
THE RELATIONSHIP BETWEEN ORGANIZATIONAL FACTORS AND DIGITAL TRANSFORMATION IN ENHANCING MSME PERFORMANCE IN BANDUNG CITY

(MSME's in Sumur Bandung, Bandung City)

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Abstract:

The industry of recreation, entertainment, culinary and tourism development makes use of Digital Transformation. As the community has ever more information media access brought about through high technology sophistication, the wider community knows more about tourist destinations that can only be visited with the help of information media. In addition, Digital Transformation can increase sales, competitiveness and market growth for MSMEs. Many entrepreneurs innovate the operations of their businesses as MSMEs digitally transform. This innovation could take the form of the adoption of digital technology, the development of a new product, increased efficiency of business processes and/or the development of more efficient business models. For example, MSMEs can increase operational efficiency with digital technology by adopting cloud-based inventory management systems, selling through e commerce platforms to open markets, or using social media for more powerful marketing ideas. Over the last few years various reforms took place at the level of digitalization and MSMEs in the city of Bandung can consider themselves both lucky and challenged due to these changes. As growth and evolution of such businesses intensified in an evolving and rapidly innovative market space, and especially the emerging and growing digital business environment, it becomes important for strategic management to lead in the acquisition and implementation of technologies. The phenomena in this study were explored with quantitative methods. The data collection technique is survey; secondary data collection and questionnaires were distributed to owners of MSMEs in Sumur Bandung sub district. The SmartPLS software was used to analyse the collected data while SPSS was used to test the instrument. It is expected that the study's conclusions will provide a boost in digital transformation of the MSMEs to boost their competitive advantage.

Keywords: Digital Technologies; Digital Skills; Digital Transformation Strategy; Digital Transformation; MSME Performance

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INTRODUCTION

The capital city of West Java, Bandung, is well known for its cultural legacy, pleasant temperature, and beautiful hilly scenery, which gave it the moniker "Paris van Java" during the colonial era. Nestled among this dynamic cityscape is Sumur Bandung, one of the oldest sub-districts of the city and home to the famous Braga area—a historical and touristic site popular with both local and foreign travelers. Micro, Small, and Medium Enterprises (MSMEs), which as of 2021 numbered 464,346 units with a reported revenue of over IDR 9.8 billion (Open Data Jabar, 2021; Dekranasda Bandung, 2021), have long supported economic activity in Bandung. With more online transactions significantly driving Bandung's economic growth rate to 3.5%

by the end of 2021 and 5.07% by 2023 (Disdagin, 2022; Radar, 2023), the COVID-19 pandemic hastened the expansion of digital commerce in the region.

Government-backed initiatives have helped Indonesia's digital transformation plan at the national level make significant progress. By 2020, the MSME Go Digital project recorded 12 million MSMEs, exceeding the original goal of 10 million. In the same year, the Gernas BBI (National Movement for Proudly Made in Indonesia) campaign similarly raised the proportion of digitally engaged MSMEs from 14% to 25%. Furthermore, by September 2021 the PaDi UMKM (Digital Market for MSMEs) platform enabled transactions of IDR 118.8 trillion from 10,412 MSMEs, so proving how digital platforms can greatly increase market access and company success (Gusmiarti, 2024).

Not with standing these successes, MSMEs in Bandung, particularly those in Sumur Bandung, nevertheless struggle with several issues. These consist of a lack of appropriate digital skills within the workforce, a lack of access to the required digital technologies, and questions about the development of successful digital initiatives. The Bandung City Government has launched several projects in reaction to these challenges, including the *Sakedap Drive Thru* Program, which seeks to simplify licensing processes and support MSME digitalization (Radar, 2023). Particularly remarkable is the possibility for MSME expansion in Sumur Bandung, since the region drew more than 178,000 people during the 2024 Asia Africa Festival, resulting in complete hotel occupancy in the city center and a good environment for local MSMEs to flourish (Detik, 2024).

Applying a resource-based digital transformation performance model to MSMEs situated in Braga, Sumur Bandung, this work adds a fresh perspective to the body of knowledge on digital transformation. Although previous studies have often concentrated on digital transformation at a macro or national level, this one focuses on a, high-opportunity micro-region and offers local knowledge on the actual application of digital practices among small businesses. Using a structural equation model (SEM), the study experimentally explores the interaction among three important components—digital technology, digital skills, and digital transformation strategy—measuring their influence on transformation success. The results highlight that the integration of these three elements anchors effective digital transformation: technology is the enabler, skills the motivator, and strategy the guiding framework for implementation.

Apart from theoretical framework around MSME digital transformation, this study offers practical consequences as well. It offers a methodical approach MSME owners and legislators can use to evaluate digital readiness, create smart technology and training investments, and create efficient strategic plans. By so doing, it helps to achieve the more general goal of creating a strong digital economy and acts as a standard for micro-regional digital growth, especially in tourism-oriented cities like Bandung.

Problem Formulation

Over the last few years various reforms took place at the level of digitalization and MSMEs in the city of Bandung can consider themselves both lucky and challenged due to these changes. As growth and evolution of such businesses intensified in an evolving and rapidly innovative market space, and especially the emerging and growing digital business environment, it becomes important for strategic management to lead in the acquisition and implementation of technologies. Having said this, there are various challenges that MSMEs encounter when implementing the digital transformation process, for instance, scarce resources, poor digital facilities, and dearth of knowledge. Due to the pressures of a changing environment that is largely driven by digital technology, MSMEs need to respond with appropriate strategies so that they can survive in this environmental context.

Digital transformation is the process of adopting digital technology that impacts various activities of a firm to improve its performance, effective customers' relationship and decision making. For example, the use of social media is mainly used as a means of marketing SME products because it is faster, practical and easier (Noviaristanti et al., 2023). However, it was found that despite the applicability of such transformation across various sectors and levels, MSMEs in Bandung especially have a hard time when trying to implement it because of high market competition, barriers in terms of the resources they have available and their need for integrating into digital environments that are much suited to the specificity of the sector and region they operate in. The main concerns which emerge from this context:

1. Does digital technology affect digital transformation?
2. Do digital skills influence digital transformation?
3. Does digital transformation strategy influence digital transformation?
4. Does digital transformation influence MSME performance?
5. Does digital technology influence MSME performance which is mediated by digital transformation?
6. Do digital skills influence MSME performance which is mediated by digital transformation?
7. Does digital transformation strategy influence MSME performance which is mediated by Digital Transformation?

Literature Review

Strategic Management

Strategic management involves business models, sustainability, and innovation to build a long-term competitive edge (Cillo et al., 2019). It integrates strategy formulation and implementation to help public organizations achieve their goals and generate public value (Bryson & George, 2020). Sustainable strategic management combines growth with ethical and ecological responsibilities, promoting resilience and competitiveness (Sulich & Soloduch-Pelc, 2024).

Strategic Management Framework

The strategic management process includes four key elements:

1. Environmental Scanning – Gathering and assessing information from internal and external environments.
2. Strategy Formulation – Creating long-term plans based on strengths, weaknesses, opportunities, and threats.
3. Strategy Implementation – Executing strategies through programs, budgets, and procedures.
4. Evaluation and Control – Assessing performance and comparing outcomes with goals, focusing on metrics like ROI (Wheelen & Hunger, 2003).

Resource-Based Theory

Resource-based theory (RBT) suggests that a company's competitive advantage stems from its unique resources and capabilities (Barney et al., 2021). Firms with valuable, rare, inimitable, and non-substitutable resources (VRIN) perform better than competitors. RBT emphasizes creating economic value and leveraging internal resources for success (Barney et al., 2021).

Digital Technology

Digital technology enhances operational efficiency in SMEs by reformulating business models in response to industry transformations (Teng et al., 2022). There are also digital tools which include internet usage, computer/phone usage, web presence, e-payment, and e-commerce. Functions in which digital tools are used are finance activities (payment

transactions, working capital management, financing management), production and operations activities (material handling, product design, production, quality control), human resource management activities (teleworking options for staff, evaluation of staff performance), and marketing activities (sales of goods or services, advertising) (Muhamad et al., 2021). The internet is used in multiple gadgets, such as smartphones, laptops, personal computers, and other devices, encouraging consumptive behaviour. (Candiwan & Wibisono, 2021).

Digital Skills

Digital transformation requires skilled teams with expertise in business and digital technologies (Kane et al., 2019). The right talent is crucial for successful digital strategy execution (Teng et al., 2022). Digital capabilities are important to connect digital technology with professional digital talents (Wahyuningtyas et al., 2021).

Digital Skills Dimensions

Digital skills include:

1. Operational Skills – Using technological tools.
2. Information Navigation – Searching for and navigating digital information.
3. Social Skills – Interacting in digital spaces.
4. Creative Skills – Innovating with technology.
5. Mobile Skills – Operating mobile applications (Van Deursen et al., 2016).

Digital Transformation Strategy

A robust digital transformation strategy is essential for successfully implementing digital change (Chanias et al., 2019). MSMEs are reformulating their business structure using new technologies and values to drive transformation (Sun et al., 2021).

Digital Transformation

Digital transformation integrates digital technology into all organizational aspects, streamlining operations and fostering innovation (Appio et al., 2021). It follows a four-stage process: exploration, development, digital maturity, and becoming a digital organization (Kane et al., 2019).

Digital Transformation Dimensions

Key dimensions of digital transformation include:

1. Strategy – Developing a comprehensive digital strategy aligned with business goals (Bharadwaj et al., 2013).
2. Organization – Building partnerships and agile organizational structures (Schlaepfer et al., 2017).
3. Culture – Fostering creativity, risk-taking, and talent development (Kane et al., 2016).
4. Technology – Adopting emerging technologies like AI and blockchain (Hess et al., 2016).
5. Customer – Providing seamless hybrid customer experiences (Berghaus et al., 2017).
6. People – Developing digital skills to support transformation (Andersson et al., 2018).

MSME Performance

MSME performance is assessed by the ability to meet objectives like profitability and market share, considering sales, marketing, financial, and market dimensions (Pramestiningrum & Iramani, 2020; Boabeng & Li, 2018). Business success depends on achieving competitive advantage and reputation (Gustian, 2017; Nelfani, 2016).

RESEARCH METHOD

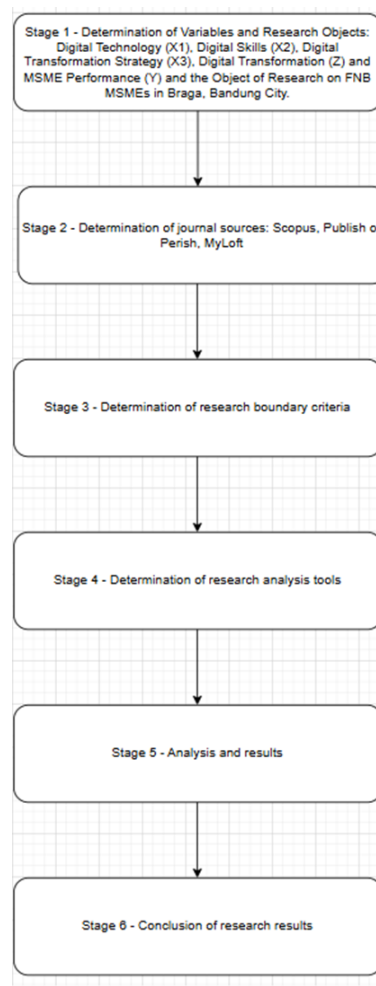


Figure 1. Research Stages

The research variable method is obtained from the title by using quantitative analysis to provide an overview of published research. Then the results obtained determine the variables, namely Digital Technology, Digital Skills, Digital Transformation Strategy, Digital Transformation, MSME Performance and the subject, namely MSMEs in the Sumur Bandung sub district. The type of journal source used is determined through the databases of Scopus, Emerald and Google Scholar using citations in papers to analyze data from Scopus, Emerald and Google Scholar over a five-year period. This study limits derived from this study to help researchers collect data to be examined to help researchers meet research goals. This study uses the SEM-PLS (Structural Equation Modeling Partial Least Squares) analysis method. In this study the author processed the data using the SMART-PLS software.

From the image above, here is a brief description of the research steps used by the author, including:

1. Choosing the factors to be researched, which include digital technology, digital skills, digital transformation strategy, digital transformation, and MSME performance. The researchers also chose the research object, which was Micro, Small, and Medium Enterprises (MSMEs) in the Food and Beverage sector in Bandung City's Braga district.

2. Selection of Journal Sources: The journal sources that the author uses are selected as references. The author had chosen Scopus, Publish or Perish and MyLoft as three good sources mainly for their known academic literature databases.
3. The author decides on the boundary of research criteria. The contents are defined as factors or criteria which will define and limit the area of the research so that the focus is kept on relevant contents.
4. Determination of Research Analysis Tools, the author selects the analysis tools or methods that will be used to process the data. The selection of this tool is very important to ensure that data analysis is carried out appropriately and the results are valid.
5. Analysis and Results, after the data is collected, the researcher analyzes the data using the tools that have been determined in the previous stage. The results obtained in the form of analysis are then collected and interpreted to answer research questions

Conclusion of Research Results, the last stage is to compile conclusions from the research results. Researchers summarize the main findings and draw relevant conclusions based on the analysis that has been done, as well as provide recommendations or implications of the research.

RESULTS AND DISCUSSION

Descriptive Analysis is conducted to describe the independent or free variables in this study, including the variables of Digital Technology, Digital Skills, Digital Transformation Strategy, Digital Transformation, and MSME Performance. Measurements made on these variables use standard deviation and mean.

1. Digital Technology

Results of distributing questionnaires to respondents measuring the Digital Technology variable, which consists of 7 dimensions. Data processing results were obtained with an average respondent's answer ranging from 3.74 to 4.07. DT 5 is the highest value in the DT dimension, while DT 4 has the lowest value. From this data processing, the total average value obtained was 3.85. So, based on the total average results, which are then entered into the continuum line size, which has a range of sizes "Very Low," "Low," "High," and "Very High," it shows that this variable is on the "High" continuum. Respondents assessed that Digital Technology was at a high level.

2. Digital Skills

results of distributing questionnaires to respondents measuring the Digital Skills variable, which consists of 5 dimensions. Data processing results were obtained with an average respondent's answer ranging from 3.75 to 3.87. DS 1, DS 4 and DS 5 holds the highest value in the DS dimension, while DS 3 has the lowest value. From this data processing, the total average value obtained was 3.84. So, based on the total average results, which are then entered into the continuum line size, which has a range of sizes "Very Low," "Low," "High," and "Very High," it shows that this variable is on the "High" continuum. Respondents assessed that Digital Skills was at a high level.

3. Digital Transformation Strategy

results of distributing questionnaires to respondents measuring the Digital Transformation Strategy variable, which consists of 7 dimensions. Data processing results were obtained with an average respondent's answer ranging from 3.85 to 4.01. DTS 7 holds the highest value in the DTS dimension, whilst DTS 2 has the lowest value. From this data processing, the total average value obtained was 3.94. Based on the total average results, which

are then entered into the continuum line size, which has a range of sizes "Very Low," "Low," "High," and "Very High," it shows that this variable is on the "High" continuum. Respondents assessed that Digital Transformation Strategy was at a high level.

4. Digital Transformation

results of distributing questionnaires to respondents measuring the Digital Transformation variable, which consists of 3 dimensions. Data processing results were obtained with an average respondent's answer ranging from 3.78 to 4.00. DTF 1 holds the highest value in the DTF dimension, whilst DTF 2 has the lowest value. From this data processing, the total average value obtained was 3.87. Based on the total average results, which are then entered into the continuum line size, which has a range of sizes "Very Low," "Low," "High," and "Very High," it shows that this variable is on the "High" continuum. Respondents assessed that Digital Transformation Strategy was at a high level.

5. MSME Performance

results of distributing questionnaires to respondents measuring the MSME Performance variable, which consists of 6 dimensions. Data processing results were obtained with an average respondent's answer ranging from 3.64 to 4.10. MP 6 holds the highest value in the MP dimension, whilst MP 5 has the lowest value. From this data processing, the total average value obtained was 3.88. Based on the total average results, which are then entered into the continuum line size, which has a range of sizes "Very Low," "Low," "High," and "Very High," it shows that this variable is on the "High" continuum. Respondents assessed that MSME Performance was at a high level.

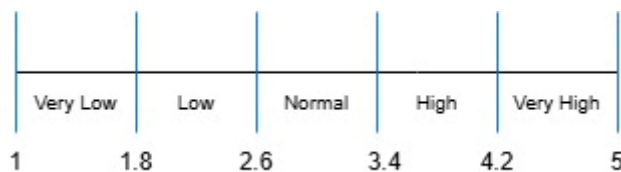


Figure 2. Variable Continuum Line

Analysis Results

Measurement Model Evaluation

Convergent validity test involves comparing measuring scales with positive values to other measures that assess comparable constructs

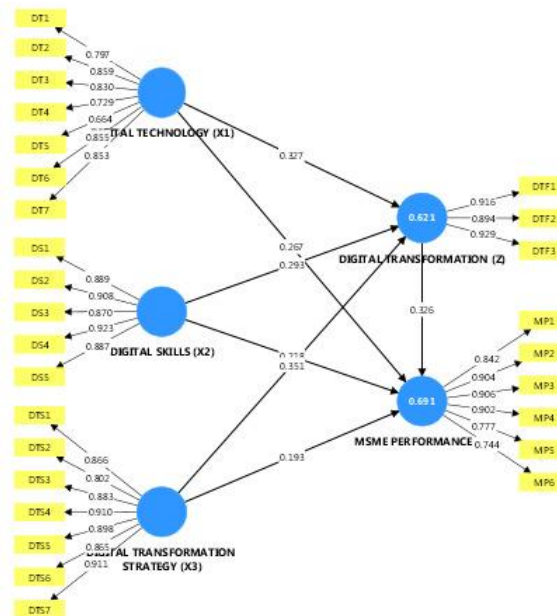


Figure 3. Outer Model Figure

Validity can be evaluated if an element or indicator possesses a loading factor and average variance extracted (AVE). The subsequent outcomes of the validity test utilising SmartPLS software are presented below:

Table 1. Validity Test Results

Variable	Question Item	Loading Factor (>0.7)	AVE (>0.5)	Description
Digital Technology	DT 1	0,797	0,642	Valid
	DT 2	0,859		Valid
	DT 3	0,830		Valid
	DT 4	0,729		Valid
	DT 5	0,664		Valid
	DT 6	0,855		Valid
	DT 7	0,853		Valid
Digital Skills	DS 1	0,889	0,802	Valid
	DS 2	0,908		Valid
	DS 3	0,870		Valid
	DS 4	0,923		Valid
	DS 5	0,887		Valid
Digital Transformation Strategy	DTS 1	0,866	0,769	Valid
	DTS 2	0,802		Valid
	DTS 3	0,883		Valid
	DTS 4	0,910		Valid
	DTS 5	0,898		Valid

Variable	Question Item	Loading Factor (>0.7)	AVE (>0.5)	Description
Digital Transformation	DTS 6	0,865	0,833	Valid
	DTS 7	0,911		Valid
	DTF 1	0,916		Valid
	DTF 2	0,894		Valid
	DTF 3	0,929		Valid
	P1	0,842		Valid
MSME Performance	P2	0,904	0,720	Valid
	P3	0,906		Valid
	P4	0,902		Valid
	P5	0,777		Valid
	P6	0,744		Valid

Source: Processed Data (2025)

The results of the convergent validity test indicate that the convergent validity of the 5 variables—digital technology, digital skills, digital transformation strategy, digital transformation, and MSME performance—along with their indicators, is high. This is evidenced by their compliance with the criteria for convergent validity, which stipulates that the AVE value is above 0.5 (>0.5) and the loading factor value is above 0.7 (>0.7). Even though one of the question items (DT 5) is still less than 0.7 (<0.7), it is still acceptable if the result is above 0.5 (>0.5), the validity and reliability of the construct meets the requirements, and the model is still newly developed. Because all indicators tested are valid, it can be concluded that the validity results of each variable studied can be used for each question.

The reliability test employs the Discriminant Validity test to evaluate the instrument's capacity to yield consistent and dependable results. This study assessed discriminant validity by Cronbach's alpha and composite reliability.

Tabel 2. Cronbach's Alpha and Composite Reliability Test Results

Variable	Cronbach's Alpha	Composite Reliability	Conclusion
Digital Technology	0,906	0,922	Reliable
Digital Skills	0,938	0,940	Reliable
Digital Transformation Strategy	0,950	0,951	Reliable
Digital Transformation	0,900	0,901	Reliable
MSME Performance	0,921	0,927	Reliable

Source: Processed Data (2025)

Fornell-Larcker Criterion

The Fornell-Larcker criterion is a technique for evaluating discriminant validity in structural equation modelling. The square root of a construct's Average Variance Extracted (AVE) must exceed its correlation with any other construct. The criterion assesses whether a

concept accounts for a greater proportion of variance in its own indicators compared to the indicators of other constructs.

Tabel 3. Fornell-Larcker Criterion

Path	Digital Technology	Digital Transformation	Digital Transformation Strategy	Digital Skills	MSME Performance
Digital Technology	0,801				
Digital Transformation	0,626	0,913			
Digital Transformation Strategy	0,433	0,648	0,877		
Digital Skills	0,502	0,644	0,532	0,895	
MSME Performance	0,663	0,758	0,635	0,664	0,848

Structural Model Evaluation

Explanatory Power

The R-Square test aims to predict the relationship between cause and effect on independent variables that affect dependent variables. There are calculation criteria for the R-square test, which include a value of 0.75, which can be said to be a good test result; 0.50, which can be said to be a moderate model; and 0.25, which can be said to be weak.

Tabel 4. R-Square Test Results

Variable	R-Square	Information
Digital Transformation	0.621	Good
MSME Performance	0.691	Good

Source: Processed Data (2025)

Based on the results of the R-Square test shown in table 4.12, the research model explains the variability of the dependent variable very well. For the Digital Transformation variable, the R-Square value of 0.621 indicates that 62.1% of the variation in this variable can be explained by the predictor variables in the model, which is included in the high category.

Furthermore, the R-Square value of 0.691 for the MSME Performance variable indicates that the predictor variables can explain 69.1% of the variation in this variable included in the very high category. Overall, a high R-square value indicates that the model has strong predictive power and can accurately represent the conditions of the population studied.

Significance and Relevance

Tabel 5. Hypothesis Test Results (T Statistics and P-Value)

Hypothesis	Path Relationship	T Statistics (O/STDEV)	P-Value	Information
H1	DT->DTF	7.157	0.000	H1 Accepted
H2	DS->DTF	4.444	0.000	H2 Accepted
H3	DTS->DTF	5.887	0.000	H3 Accepted

H4	DTF->MP	4.014	0.000	H4 Accepted
H5	DT->DTF->MP	3.385	0.001	H5 Accepted
H6	DS->DTF->MP	3.398	0.001	H6 Accepted
H7	DTS->DTF->MP	3.591	0.000	H7 Accepted

Source: Processed Data (2025)

Hypothesis testing is done to see the significant influence of each research variable. It is done by examining the path coefficients that show the parameter coefficients and the significance value of the T statistic. In hypothesis testing, it is required to meet three criteria, namely through the original sample value to complete the regression equation, if the original sample is positive, then the direction of the research is positive, through the T statistic value to test the significant influence of the relationship between variables, and through the P-Value value to find out whether the value is below the significance standard. Based on the table above, here is an explanation of each hypothesis:

1. Digital Technology (DT) influences Digital Transformation (DTF). The test results of the Digital Technology (DT) variable on Digital Transformation (DTF) indicated positive and significant outcomes, as evidenced by a T Statistic of 7.157 and a P Value of $(0.000 < 0.005)$. The T-Statistic indicates a positive correlation, as increased implementation of Digital Technology by MSMEs correlates with enhanced Digital Transformation. The P-value of <0.005 indicates that the effect is significant.
2. Digital Skills (DT) influences Digital Transformation (DTF). The test results of the Digital Skill (DS) variable on Digital Transformation (DTF) indicated positive and significant outcomes, as evidenced by a T Statistic of 4.444 and a P Value of $(0.000 < 0.005)$. The T-Statistic indicates a positive correlation, as increased implementation of Digital Skill by MSMEs correlates with enhanced Digital Transformation. The P-value of <0.005 indicates that the effect is significant.
3. Digital Transformation Strategy (DTS) influences Digital Transformation (DTF). The test results of the Digital Transformation Strategy (DTS) variable on Digital Transformation (DTF) indicated positive and significant outcomes, as evidenced by a T Statistic of 5.887 and a P Value of $(0.000 < 0.005)$. The T-Statistic indicates a positive correlation, as increased implementation of Digital Transformation Strategy by MSMEs correlates with enhanced Digital Transformation. The P-value of <0.005 indicates that the effect is significant.
4. Digital Transformation (DTF) influences MSME Performance (MP). The test results of the Digital Transformation (DTF) variable on MSME Performance (MP) indicated positive and significant outcomes, as evidenced by a T Statistic of 4.014 and a P Value of $(0.000 < 0.005)$. The T-Statistic indicates a positive correlation. The P-value of <0.005 indicates that the effect is significant.
5. Digital Technology (DT) influences MSMS Performance (MP) through digital transformation mediation. The test results of the Digital Technology (DT) variable on MSME performance through digital transformation mediation indicated positive and significant results because the T Statistic is 3.385 and the P Value is $(0.001 < 0.005)$. The T Statistic shows a positive value, because the higher the Digital Technology applied by MSMEs through digital transformation, the better the performance of MSMEs. In addition, the P-value <0.005 states that the influence is significant.
6. Digital Skills (DS) influences MSMS Performance (MP) through digital transformation mediation. The test results of the Digital Skills (DS) variable on MSME performance through digital transformation mediation indicated positive and significant results because

the T Statistic is 3.591 and the P Value is (0.000 <0.005). The T Statistic shows a positive value, because the higher the Digital Technology applied by MSMEs through digital transformation, the better the performance of MSMEs. In addition, the P-value <0.005 states that the influence is significant.

7. Digital Transformation Strategy (DTS) influences MSMS Performance (MP) through digital transformation mediation. The test results of the Digital Transformation Strategy (DTS) variable on MSME performance through digital transformation mediation indicated positive and significant results because the T Statistic is 3.385 and the P Value is (0.001 <0.005). The T Statistic shows a positive value, because the higher the Digital Technology applied by MSMEs through digital transformation, the better the performance of MSMEs. In addition, the P-value <0.005 states that the influence is significant.

VIF Test

The Variance Inflation Factor (VIF) is a metric employed in multiple regression analysis to identify multicollinearity, a condition when independent variables within a model exhibit strong correlation with one another. It denotes the extent to which the variation of a coefficient is amplified by collinearity, with elevated VIFs indicating a more significant issue. A Variance Inflation Factor (VIF) of 1 signifies the absence of multicollinearity, however a VIF of 5 or 10 is typically seen as concerning, suggesting a probable necessity to mitigate multicollinearity.

Tabel 6. VIF Test

Question Items	VIF
DS1	3,223
DS2	3,838
DS3	2,868
DS4	4,404
DS5	3,356
DT1	2,143
DT2	2,975
DT3	2,499
DT4	1,923
DT5	1,776
DT6	2,819
DT7	2,832
DTF1	2,905
DTF2	2,473
DTF3	3,415
DTS1	3,129
DTS2	2,413
DTS3	3,550
DTS4	4,615
DTS5	4,441
DTS6	3,271
DTS7	4,338
MP1	2,778
MP2	4,054
MP3	4,342
MP4	3,807
MP5	1,962
MP6	1,970

DISCUSSION OF RESEARCH RESULTS

Descriptive Analysis Discussion

The descriptive analysis of this study, encompassing 156 respondents for each question item utilising a 5-point Likert scale, revealed that the perception of the Digital Technology variable yielded an average response ranging from a minimum of 3.74 to a maximum of 4.07, resulting in an overall average of 3.85. The assessment of the Digital Skills (DS) variable yielded an average response ranging from a minimum of 3.75 to a maximum of 3.87, resulting in an overall average of 3.84. The assessment of the Digital Transformation Strategy (DTS) variable yielded an average response ranging from a minimum of 3.85 to a maximum of 4.01, resulting in an overall average of 3.94. The assessment of the Digital Transformation (DT) variable yielded an average response ranging from a minimum of 3.78 to a maximum of 4.00, resulting in an overall average of 3.87. The assessment of the MSME Performance (MP) variable yielded an average response ranging from a minimum of 3.64 to a maximum of 4.10, resulting in a total average of 3.88. This signifies that digital technology, digital skills, and digital transformation strategies, along with digital transformation itself, are positively regarded and deemed significant by most respondents.

This signifies that the four variables have successfully enhanced MSME performance. The findings of this study demonstrate that digital technology, digital skills, digital transformation strategy, and digital transformation significantly enhance MSME performance, fostering business success and sustainability in the digital age.

Discussion of Test Results and Analysis

Hypothesis 1: Digital Technology (DT) is positively correlated with the digital transformation of MSMEs

The test results indicate a substantial and favourable impact of the Digital Technology (DT) variable on the Digital Transformation of MSMEs. The T Statistic of 7.157 and a P-Value of 0.000 (<0.005) indicate that Digital Technology significantly contributes to the Digital Transformation of MSMEs. A high T Statistic signifies a robust association between the two variables, indicating that alterations in Digital Technology will substantially impact the Digital Transformation of MSMEs.

As mentioned in an earlier research conducted by (Teng et al., 2022), the very idea of digital transformation is to reform the processes of work and business based on digital-technology-driven improvements in favour of better efficiency.

Hypothesis 2: Employee digital skills are positively correlated with the digital transformation of MSMEs

The test results indicate a substantial and favourable impact of the Digital Skills (DS) variable on the Digital Transformation of MSMEs. The T Statistic of 4.444 and a P-Value of 0.000 (<0.005) indicate that Digital Skills significantly contributes to the Digital Transformation of MSMEs. A high T Statistic signifies a robust association between the two variables, indicating that alterations in Digital Skills will substantially impact the Digital Transformation of MSMEs.

Organization's empowerment is effective only under condition when the right people have been selected, later endeavours emerge better with less work invested. Consequently, for business in the context of digital transformation, the key issue for the organization is in people, not a particular business (Teng et al., 2022).

Hypothesis 3: Digital transformation strategies are positively correlated with the digital transformation of MSMEs

The test results indicate a substantial and favourable impact of the Digital Transformation Strategies (DTS) variable on the Digital Transformation of MSMEs. The T Statistic of 5.887

and a P-Value of 0.000 (<0.005) indicate that Digital Transformation Strategies significantly contributes to the Digital Transformation of MSMEs. A high T Statistic signifies a robust association between the two variables, indicating that alterations in Digital Transformation Strategies will substantially impact the Digital Transformation of MSMEs.

A digital transformation strategy can represent a perfect blueprint for building upon corporate transformation. Prior to going through digital transformation, formulation and execution of a digital transformation plan has become a critical responsibility or priority for many traditional industry firms (Chantias et al., 2019).

Hypothesis 4: Digital transformation is positively correlated with MSME performance

The test results indicate a substantial and favourable impact of the Digital Transformation (DTF) variable on MSME performance. The T Statistic of 4.014 and a P-Value of 0.000 (<0.005) indicate that Digital Transformation significantly contributes to MSMEs performance. A high T Statistic signifies a robust association between the two variables, indicating that alterations in Digital Transformation will substantially impact MSME performance.

Taken from a previous research, digital transformation (DT) is the process of incorporating digital technology into every facet of an organization. This process is essential for companies that are attempting to adjust to the ever-changing digital landscape. Streamlining operations, encouraging innovation, and developing new business models are all ways in which it ensures a sustainable advantage over potential competitors (Appio et al., 2021).

Hypothesis 5: Digital technology and MSME performance are mediated through digital transformation and positively correlated

The test results indicate a substantial and favourable impact of Digital Technology (DT) variable and MSME performance mediated through digital transformation. The T Statistic of 3.385 and a P-Value of 0.001 (<0.005) indicate that Digital Technology and MSME performance significantly correlates through digital transformation. A high T Statistic signifies a robust association between the variables, indicating that alterations in digital technology and MSME performance are very much correlated when mediated through digital transformation.

Digitalization is considered crucial in increasing productivity, income and reducing operational costs for MSMEs. Digitalization also opens up great opportunities for MSMEs to increase their competitiveness and competitive advantage in a competitive market (Sri & Desi, 2024).

Hypothesis 6: The relationship between employee digital skills and MSME performance is mediated through digital transformation and positively correlated

The test results indicate a substantial and favourable impact of Digital Skills (DS) variable and MSME performance mediated through digital transformation. The T Statistic of 3.398 and a P-Value of 0.001 (<0.005) indicate that Digital Skills and MSME performance significantly correlates through digital transformation. A high T Statistic signifies a robust association between the variables, indicating that alterations in digital skills and MSME performance are very much correlated when mediated through digital transformation.

Entrepreneurs in the MSME sector should elevate their digital skills, particularly by leveraging diverse social media platforms to effectively promote their products and services in the online marketplace. The application of information technology, proficient human resources in the digital realm, and the implementation of sound business strategies. To bolster their competitive edge, MSMEs must cultivate their reputation and intangible assets (Hutama et al., 2023).

Hypothesis 7: The relationship between digital transformation strategy and MSME performance is mediated through digital transformation and positively correlated

The test results indicate a substantial and favourable impact of Digital Transformation Strategy (DTS) variable and MSME performance mediated through digital transformation. The T Statistic of 3.591 and a P-Value of 0.000 (<0.005) indicate that Digital Skills and MSME performance significantly correlates through digital transformation. A high T Statistic signifies a robust association between the variables, indicating that alterations in digital transformation strategy and MSME performance are very much correlated when mediated through digital transformation.

A successful digital transformation requires the formulation of a meticulously designed digital transformation strategy. Formulating a practical, transparent, and resilient strategy guarantees the seamless implementation of digital transformation, acting as an essential guide in the journey of business transformation. The development and execution of such a strategy have become essential for organizations across diverse traditional sectors before undertaking digital transformation efforts. (Chanias et al., 2019) from (Hendra Halim et al., 2023)

CONCLUSION

With the research producing various important findings, this paper intends to clarify the relationship between organisational elements and digital transformation in respect to MSME performance in Sumur Bandung. Digital technology first shows a good correlation with MSME digital transformation, supported by a T Statistic of 7.157 and a P-Value of 0.000 (<0.05), where respondents agreed that digital technology—especially social media—is crucial, although cloud technology (DT 2) stays a weaker area. Digital skills are also strongly associated, as shown by a T Statistic of 4.444 and a P-Value of 0.000 (<0.05), with strong agreement on their relevance, particularly in digital literacy and matching business with digital demands, while the need for better-skilled teams (DS 3) remains unmet. Digital transformation plans come next in positive correlation, as indicated by a T Statistic of 5.887 and a P-Value of 0.000 (<0.05). Respondents underlined strategy elements including efficiency improvement even although DTS 2 competitiveness is still a work in progress. Moreover, digital transformation itself has a strong positive link with MSME performance (T Statistic = 4.014; P-Value = 0.000), hence stressing digital maturity as a major strength; nonetheless, more use of digital technology (DTF 2) is recommended. When mediated via digital transformation, the mediation study additionally verifies that digital technology (T = 3.385; P = 0.001), digital skills (T = 3.398; P = 0.001), and digital transformation strategy (T = 3.591; P = 0.000) all positively influence MSME performance. The results show overall that every organisational element helps to improve MSME performance by means of digital transformation, thereby providing useful information for strategic implementation among MSME owners in Sumur Bandung.

SUGGESTION

Several suggestions may be made to improve MSME performance depending on the findings of the study. First, MSME owners and managers should devote time and money to enhancing digital transformation capacity. This means teaching staff members to better grasp and apply digital procedures, hence enabling them to properly use digital technologies to enhance company operations. The government of Bandung City should also give digital transformation projects top priority to assist MSMEs in adjusting to the changing digital scene. This can mean starting awareness campaigns, delivering training courses, or giving MSMEs incentives to use digital technologies. Such initiatives would enable companies to stay competitive in an ever more digital market.

Moreover, artificial intelligence (AI) should be used more widely to help MSMEs in different ways, including idea generation for social media marketing and enhancement of general competitiveness. By providing data-driven insights, improving marketing strategies, and streamlining operations, AI-powered tools help MSMEs to be more informed. Finally, future studies should consider other variables that could affect MSME performance as well as a bigger sample size. A wider research scope would offer more in-depth analysis and assist in finding fresh ideas to assist the expansion and sustainability of MSMEs in various settings.

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