

ANALYSIS OF THE IMPACT OF DIGITAL TRANSFORMATION ON THE MARKETING PERFORMANCE OF F&B SMES IN SURAKARTA, MEDIATED BY BUSINESS MODEL INNOVATION AS A SUPPORT FOR IMPROVING MARKETING PERFORMANCE IN F&B SMES IN SURAKARTA

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ABSTRACT

In the present era, digital transformation has become a means of development in the economic and business sectors, including in the field of F&B (Food and Beverage), as well as in SMEs (Small and Medium Enterprises) operating in the F&B sector. This research discusses the influence of digital transformation on the marketing performance of F&B products in the Surakarta region. This study employs a quantitative approach and utilizes purposive sampling techniques for data collection. The population of this research consists of F&B SME operators in Surakarta. In this study, Partial Least Squares Structural Equation Modeling (PLS-SEM) is used for data analysis. The results of the analysis conducted using PLS-SEM indicate that Marketing Performance can be influenced by several factors, namely Digital Transformation and BMI (Business Model Innovation), where explorative digital transformation has the most significant impact on Marketing Performance. Therefore, this study answers the fundamental question of whether implementing Digital Transformation will affect the Marketing Performance of every product sold or produced by F&B SME operators, providing evidence that Digital Transformation is a strong antecedent to Marketing Performance.

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1. INTRODUCTION

Digital transformation, as a crucial component of the fourth industrial revolution, is currently reshaping our understanding of organizations (Fachrunnisa et al., 2020). Simultaneously, changes in market dynamics, such as digitalization and personalized consumer demands, have compelled a majority of companies to prioritize the development of the capability to adapt to significant shifts in their business strategies and processes. Digital transformation has become an imperative for companies to pivot towards networking and intelligence to enhance quality and efficiency while reshaping competitiveness (Lu et al., 2019). Aligned with this issue, a process is expected to create demand, explore various digital properties, and enable the utilization of different strategies in digital promotion and technological culture. This process involves professional services intensively harnessing the advantages of this technological revolution to create value in consumer-producer relationships (Muller and Doloreux, 2007).

Furthermore, leveraging the opportunities of digital transformation through the complex phenomenon driven by the rapid development of digital technology (Lanzolla et al., 2018) and organizational changes aimed at exploiting this technology (Warner and Wager, 2019) is one of the significant challenges and priorities in a modern company. Current literature on management and operational leadership broadly agrees that digital transformation has a significant and ongoing impact across all sectors (Hess et al., 2016; Sebastian et al., 2017; Lanzolla et al., 2018). Businesses worldwide face challenges in managing rapid and recurring adaptations within their organizations to stay aligned with the turbulent conditions of the digital era (Sailer et al., 2019). Unlike traditional transformations, the target environment remains dynamic and flexible, and competition in the digital landscape differs from the common approaches seen in traditional organizations (Sailer et al., 2019). Digital transformation encompasses highly common and complex stages (Furjan et al., 2020). Many small and medium-sized enterprises (UMKM), with limited resources, encounter difficulties in navigating this intricate situation.

We conducted an exploratory survey among UMKM that have undergone digital transformation, aiming to identify key factors (resources) influencing digital transformation to overcome barriers and

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challenges in digital transformation for UMKM. We believe that digital transformation has the goal of innovation. Through digital transformation, UMKM have already embraced a new paradigm in their development (Fletcher & Griffiths, 2020) compared to large corporations, UMKM have the advantage of flexibility and easy innovation. This research contributes to further refining the tangible manifestation of Digital Business Model Innovation, which significantly influences company performance. We build upon previous findings regarding managerial capabilities as the catalysts for digital business model transformation and overall company performance (Heubeck, 2023). Secondly, we aim to align the expression that interoperability is not a significant factor affecting business performance in previous findings concerning the impact of digital transformation on business performance (Mubarak et al., 2019).

Our research focuses on micro, small, and medium-sized enterprises (UMKM) in Soloraya, Central Java, Indonesia. Based on previous research, the framework for digital transformation performance is grounded in the adopted resources. We have identified three potential factors that could influence digital transformation in micro, small, and medium-sized enterprises. This study explores the possibility of a combination of these three factors: digital technology, digital skills, and digital marketing strategy. Among these factors, digital technology assumes a central role in digital transformation, with digital skills serving as a supporting pathway, and digital marketing as the primary goal of the transformation. This study contributes to the expansion and broadening of research in the field of digital transformation, deepening our understanding and knowledge of digital transformation, and promoting digital transformation among UMKM. Overall, Digital Transformation and BMI Are Vital Components in Supporting Marketing Performance for UMKM F&B Products. Therefore, We Discuss "An Analysis of the Impact of Digital Transformation on the Marketing Performance of F&B UMKM in Surakarta, Mediated by Business Model Innovation as a Driver for Enhancing Marketing Performance in F&B UMKM in Surakarta"

Digital Transformation

Digitalization refers to the application of digital technology in business, society, and the economy (Proksch et al., 2021). For companies, digitalization is the process of enhancing business operations by utilizing digital technology, AI, Internet of Things, to improve customer experiences, streamline operations, and build new businesses (Sousa-Zomer et al., 2020; Warner and Wager, 2019). Digital transformation is a complex process that requires careful consideration by decision-makers because digital technology accelerates the pace of growth and creates ambiguity (Warner and Wager, 2019).

Digital Transformation and BMI

Business models are considered the fundamental concepts that describe how organizations create, deliver, and capture value (Osterwalder et al., 2005). In the digital economy era, it becomes challenging for traditional manufacturing companies to adapt their methods of value creation, value acquisition capabilities, and value creation channels to new market environments (Nambisan et al., 2019). Hence, the importance of digital transformation emerges. It involves updating traditional business strategies and transitioning to digital BMI (Business Model Innovation) (A. Bharadwaj et al., 2013). To transform a company's business model, exploitative digital transformation utilizes digital technology to enhance efficiency in value creation and expand value creation channels. Initially, exploitative digital transformation enhances the efficiency of the company's value creation and promotes BMI.

Digital Marketing Capability

Digital marketing capability refers to a company's ability to plan, implement, and manage digital marketing. It relates to the company's capacity to use the internet and other information technologies to build closer relationships with customers. Through these relationships, customers can access the company's resources and information, and the company has the ability to further analyze its customers. Digital marketing capability also encompasses the processes, structures, and skills that businesses need to succeed in the digital era (Chaffey & Chadwick, 2016).

BMI (Business Model Innovation)

From the perspective of BMI innovation, creating value can motivate customer desires to purchase a product or service. It can also enhance customer value and sales by offering new products and technologies, establishing new partnerships, and promoting new business forms (Chesbrough, 2010). By providing value from an innovative standpoint, BMI can help companies reassess and meet customer needs for a better value experience. It can be challenging for customers to find suitable alternatives, which increases switching costs and strengthens a company's pricing power (Zott and Amit, 2008). In terms of value innovation, BMI can increase transaction efficiency and boost the number of transactions through new markets, channels, and customer relationships (George and Bock, 2011). Since value is

created through transactions, increasing the number of transactions means the company can generate more value and enhance its performance.

2. METHOD

This research utilizes a quantitative method, which is one of the systematic, planned, and structured research types that examine specific aspects of the phenomenon under investigation, with clear causality from the beginning to the end of the research design. According to Sugiyono (2015), quantitative research is an approach based on positivism philosophy and is used to study specific populations or samples. Data is collected using research instruments and analyzed quantitatively or statistically with the aim of testing predetermined hypotheses. In essence, the research population refers to the entire group or psychological items delimited by certain criteria (Supriyanto, 2009). In this study, the population consists of F&B micro, small, and medium-sized enterprises (UMKM) in the Surakarta region.

According to Sunyoto (2012), a sample is a portion of the population with characteristics that are to be investigated and is considered to represent the entire population. Since the exact population size is unknown, the calculation method by Malhotra will be used to determine the minimum sample size required to estimate the actual population size. According to Malhotra's calculation (2006: 291), the sample size should be at least four to five times the number of questions. We will use purposive sampling technique, which, according to Sugiyono (2010), selects samples based on specific considerations or standards to obtain representative data. Therefore, we have determined the sample respondents as follows: F&B sector entrepreneurs in Surakarta, Businesses located in Surakarta, UMKM businesses in the F&B sector that have been operating for a minimum of 1 year.

Data and Data Sources

In this research, we use primary data. Primary data for this study are obtained from respondents' answers using closed-ended questionnaires. This primary data consists of information directly obtained from respondents regarding variables of interest for a specific study purpose. We collected primary data through the distribution of closed-ended questionnaires. Closed-ended questionnaires are given to respondents, meaning they are asked to choose from various options provided by the researcher (Sekaran & Bougie, 2017).

Data Collection Technique

This research employs a questionnaire distributed through Google Forms. The questionnaire is structured using Likert scale and interval scale formats, both of which are commonly used in questionnaire development. The Likert scale is considered interval because statements such as "Strongly Agree" have a "higher" level or preference than "Agree," and "Agree" has a "higher" level or preference than "Neutral." According to Sugiono (Sholeh, 2014), the Likert scale is used to measure the attitudes, perceptions, and opinions of individuals or groups about existing social phenomena.

Respondent Answers Based on Options:

- | | |
|------------------------------|-----|
| 1. SS (Sangat Setuju) | : 5 |
| 2. S (Setuju) | : 4 |
| 3. N (Netral) | : 3 |
| 4. TS (Tidak Setuju) | : 2 |
| 5. STS (Sangat Tidak Setuju) | : 1 |

4. RESULT AND DISCUSSION

Data Description

Characteristics of Gender:

Tabel 1 Description of Gender Characteristics

No	Gender	Count	Percentage
1	Laki-laki	51	63,7%
2	Perempuan	29	36,3%
Total		80	100%

From the table above, it can be seen that there were 80 respondents in total, divided into two groups: males and females. There were 51 male respondents (63.7%) and 29 female respondents

(36.3%). Based on this data, it can be concluded that the majority of small manufacturing business operators in Solo are males.

Tabel 2 Description of Age Characteristics

No	Age	Quantity	Percentage
1	15-20	11	13,8%
2	21-25	53	66,3%
3	25-40	13	16,2%
4	>40	3	3,7%
Total		80	100%

From the table above, it can be seen that there were 80 respondents in total, divided into 4 age groups. There were 11 respondents aged 15-20 years (13.8%), 53 respondents aged 21-25 years (66.3%), 13 respondents aged 26-40 years (16.2%), and 3 respondents aged over 40 years (3.7%). Based on this data, it can be concluded that the majority of small manufacturing business operators in Solo are still young.

a. Outer Model

The outer model, also known as the measurement model, aims to clarify the relationship between latent variables and their indicators. The outer model testing uses the PLS algorithm method. Table 3 shows Cronbach's Alpha, Composite Reliability, and Average Variance Extract (AVE). Below is the outer model produced in Smart PLS through the algorithm method to evaluate construct reliability and validity.

b. Validity and Reliability Tests

Average Variance Extract (AVE) can be used to test validity, while composite reliability and Cronbach's alpha values can be used to test reliability. If the composite reliability value is greater than 0.70, AVE is greater than 0.50, and Cronbach's alpha is greater than 0.70, then the overall test has sufficient reliability (Hair et al., 2014). The validity and reliability tests can be seen in Table 3.

Tabel 3 Validity and Reliability Tests

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
BMI	0.928	0.942	0.946	0.78
Eksplorative_Digital Transformation	0.903	0.913	0.939	0.837
Eksploratif_Digital Transformation	0.823	0.877	0.882	0.658
Marketing_Performance	0.903	0.913	0.939	0.837

The table above indicates that the alpha value is greater than 0.7. Composite reliability is also greater than 0.70, and AVE is greater than 0.50. These results demonstrate that all data are both competent and reliable.

c. Inner model

The inner model in Smart PLS refers to the structural model used to test the relationships between constructs in partial least squares path analysis. This study analyzes the relationships between hypothesis variables as described in the literature review. The analysis of the five proposed hypotheses needs to be confirmed in this study using the bootstrapping method, taking into account path coefficient analysis.

d. R-Square

R-squared is a value that indicates the extent of the influence of independent variables on dependent variables. The R-squared value (R²) is used to assess the extent of the influence of specific latent independent variables on latent dependent variables. An R-squared value of 0.75 is considered strong, an R-squared value of 0.50 is considered moderate, and an R-squared value of 0.25 is considered weak (Hair et al., 2011).

Tabel 4 Analysis R-Square

	R-square	R-square adjusted
BMI	0.622	0.612
Marketing_Performance	0.461	0.454

Based on Table 3.1, the R-Square value for the BMI variable is 0.622, which means that the Reciprocity norm percentage is 62.2%. This indicates that the BMI variable is influenced by other variables by 62.2%, and the remaining 37.8% is influenced by other variables. Meanwhile, the R-Square value for the Marketing Performance variable is 0.461, indicating that Marketing Performance influences BMI by 46.1%, and the remaining 53.9% is influenced by other variables.

e. F-Square

To determine the simultaneous feasibility or influence between independent variables and the dependent variable used in the study, an F-test is employed. The f-square value of 0.02 indicates a small effect, 0.15 indicates a medium effect, and 0.35 indicates a large effect. Values less than 0.02 can be disregarded or considered to have no significant impact (Sarstedt et al., 2017).

Tabel 4 Analysis F-Square

	BMI	Eksplorative_Digital Transformation	Eksplorative_Digital Transformation	Marketing_Performance
BMI				0.855
Eksplorative_Digital Transformation	0.027			
Eksplorative_Digital Transformation	0.426			
Marketing_Performance				

Sumber : Pengolahan data SmartPLS 4.0, (2023)

Looking at the table of F Square values above, with the criteria that F Square greater than 0.35 indicates a large effect, it can be concluded that digital transformation has a large effect. Both exploratory digital transformation and exploitative digital transformation have large effects, as their F Square values are greater than 0.35. There is no negligible effect because none of them have an F Square value less than 0.02.

f. Path Coefficients

Path coefficients are used to study the relationships between hypothesized variables. The path coefficient values range between -1 and 1. If the value is between 0 and 1, it can be considered a positive relationship, and if it is between -1 and 0, it can be considered a negative relationship. Path coefficients can be seen in Table 5.

Tabel 5 Path Coefficients (Uji Hipotesis)

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
BMI -> Marketing_Performance	0.679	0.673	0.091	7.484	0.000
Eksplorative_Digital Transformation -> BMI	0.163	0.16	0.149	1.096	0.273
Eksplorative_Digital Transformation -> BMI	0.653	0.653	0.138	4.746	0.000

Sumber : Pengolahan data SmartPLS 4.0, (2023)

The table above presents the results of hypothesis testing. The relationship is considered significant if the t-statistic is greater than 1.96 with a margin of error (p-value) less than 5% or 0.05 (Hair et al., 2014). Conversely, the strength of the relationship is assessed based on the magnitude of the original sample values.

Result

This research focuses on examining the influence of digital transformation on marketing performance, mediated by Business Model Innovation, in UMKM operating in the F&B sector in Surakarta. Data for this study was collected through questionnaires distributed to UMKM in the F&B sector in Surakarta. The questionnaires were administered throughout the research period, yielding data that was subsequently processed and analyzed. The results of the research indicate that Marketing Performance

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can be influenced by several factors, including Digital Transformation and BMI. The data collection process involved the use of Google Forms for questionnaire distribution, and the questionnaires were disseminated through our social media channels. Specific criteria were provided to respondents to ensure that they met the predefined requirements for participation in the study.

Diskusion

The discussion presented in our study focuses on examining the influence of Digital Transformation and BMI on Marketing Performance. We have provided an in-depth analysis based on the data collected during the research. In the first data analysis, it is explained that all data are competent and reliable, with BMI having a higher information value than Digital Transformation. In the second data analysis, it is stated that the influence of BMI and Digital Transformation on Marketing Performance is very high. In the third data analysis, it is confirmed that the theories put forth by experts align with the influence of BMI and Digital Transformation on Marketing Performance.

4. CONCLUSION

This study addresses the fundamental question of whether Digital Transformation will affect the Marketing Performance of products sold or produced by UMKM F&B entrepreneurs. We provide evidence that Digital Transformation is a strong antecedent for Marketing Performance. Our findings also highlight the significant role of BMI in influencing Marketing Performance. These findings have important implications for the implementation of Digital Transformation in achieving Marketing Performance for UMKM F&B products. By demonstrating that the adoption of Digital Transformation and BMI will have a positive impact on Marketing Performance, this research illustrates the crucial roles of BMI and Digital Transformation in achieving Marketing Performance for products sold and produced by UMKM F&B entrepreneurs in Surakarta. Based on the findings of this field research, there are several suggestions for future research. It is recommended that future studies explore and include additional variables that have not been addressed in this research. Additionally, there is a need to expand research on the perception of green products that mediate green product innovation's impact on differentiation advantages in small-scale manufacturing industries in Surakarta and in larger-scale manufacturing industries, both in the city and in other regions across Indonesia. Future research should be conducted with a larger number of respondents with diverse characteristics to improve the generalizability and diversity of research outcomes.

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