, workflow adjustments, and new value creation for customers are crucial factors in driving business competitiveness and sustainability.
3. Digital Transformation also plays a role in providing an indirect influence on Operational Performance through Business Model Innovation. This means that the adoption of digital technology not only improves performance directly, but also strengthens the capacity for innovation in business models which in turn is able to maximize overall operational results.

### ***Managerial Implications***

1. From the results of the research, Digital Transformation has been proven to have a positive impact on operational efficiency. Therefore, I suggest that coffee shop owners start adopting technology such as digital cashier systems, online ordering applications, and the use of social media for promotion and communication with customers.
2. The findings in this study show that Business Model Innovation has the greatest influence on improving operational performance. This means that coffee shops need to continue to make updates in how to deliver services, establish cooperation with new partners, and create products or services that are more attractive and in accordance with consumer needs.
3. In practice, digitalization and Business Model Innovation should not be done separately. The two actually support each other, and can be the main strength for coffee shops to survive and grow in the midst of increasingly fierce business competition, especially in the special area of Yogyakarta.

### ***Research Limitations***

1. This study involved 112 respondents who were MSME coffee shop actors in the Yogyakarta area. The limited number and scope of respondents has implications for the level of generalization of findings, so the results of this

study do not necessarily fully represent the condition of coffee shop MSMEs in other regions that have different characteristics, market dynamics, and operational challenges. The difference in the characteristics and situation of coffee shop MSMEs in the Yogyakarta area with other areas can make the results of this study less fully applicable or appropriate if used outside the Yogyakarta area.

2. Because I only researched the coffee shop sector, the results cannot necessarily be used for other MSME sectors such as fashion, traditional culinary or handicrafts. Each sector certainly has its own characteristics.
3. Data collection in this study was carried out online by utilizing questionnaires distributed through the Google Form platform, allowing respondents to fill out flexibly without restrictions on location or time. This method not only simplifies the distribution and collection of data, but also speeds up the process of processing information efficiently. However, this method has the potential to cause inconsistencies between respondents' answers and the actual conditions that occur.

### ***Recommendation***

1. Increase the continuous adoption of digital technologies, such as online ordering apps, cashless payments, digital inventory, and digital marketing integrations to accelerate services and expand markets.
2. Develop adaptive Business Model Innovation, including menu updates, room concepts, subscription systems, and collaboration with relevant communities or brands.
3. Strengthening digital literacy and innovative capabilities of human resources through digital transformation training, innovation-based entrepreneurship, and data-driven operational management.
4. Integrate digitalization and innovation in a long-term strategy by building a business culture that is responsive to changing technologies and consumer trends.

### **ADVANCED RESEARCH**

Further research can be directed to expand the scope of the MSME sector beyond coffee shops, such as traditional culinary, fashion, and handicrafts, in order to test the consistency of the influence of Digital Transformation and Business Model Innovation on operational performance in different contexts. In addition, a mixed methods approach with a combination of quantitative surveys and in-depth interviews can provide a more comprehensive understanding of contextual factors, barriers to technology adoption, and relevant innovation strategies. The research can also utilize longitudinal data to observe the dynamics of performance changes over a period of time, as well as consider moderation variables such as digital literacy, government policy support, and local market conditions. Thus, the findings produced will have a higher level of generalization and make a stronger strategic contribution to the development of MSMEs in various sectors and regions.

## REFERENCES

- Anggoro, Dani, Elmira Febri Darmayanti, Sangidatus Sholihah, Aditya Agung Budi Pratama, and Aprilia Wahyuningrum. 2024. "Peningkatan Kapasitas Produksi Dan Digitalisasi Pemasaran UMKM Telogo Wungu Untuk Mendorong Pertumbuhan Ekonomi Desa Sumbergede, Lampung Timur." *Amirotun Sholikhah*. (2016). *Statistik Dekstiptif dalam penelitian kuantitatif*.
- Anwar, M. (2020). Business model innovation and SMEs performance-Does competitive advantage mediate? *International Journal of Innovation Management*, 22(7). <https://doi.org/10.1142/S1363919618500573>
- Bagas Aji, F., & Nursyamsiah, S. (2023). *Indonesian Journal of Economics, Business, Accounting, and Management Pengaruh Inovasi Model Bisnis terhadap Peningkatan Kinerja UKM di Yogyakarta*.
- Baihaqi, A., & Huda, M. (2023). *Triwikrama: Jurnal Ilmu Sosial Pengaruh Transformasi Digital dan Inovasi Produk Terhadap Keunggulan Bersaing dan Kinerja Umkm di Kabupaten Pasuruan*. 01, 50-60.
- Candra, Kusuma Chandra Kirana, & Syamsul Hadi. (2024). *Analysis of The Influence of Transformational Leadership Style and Work Discipline on Employee Innovation Performance with Motivation as An Intervening Variable at SDIT Yogyakarta*.
- Ciacci, A., & Penco, L. (2023). Business model innovation: harnessing big data analytics and digital transformation in hostile environments. *Journal of Small Business and Enterprise Development*, 31(8), 22-46. <https://doi.org/10.1108/JSBED-10-2022-0424>
- Chaidir, Mohamad, Grace Yulianti, and Seger Santoso. 2024. "Dampak Digitalisasi Terhadap Inovasi Teknologi Pada Usaha Mikro, Kecil, Dan Menengah." *Jurnal Visi Manajemen* 10(2): 74-87. <https://stiepari.org/index.php/jvm/article/view/523>.
- Choirunnissa, Nur Fadiyah, Nina Oktarina, Program Studi, Pendidikan Ekonomi, Administrasi Perkantoran, and Universitas Negeri Semarang. 2025. "Peran Digitalisasi Dalam Meningkatkan Pelayanan Administratif Kantor." *Book Chapter Administrasi Perkantoran*: 77-95.
- Dedi Rianto Rohadi. (2023). *PengantarPartialLeastSquareStructuralEquationModelPLS-SEM*.
- Dinda Riri Saraswati, Pristiyono, P., & Harahap, A. (2022). The Effect of Business Model Innovation and Entrepreneurship Orientation on MSMESs Performance Through Business Agility Moderated Financial Literature. *Quantitative Economics and Management Studies*, 3(4), 498-507. <https://doi.org/10.35877/454ri.qems973>
- Dobrovnik, M., Herold, D. M., & Kummer, S. (2024). Exploring supply chain managers' complex perceptions of dynamic capabilities for digital transformation. *Digital Business*, 100098. <https://doi.org/10.1016/j.digbus.2024.100098>
- Ekasari, Dina Luh, and Hermi Sularsih. 2023. "Pengaruh Model Bisnis, Inovasi Produk Dan Literasi Keuangan Terhadap Kelangsungan Usaha Kecil Menengah Menuju UKM Bangkit Dari Pandemi Covid-19." *Jurnal Paradigma Ekonomika* 18(1): 2684-7868.
- Emma, L. (2024). *Digital Transformation and Business Model Innovation: A Comparative Analysis*. <https://www.researchgate.net/publication/385906327>
- Febriani, S. (2022). *Analisis Deskriptif Standar Deviasi*.
- Govindan, K. (2024). Analyzing the dynamic capabilities of emerging technologies for industrial emergency situations. *International Journal of Production Economics*, 109495. <https://doi.org/10.1016/j.ijpe.2024.109495>
- Hadiono, K., Candra, R., & Santi, N. (2020). *Menyongsong Transformasi Digital*.

- Hair Jr., J. F., Ray, S., Danks, N. P., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). Classroom Companion: Business Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R AAWorkbook. <http://www>.
- Harto, Budi, Panji Pramuditha, Andina Dwijayanti, Lina Parlina, and Harnavela Sofyan. 2023. "Strategi Bisnis Berkelanjutan Melalui Inovasi Model Operasional Di Era Digitalisasi Bisnis." *ATRABIS Jurnal Administrasi Bisnis (e-Journal)* 9(2): 243-51. doi:10.38204/atrabis.v9i2.1677.
- Imam Ghozali, & Hengky Latan. (2015). Partial Least Squares, Konsep, Teknik dan Aplikasi menggunakan Program SMARTPLS 3.0 Untuk Penelitian Empiris.
- January, B. ; Hair, J. F., Tomas, G., Hult, M., Ringle, C. M., & Sarstedt, M. (2022). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). <https://www.researchgate.net/publication/354331182>
- Kareem, M. A., & Kummitha, H. V. R. (2020). The Impact of Supply Chain Dynamic Capabilities on Operational Performance. *Organizacija*, 53(4), 319-331. <https://doi.org/10.2478/orga-2020-0021>
- Latifi, M. A., Nikou, S., & Bouwman, H. (2021). Business model innovation and firm performance: Exploring causal mechanisms in SMEs. *Technovation*, 107. <https://doi.org/10.1016/j.technovation.2021.102274>
- Merín-Rodrigáñez, J., Dasí, À., & Alegre, J. (2024a). Digital transformation and firm performance in innovative SMEs: The mediating role of business model innovation. *Technovation*, 134(March). <https://doi.org/10.1016/j.technovation.2024.103027>
- Merín-Rodrigáñez, J., Dasí, À., & Alegre, J. (2024b). Digital transformation and firm performance in innovative SMEs: The mediating role of business model innovation. *Technovation*, 134. <https://doi.org/10.1016/j.technovation.2024.103027>
- Nsisong Louis Eyo-Udo. (2024). Digital transformation as a catalyst for business model innovation: A critical review of impact and implementation strategies. *Open Access Research Journal of Engineering and Technology*, 6(2), 001-022. <https://doi.org/10.53022/oarjet.2024.6.2.0085>
- Nusrang, M., Fahmuddin, M., & Hafid, H. (2023). Prosiding Seminar Nasional Penerapan Metode Structural Equation Modelling-Partial Least Squares (SEM-PLS) Dalam Mengevaluasi Faktor-Faktor yang Mempengaruhi PDRB di Indonesia. <https://journal.unm.ac.id/index.php/Semnasdies62/index>
- Putri, P. L., & Widadi, B. (2024). Peran Inovasi dalam Pengembangan Model Bisnis UMKM di Era Digital. *Maeswara: Jurnal Riset Ilmu Manajemen Dan Kewirausahaan*, 2(4), 180-189. <https://doi.org/10.61132/maeswara.v2i4.1113>
- Rokhmad Slamet, & Sri Wahyuningsih. (2022). Validitas Dan Reliabilitas Terhadap Instrumen Kepuasan Kerja.
- Salfore, N., Ensermu, M., & Kinde, Z. (2023). Business model innovation and firm performance: Evidence from manufacturing SMEs. *Heliyon*, 9(6). <https://doi.org/10.1016/j.heliyon.2023.e16384>
- Santarsiero, F., Carlucci, D., & Schiuma, G. (2024). Driving digital transformation and business model innovation in tourism through innovation labs: An empirical study. *Journal of Engineering and Technology Management - JET-M*, 74. <https://doi.org/10.1016/j.jengtecman.2024.101841>
- Saryatmo, M. A., & Sukhotu, V. (2021). The influence of the digital supply chain on operational performance: a study of the food and beverage industry in Indonesia. *Sustainability (Switzerland)*, 13(9). <https://doi.org/10.3390/su13095109>
- Sifwah, Mudrika Aqillah, Zidna Zaena Nikhal, Anggi Puspita Dewi, Neuneu Nurcahyani, Ratna Nur Latifah, Studi Program, Fakultas Manajemen, et al. 2024.

- "MANTAP: Journal of Management Accounting, Tax and Production E-Penerapan Digital Marketing Sebagai Strategi Pemasaran Untuk Meningkatkan Daya Saing UMKM." *Mudrika Aqillah Sifwah* 2(1): 109–18. <http://rayyanjournal.com/index.php/mantap/article/view/1592>.
- Sofyana, L., & Rozaq, A. (2019). Pembelajaran Daring Kombinasi Berbasis WhatsApp Pada Kelas Karyawan Prodi Teknik Informatika Universitas PGRI Madiun (Vol. 8).
- Sugiyono. (2020a). Metode Penelitian Kuantitatif.
- Sugiyono. (2020b). Metode Penelitian Kuantitatif Kualitatif Dan R&D.
- Teece, D. J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z)
- Terapan, J. P., Pendidikan, D., Psikologi, M., Dahlan, A., & Situmorang, N. Z. (2019). Pengujian validitas dan reliabilitas konstruk hope Husnawati Fatwa Tentama. 1(2), 128–135.
- Trichaya Avilya, L., & Ghozali, I. (2022). Pengaruh Intellect Capital, Good Corporate Governance Dan Corporate Social Responsibility Terhadap Kinerja Keuangan Dengan Manajemen Laba Sebagai Variabel Mediasi (Studi Empiris pada Perusahaan Manufaktur yang Terdaftar di BEI Tahun 2018-2020). *DIPONEGORO JOURNAL OF ACCOUNTING*, 11(4), 1–15. <http://ejournal-s1.undip.ac.id/index.php/accounting>
- Tulungen, E., Maramis, J., Saerang, D., Tulungen, E. E., Saerang, D. P., Maramis, J. B., Studi Doktor Ilmu Manajemen, P., Ekonomi dan Bisnis, F., & Kunci, K. (2022). DIGITAL TRANSFORMATION: ROLE OF DIGITAL LEADERSHIP. 1116 *Jurnal EMBA*, 10(2), 1116–1123.
- Umar, F., Abidin Umar, Z., & Juanna, A. (2025). Pengaruh Kualitas Produk dan Kualitas Pelayanan Terhadap Kepuasan Pelanggan di Konveksi Aria Kaos Kota Gorontalo. *JAMBURA*, 7, 2025. <http://ejurnal.ung.ac.id/index.php/JIMB>
- Undari Sulung, & Mohamad Muspawi. (2024). Memahami Sumber Data Penelitian: Primer, Sekunder, dan Tersier.
- Vaska, S., Massaro, M., Bagarotto, E. M., & Dal Mas, F. (2021). The Digital Transformation of Business Model Innovation: A Structured Literature Review. In *Frontiers in Psychology* (Vol. 11). *Frontiers Media S.A.* <https://doi.org/10.3389/fpsyg.2020.539363>
- Wei, J., Zhang, X., & Tamamine, T. (2024). Digital transformation in supply chains: Assessing the spillover effects on midstream firm innovation. *Journal of Innovation and Knowledge*, 9(2). <https://doi.org/10.1016/j.jik.2024.100483>
- Zheng, B., Yuan, Y., Li, H., & Jiang, Y. (2023). A study of digital transformation and MSMEs performance from a spatial perspective: Evidence from China. *Journal of Economics and Management (Poland)*, 45(1), 319–343. <https://doi.org/10.22367/jem.2023.45.13>