J T I M B

Vol 8/1/2025
Januari-Juni 2025

E – ISSN 2656-9450
P - ISSN 2654-9972

JURNAL TERAPAN ILMU MANAJEMEN DAN BISNIS

Penerbit: Fakultas Ekonomi dan LPPM Universitas Advent Indonesia

J T I M B

Jurnal Terapan Ilmu Manajemen dan Bisnis

E- ISSN 2656-9450 P- ISSN 2654-9972

Penerbit : Fakultas Ekonomi dan LPPM
Universitas Advent Indonesia

J T I M B

J u r n a l T e r a p a n I l m u M a n a j e m e n d a n B i s n i s

E- ISSN 2656-9450
Vol 8/1/Januari-Juni 2025 P- ISSN 2654-9972

Terbit Dua kali setahun pada bulan Januari – Juni dan Juli – Desember. Berisi tulisan yang diangkat dari hasil penelitian dan kajian terapan Ilmu manajemen dan Bisnis

Alamat Penyunting dan Tata Usaha: Lembaga Penelitian Pengabdian Masyarakat, Universitas Advent Indonesia, Jl. Kolonel Masturi No. 288 Parongpong Bandung Barat 40559.
E-mail: jtimb@unai.edu Website: jurnal.unai.edu

Jurnal Terapan Ilmu Manajemen dan Bisnis diterbitkan sejak bulan November 2019 oleh Fakultas Ekonomi dan LPPM Universitas Advent Indonesia

DAFTAR ISI

J T I M B
Jurnal Terapan Ilmu Manajemen dan Bisnis
Dorkas Rama Widya Siregar, Toman Panggabean & Winarto
Vol. 8 No.1
Januari-Juni
2025

THE IMPACT OF WORKLOAD, STRESS MANAGEMENT, AND WORK-LIFE BALANCE ON EMPLOYEE PRODUCTIVITY AT ADVENT HOSPITAL MEDAN

Dorkas Rama Widya Siregar
Management Study Program, Faculty of Economics
Methodist University of Indonesia
dorkasrama@gmail.com

Toman Panggabean
Methodist University of Indonesia

Winarto
Methodist University of Indonesia

Abstract

This research aims to evaluate the impact of workload, stress management, and work-life balance on employee productivity at Medan Advent Hospital. The research method used is a quantitative approach with a survey involving 81 respondents. Data were collected through a questionnaire containing questions about workload, stress management, work-life balance, and employee productivity. Data analysis was conducted using multiple linear regression. The results of the study indicate that workload has a negative and significant impact on employee productivity, where an increased workload negatively affects employee productivity. Stress management and work-life balance have a positive and significant impact on employee productivity. Work-life balance has a stronger impact compared to workload and stress management. Therefore, to improve employee productivity, Advent Hospital Medan is advised to focus more on conducting stress management training and implementing work-life balance for employees while paying attention to the workload of employees to ensure it aligns with their capabilities.

Keywords: *Workload; Stress Management; Work-Life Balance; Productivity*

INTRODUCTION

Humans are a crucial component in an organization because they play an important role in supporting the achievement of organizational goals. The quality of human resources greatly determines the success of the organization, both operationally and strategically. Therefore, companies are required to optimally manage their human resources so that the established goals can be effectively achieved. Employee productivity is an important indicator of the success of an organization. The higher the level of productivity, the faster the organization can grow and achieve the targets set.

Productivity not only reflects the quantitative results of work but also shows the mental attitude and commitment to continuous improvement. In the context of the healthcare service industry, efficiency and productivity are essential to provide the best service to patients. Productive employees are able to complete tasks on time, work with high quality, and have low absenteeism rates. Therefore, it is important for hospital management to pay attention to various elements that affect employee performance.

One of the main factors influencing productivity is workload. Excessive workload, both physically and mentally, can decrease performance, especially in high-pressure work environments like hospitals. Research by Fathoni (2020) and Pantow (2021) shows that workload has a significant impact on the productivity of both healthcare and non-healthcare workers. However, previous studies have not extensively discussed the differences in the effects of workload based on job fields, which presents an important gap to explore further.

In addition to workload, stress management also plays a crucial role in maintaining employee productivity. Unmanaged work stress can reduce performance quality, mental health, and job satisfaction. Research by Christian (2024) and Sidabalok & Sayekti (2020) indicates that effective stress management positively affects productivity improvement. Unfortunately, most of these studies were carried out outside the context of hospitals or only focused on performance, not specifically on productivity, thus requiring research that is more relevant to field conditions.

The last factor that is equally important is work-life balance, which refers to the balance between job demands and personal life. This balance can enhance employee satisfaction and motivation, which impacts productivity improvement. However, the reality at the Advent Hospital in Medan shows there are obstacles to achieving this balance, such as inflexible work schedules and high job demands. Therefore, this research aims to explore how workload, stress management, and work-life balance collectively influence employee productivity, as well as provide strategic recommendations for the development of human resource management policies in the hospital.

Based on the results of field observations and the personal experience of the researcher during direct observation at Advent Hospital Medan, there are still several obstacles related to the factors previously explained. Workload, stress management, and work-life balance do not fully support employee productivity. This is reinforced by direct complaints from patients or visitors expressed through reviews on a certain platform regarding the poor service provided by the employees of Advent Hospital Medan. Patients or visitors have pointed out that employees show emotional instability, lack discipline in time management, and are less informative in providing services. This phenomenon is caused by the inconsistency of the workload experienced by individual employees, minimal training in work stress management, and a lack of opportunities to achieve a balance between work life and personal life.

As a result, employees' emotional stability and work spirit decline, which ultimately impacts the low quality of service to the public and hinders the organization in achieving the planned goals. Another phenomenon discovered by the researcher through interviews and direct observation in the field is the addition of working hours beyond the initial agreement. For example, employees are required to come in one hour earlier than the agreed schedule. In addition, there is a shift system for both healthcare and non-healthcare staff, such as morning, afternoon, and night shifts. This situation makes it difficult for employees to implement work-life balance, thus their productivity can be disrupted due to work-related stress that arises from difficulties in managing time individually.

Problem Formulation

1. Does workload partially affect employee productivity at Advent Hospital Medan?
2. Does stress management partially affect employee productivity at Advent Hospital Medan?
3. Does work-life balance partially affect employee productivity at Advent Hospital Medan?
4. Do workload, stress management, and work-life balance simultaneously affect employee productivity at Advent Hospital Medan?

LITERATURE REVIEW AND HYPOTHESES

Workload

According to Mahawati (2021), "workload is something that every individual who has responsibilities towards their job will experience intensively." Meanwhile, Wardhana et al. (2023) define "workload as the total work or tasks that must be completed by an individual within a certain time frame, which is usually measured based on the number of tasks to be completed or the time spent to accomplish those tasks." Thus, workload can be understood as a set of jobs or tasks that are the responsibility of an individual or organizational unit, which must be completed within a certain time to achieve the completion of those tasks.

The indicators of workload according to Mahawati et al. (2021) in Kadarisman (2023) are as follows:

1. Work conditions

   Work conditions include employees' understanding of the tasks and responsibilities they carry. The organization needs to ensure that all employees have been briefed on the applicable Standard Operating Procedures (SOP). With a good understanding of the SOP, employees can perform their jobs more efficiently and effectively.
2. Work time usage

   Proper time management according to the SOP can help minimize employees' workload. With good time management, employees can complete their tasks within the specified timeframe, thereby reducing stress and increasing productivity.

3. Targets to be achieved

   Setting clear and realistic targets is very important in workload management. Each employee may have a different workload, so it is necessary to establish appropriate timing to complete certain tasks. With measurable targets in place, employees can be more focused and motivated to achieve the expected results.

Stress Management

Aprinawati et al. (2024) state that stress management is a skill that enables individuals to anticipate, prevent, manage, and recover from stress caused by threats or the inability to respond cognitively and behaviorally. Kalonio et al. (2019) define stress management as an individual's efforts to control and recognize the causes of stress and to apply certain techniques in order to manage stress more effectively. According to Wardhana et al. (2021), stress management consists of a set of techniques and programs designed to help individuals cope with stress effectively by analyzing stress triggers and taking positive actions to minimize their impact. Based on these definitions, it can be concluded that stress management is the individual’s ability to recognize and address stress through prevention, control, and recovery techniques, in order to enhance emotional balance in both personal and professional life.

According to Galuh and Purnamasari (2020), the following is an explanation of the indicators of stress management:

1. Identification of stress symptoms

   The process of identifying stress symptoms involves an individual's ability to recognize and understand various physical and emotional signs that arise as a response to the pressure or burden experienced.

2. Analysis of stress symptoms

   This includes reflecting on the situations or factors that trigger stress, as well as understanding how stress affects physical and mental health.

3. Strategies to avoid stress

This includes better time management, limiting exposure to stressful situations, and creating a more supportive work or learning environment.

4. Coping stress

   Refers to various methods and strategies used by individuals to face and adapt to stressful situations. Including cognitive approaches such as changing negative thought patterns to positive ones, as well as behavioral techniques like relaxation exercises, sports, or meditation.

Work-Life Balance

Saring (2022) defines work-life balance as a form of equilibrium in a person's life, where job responsibilities can be fulfilled without neglecting personal aspects. Sariningrum (2024) adds that work-life balance is an effort to achieve harmony between job demands and personal needs. According to Lukmiati et al. (2020), work-life balance is the level of engagement and satisfaction individuals have in their work and personal roles without causing conflict. Based on these definitions, work-life balance can be understood as an individual's effort to harmoniously balance their roles in work and personal life, thus maintaining satisfaction and avoiding conflicts between the two.

According to Saring (2022), there are several indicators of work-life balance, namely:

1. Time balance.

   This indicator relates to: the amount of time an employee allocates to both work and personal life with their family, the amount of time for various office activities, and the amount of time for family or social activities that the employee participates in.

2. Involvement balance.

   This indicator refers to the amount or condition of psychological involvement and commitment of an employee in performing their work as well as activities outside of work.

3. Satisfaction balance.

This indicator relates to the level of satisfaction an employee feels in performing their job and activities outside of work.

Productivity

According to Wijaya (2021), "Productivity is the ratio between the output achieved and the total resources used (input), which is related to a productive mental attitude including: attitudes, spirit, motivation, discipline, creativity, innovation, dynamism, and professionalism." According to Nurfitriani (2024), productivity is a mental attitude that has the spirit of self-improvement, such as enhancing skills, discipline, teamwork, knowledge, personal effort, and improving work through better management and work attitudes than before, saving costs, being punctual, and having better technological systems. Based on several definitions regarding productivity, it can be interpreted that productivity is the ratio of the results achieved (output) to the resources used (input), encompassing aspects of quality and quantity, and influenced by mental attitudes such as the spirit of self-improvement, skills, discipline, cooperation, and the better use of technology and management to achieve optimal results.

In measuring employee work productivity, several indicators are needed. According to Mahawati et al. (2021), the indicators of productivity include:

1. Work quantity

   Which is the ability of employees to complete assigned tasks as expected and meet the specified targets.
2. Quality

   Which is the quality of work that meets the specifications of product or service materials by following work techniques and standard operating procedures.
3. Punctuality

   Which is the ability of employees to finish work according to the time target by maximizing working time to achieve optimal output.

Hypotheses

Based on the theoretical description that has been explained, the hypotheses in this research can be formulated as follows:

H_1: Workload partially has a positive and significant effect on employee productivity at Advent Hospital Medan.

H_2: Stress management partially has a positive and significant effect on employee productivity at Advent Hospital Medan.

H_3: Work-Life balance partially has a positive and significant effect on employee productivity at Advent Hospital Medan.

H_4: Workload, stress management, and work-life balance simultaneously have a positive and significant effect on employee productivity at Advent Hospital Medan.

RSEARCH METHODOLOGY

Types and Sources of Research

This research is a quantitative study that utilizes numerical data to describe the variables under investigation. Data is obtained from two sources, namely primary and secondary. Primary data is collected through direct observation at the research site, including the distribution of questionnaires and information related to the organizational structure. Meanwhile, secondary data is sourced from literature such as books, journals, and websites that support the analysis process.

Research Location and Time

ResearchThis research is conducted at Advent Hospital Medan located at Jalan Gatot Subroto No.Km 4, Sei Sikambing D, Medan Petisah District, Medan City, North Sumatra, 20118. The research period extends from December 2024 to April 2025.

Population and Sample

The population in this study comprises the employees of Advent Hospital Medan, totaling 426 individuals. The sample in this study was determined using Slovin's formula with a margin of error of 10%, resulting in a total of 81 samples.

Data Collection Techniques

The data in this study was obtained through the distribution of questionnaires to test its validity. The questions asked are closed-ended with measurements using a Likert scale. The Likert scale is a technique that measures the answer scores for each provided answer instrument. In analyzing the data collected from respondents, the author employs analysis to address the research problem formulation utilizing SPSS version 30.

Operationalization Definition of Variables

Operational definition is the aspects of research that can provide information on how to measure variables. The variables to be analyzed are workload, stress management, work-life balance, and employee productivity as dependent variables.

Table 1. Operationalization Definition of Variables

Variable	Operationalization Definition	Empirical Indicator	Scale	Questionnaire Number
Workload (X_1)	A number of jobs or tasks held by an individual or organizational unit as responsibilities in a job and must be completed within a certain timeframe to be able to accomplish those tasks.	1. Work conditions. 2. Work time usage. 3. Targets to be achieved.	*Likert*	1-2 3-4 5-6
Stress Management (X_2)	Stress management is a skill that individuals possess to be able to manage, anticipate, prevent, and control the stress they experience, as well as to know techniques for managing stress so that they will be better at coping with stress in life and work.	1. Identify of stress symptoms. 2. Analyze the symptoms of stress. 3. Strategies to avoid stress. 4. Coping stress.	*Likert*	1-2 3-4 5-6 7-8
Work-Life Balance (X_3)	Work-life balance is an effort to achieve a balance between work life and personal life, allowing individuals to engage equally in both roles without causing conflict and still feeling satisfied in both.	1. Time balance. 2. Involvement balance. 3. Satisfaction balance.	*Likert*	1-2 3-4 5-6
Employee Productivity (Y)	Productivity is the ratio of the results achieved (output) to the resources used (input), which includes aspects of quality and quantity, and is influenced by mental attitudes such as the enthusiasm for self-improvement, skills,	1. Work Quantity 2. Quality 3. Punctuality	*Likert*	1-2 3-4 5-6

Variable	Operationalization Definition	Empirical Indicator	Scale	Questionnaire Number
	discipline, teamwork, and better use of technology and management to achieve optimal results.			

Source: Data processed by the author, (2025)

Data Analysis Techniques

- Classical Assumption Tests

  These are a series of statistical tests used in linear regression analysis to ensure that the regression model applied meets the basic requirements (classical assumptions) so that the results of the analysis are valid, unbiased, and reliable. The classical assumption tests employed in this research include normality test, multicollinearity test, and heteroscedasticity test.

- Multiple linear regression analysis

  It is a statistical method used to determine the extent of the influence of independent variables, namely: workload (X_1), stress management (X_2), and work-life balance (X_3) on the dependent variable, which is employee productivity (Y).

$$\mathbf{Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e}$$

Description:
Y : Employee Productivity
a : Constant
b_1, b_2, b_3 : Regression coefficients
X_1 : Workload
X_2 : Stress Management
X_3 : *Work-Life Balance*
e : *Standard error*

- Hypothesis Testing

  This is conducted to assess whether workload, stress management, and work-life balance truly impact employee productivity at Advent Hospital Medan. The hypothesis testing includes: partial significance tests (t-tests), simultaneous significance tests (F-tests), and the coefficient of determination test (R^2).

THE RESULT OF RESEARCH

Respondent Identity

The identity describes the gender, age, length of employment, and employee status at Medan Advent Hospital for those willing to fill out the distributed questionnaire.

- There are 28 male respondents (35%) and 53 female respondents (65%). This means that the majority of respondents who were willing to fill out the distributed questionnaire are female employees.
- The respondents under 25 years old totaled 19 people (23%), those aged 25-40 years totaled 43 people (53%), and those over 40 years old totaled 19 people (23%). This indicates that most respondents willing to fill out the distributed questionnaire are primarily employees aged 25-40 years.
- Respondents who have worked for ≤ 5 years amounted to 25 people (31%), those who have worked for ≤ 10 years totalled 33 people (41%), and those who have worked for >10 years numbered 23 people (28%). This indicates that the majority of respondents willing to fill out the distributed questionnaire are employees who have worked for ≤ 10 years.
- There are 26 respondents who are not married (32%) and 55 respondents who are married (68%). This shows that most of the respondents who were willing to fill out the distributed questionnaire are predominantly employees who are married.

Descriptive Statistical Analysis

In the descriptive analysis, the frequency distribution and percentages for the variables of workload, stress management, work-life balance, and productivity are presented.

Table 2. Frequency Distribution of Responses from the Workload Variable

No	Statement	Assessment					Total Score	Average Score	Category
		STS	TS	KS	S	SS			
		1	2	3	4	5			
1	Statement 1	0	1	14	26	40	348	4,30	Very High
2	Statement 2	0	0	7	39	35	352	4,35	Very High
3	Statement 3	0	0	10	36	35	349	4,31	Very High
4	Statement 4	0	0	10	29	42	356	4,40	Very High

No	Statement	Assessment					Total Score	Average Score	Category
		STS	TS	KS	S	SS			
		1	2	3	4	5			
5	Statement 5	0	0	7	34	40	357	4,41	Very High
6	Statement 6	0	0	8	27	46	362	4,47	Very High
Overall average								4,37	Very High

Source: Primary data processed by the author, (2025)

Based on the results of the descriptive statistical analysis in table 2. the average score of the 6 statements regarding workload is 4.37. This indicates a range of 4.21 – 5.00, falling into the very high category. Among the 6 statements in the workload questionnaire, the majority of respondents answered agree and strongly agree. Therefore, it can be concluded that the Advent Hospital Medan provides a good workload for its employees.

Table 3. Frequency Distribution of Responses from the Stress Management Variable

No	Statement	Assessment					Total Score	Average Score	Category
		STS	TS	KS	S	SS			
		1	2	3	4	5			
1	Statement 1	0	1	15	30	35	342	4,22	Very High
2	Statement 2	0	1	7	33	40	355	4,38	Very High
3	Statement 3	0	1	12	36	32	342	4,22	Very High
4	Statement 4	0	1	15	34	31	338	4,17	High
5	Statement 5	0	1	12	38	30	340	4,20	High
6	Statement 6	0	1	10	30	40	352	4,35	Very High
7	Statement 7	0	1	8	31	41	355	4,38	Very High
8	Statement 8	0	0	8	23	50	366	4,52	Very High
Overall average								4,31	Very High

Source: Primary data processed by the author, (2025)

Based on the results of the descriptive statistical analysis in table 3. the average score of the 8 statements regarding stress management is 4.31. This means it falls in the range of 4.21 – 5.00, which is categorized as very high, and from the 8 statements in the stress management questionnaire, the majority of respondents answered agree and strongly agree. Therefore, it can be concluded that Medan Advent Hospital provides good stress management to its employees.

Table 4. Frequency Distribution of Responses from the Work-Life Balance Variable

No	Statement	Assessment					Total Score	Average Score	Category
		STS	TS	KS	S	SS			
		1	2	3	4	5			
1	Statement 1	0	1	10	40	30	342	4,22	Very High
2	Statement 2	0	2	16	34	29	333	4,11	High
3	Statement 3	0	2	20	33	26	326	4,02	High
4	Statement 4	0	0	20	40	21	325	4,01	High
5	Statement 5	0	2	16	35	28	332	4,10	High
6	Statement 6	0	4	18	33	26	324	4,00	High
Overall average								4,08	High

Source: Primary data processed by the author, (2025)

Based on the results of the descriptive statistical analysis in table 4. the average score from 6 statements regarding work-life balance is 4.08. This indicates a range of 3.41 – 4.20, falling into the high category, and from the 6 statements in the work-life balance questionnaire, the majority of respondents answered agree and strongly agree. Thus, it can be concluded that Advent Hospital Medan provides a good work-life balance for its employees.

Table 5. Frequency Distribution of Responses from the Productivity Employee Variable

No	Statement	Assessment					Total Score	Average Score	Category
		STS	TS	KS	S	SS			
		1	2	3	4	5			
1	Statement 1	1	2	18	33	27	326	4,02	High
2	Statement 2	0	8	21	26	26	313	3,86	High
3	Statement 3	2	4	24	34	17	303	3,74	High
4	Statement 4	0	7	20	31	23	313	3,86	High
5	Statement 5	1	13	27	21	19	287	3,54	High
6	Statement 6	2	14	28	25	12	274	3,38	Sufficiently High
Overall average								3,74	High

Source: Primary data processed by the author, (2025)

Based on the results of the descriptive statistical analysis in Table 5. the average score from 6 statements regarding productivity is 4.74. This indicates that it falls within the range of 3.41 – 4.21 and is categorized as high. From the 6 statements in the productivity questionnaire, the majority of respondents answered agree and strongly agree. Therefore, it can be concluded that the employees of Advent Hospital Medan demonstrate good productivity.

Results of the Normality test

This test is used to test the normality of residuals of a regression model by using the Kolmogorov Smirnov test. In the Kolmogorov Smirnov test, a dataset is said to be normal if the Asymptotic Significant value is ≥ 0.10.

Table 6. Normality Test *Kolmogorov Smirnov.*

One-Sample Kolmogorov-Smirnov Test

			Unstandardized Residual
N			81
Normal Parameters[a,b]	Mean		.0000000
	Std. Deviation		3.05575638
Most Extreme Differences	Absolute		.080
	Positive		.055
	Negative		-.080
Test Statistic			.080
Asymp. Sig. (2-tailed)[c]			.200[d]
Monte Carlo Sig. (2-tailed)[e]	Sig.		.222
	90% Confidence Interval	Lower Bound	.215
		Upper Bound	.229

Source: Primary data processed by SPSS 30, (2025).

Based on the table above, the Asymp. Sig (2-tailed) value of 0.200 is greater than the significance level of 0.10, thus it can be concluded that the data are normally distributed.

Results of the Multicollinearity Test

This test is used to determine whether multicollinearity has occurred, which can be seen from the size of the variance inflation factor (VIF). If the VIF value is greater than 10, it can be indicated that a predictor variable has experienced multicollinearity.

Table 7. Multicollinearity Test.

Coefficients[a]

Model		Collinearity Statistics Tolerance	VIF
1	Beban Kerja	.764	1.309
	Manajemen Stres	.770	1.298
	Work-Life Balance	.978	1.022

a. Dependent Variable: Produktivitas

Source: Primary data processed by SPSS 30, (2025).

Based on Table 7, the VIF values for workload (1.309), stress management (1.298), and work-life balance (1.022) are all less than 10, thus it can be concluded that there is no multicollinearity.

Results of the Heteroskedasticity Test

The Glejser test is used to detect heteroskedasticity because it is more accurate than graphical analysis. This test is conducted by regressing the independent variables against the absolute residual values. The results are assessed based on the significance value: if it is greater than 10%, heteroskedasticity does not occur; if it is smaller, then heteroskedasticity exists.

Table 8. Heteroscedasticity Test with the Glejser Test

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.937	3.385		.277	.783
	Beban Kerja	-.002	.115	-.002	-.014	.989
	Manajemen Stres	.040	.079	.066	.513	.609
	Work-Life Balance	.006	.086	.008	.069	.945

a. Dependent Variable: ABS_RES

Source: Primary data processed by SPSS 30, (2025).

Based on Table 8, the Sig. Glejser values for workload (0.989), stress management (0.609), and work-life balance (0.945) are all greater than 0.10, thus it can be concluded that heteroskedasticity does not occur.

Results of Multiple Linear Regression Analysis

The analysis method used in this research is multiple linear regression analysis. The result of the regression analysis is in the form of regression coefficients for each independent variable. These coefficients are obtained by predicting the value of the dependent variable using an equation.

Table 9. Analisis Regresi Linear Berganda

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	5.820	5.663		1.028	.307
	Beban Kerja	-.537	.193	-.307	-2.786	.007
	Manajemen Stres	.632	.132	.527	4.801	<,001
	Work-Life Balance	.364	.144	.246	2.520	.014

a. Dependent Variable: Produktivitas

Source: Primary data processed by SPSS 30, (2025).

Based on Table 9, the multiple linear regression equation obtained is:

$$\mathbf{Y = 5{,}820 - 0{,}537X_1 + 0{,}632X_2 + 0{,}364X_3}$$

The interpretation of this equation is as follows:

- A constant of 5.820 indicates that if X_1, X_2, and X_3 are all zero, the employee productivity would be 5.820.
- The workload coefficient (X_1) of -0.537 means that for every increase of 1 unit in workload, productivity will decrease by 0.537.
- The stress management coefficient (X_2) of 0.632 indicates that every increase of 1 unit in stress management will increase productivity by 0.632.
- The work-life balance coefficient (X_3) of 0.364 means that an increase of 1 unit in work-life balance will increase productivity by 0.364.

Results of Partial Significance Testing (t-test)

A statistical test used to compare the averages of two groups or samples, or to test the partial effect of independent variables on dependent variables. To perform a t-test, you compare the calculated t value against the table t value, and also check the significance value against the predetermined significance level.

Based on the t-test value and table:

a. If the t-test value is less than or equal to the table value, then the independent variable (X) has a negative impact on the dependent variable (Y).
b. If the t-test value is greater than the table value, then the independent variable (X) has a positive impact on the dependent variable (Y).

Based on the significance value from the SPSS output:

a. If the significance value is greater than 0.10, then the independent variable (X) does not have a significant impact on the dependent variable (Y).
b. If the significance value is less than or equal to 0.10, then the independent variable (X) has a significant impact on the dependent variable (Y).

Table 10. Partial Significance Testing (t-test)

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	5.820	5.663		1.028	.307
	Beban Kerja	-.537	.193	-.307	-2.786	.007
	Manajemen Stres	.632	.132	.527	4.801	<,001
	Work-Life Balance	.364	.144	.246	2.520	.014

a. Dependent Variable: Produktivitas

Source: Primary data processed by SPSS 30, (2025).

To determine the t_{table} value, a significance level (α) of 10% and degrees of freedom (df) of n - k are used, where n is the sample size (81) and k is the number of independent variables (3), resulting in df = 78. Thus, the t_{table} value obtained is 1.292.

Based on Table 10, the results of the t-test indicate that:

1. Workload has a negative and significant effect on employee productivity, with a calculated t_{value} of -2.786 < t_{table} of 1.292 and significance of 0.007 < 0.10.
2. Stress management has a positive and significant effect, as the calculated t_{value} is 4.801 > 1.292 and significance is 0.001 < 0.10.
3. Work-life balance also has a positive and significant effect, indicated by a calculated t_{value} of 2.520 > 1.292 and significance of 0.014 < 0.10.

Results of the Simultaneous Significance Test (F-test)

A statistical test used to check if all the independent variables (the free variables) together have a significant effect on the dependent variable (the bound variable).

The decision-making criteria are:

- H_0 is accepted if the calculated F is less than the table F at α = 10%
- H_a is accepted if the calculated F is greater than or equal to the table F at α = 10%.

Table 11. Simultaneous Significance Test (F-test)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	296.717	3	98.906	10.195	<,001[b]
	Residual	747.012	77	9.701		
	Total	1043.728	80			

a. Dependent Variable: Produktivitas
b. Predictors: (Constant), Work-Life Balance, Manajemen Stres, Beban Kerja

Source: Primary data processed by SPSS 30, (2025).

The F table formula is = (df1; df2). df1 = (k - 1), df2 = (n - k), thus df1 = (3 - 1) and df2 = (81 - 3), making the F table = (2; 78) = 2.372.

Based on Table 6, the calculated F value is 10.195 > F table 2.372 and the significance value is 0.001 < 0.10, hence it can be concluded that workload, stress management, and work-life balance significantly influence employee productivity simultaneously.

Results of the Coefficient of Determination (R^2) Test

The Coefficient of Determination (R^2) is used to measure how much the independent variable (X) contributes to the dependent variable (Y). If the R^2 value is getting higher (closer to one), it means that variable X is doing a better job explaining variable Y. On the flip side, if R^2 is getting lower (closer to zero), it suggests that the independent variable doesn't have much of an impact on the dependent variable. This indicates that the model being used isn't strong enough to prove that there's a connection between the independent variable being studied and the dependent variable.

Table 12. Coefficient of Determination (R^2) Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.533[a]	.284	.256	3.115

a. Predictors: (Constant), Work-Life Balance, Manajemen Stres, Beban Kerja

b. Dependent Variable: Produktivitas

Source: Primary data processed by SPSS 30, (2025).

Based on table 12. it can be concluded that the value of the coefficient of determination or Adjusted R-Square is 0.256 or 25.6%, indicating the impact of workload, stress management, and work-life balance on productivity. Meanwhile, the remaining 74.4% is influenced by other variables not included in this study.

DISCUSSION OF THE RESULT

The Impact of Workload on Employee Productivity

Based on the results of the t hypothesis test, the calculated t_{value} for the workload variable is -2.786 < 1.292, and the significance value is 0.007 < 0.10. The negative calculated t_{value} indicates that the workload variable has a negative relationship with productivity. This means that as the workload increases, productivity tends to decrease. Since the calculated t_{value} (-2.786) is smaller than the tabulated t_{value} (1.292) and the significance value of 0.007 < 0.10, it can be concluded that H0 is accepted and H1 is rejected. Therefore, these results demonstrate that workload has a significant impact on productivity. The negative effect found indicates that an increase in workload may adversely affect productivity. These research findings are consistent with the findings of Kurniasari et al. (2024), which show that workload negatively impacts employee productivity. However, these results contradict the research conducted by Fathoni (2020), which states that there is an influence of workload on employee productivity.

Several factors can explain why workload significantly but negatively affects employee productivity. First, high workloads can lead to physical and mental fatigue, thereby reducing employees' ability to work efficiently and effectively. Second, an increase in workload is often accompanied by a rise in stress levels, which can disrupt focus and motivation at work. Third, a heavy workload may cause employees to rush through tasks without paying attention to details, resulting in a decline in the quality of work output. Fourth, excessive workload can disrupt the balance between work and personal life, ultimately reducing job satisfaction and overall productivity.

The Impact of Stress Management on Employee Productivity

Based on the results of the t-test hypothesis, the calculated t_{value} for the stress management variable is 4.801, which is greater than 1.292, and the significance value is 0.001, which is less than 0.10. It can be concluded that stress management has a positive and significant impact on employee productivity, leading to the rejection of H0 and the acceptance of H2. The better the stress management implemented, the higher the employee productivity. This research finding is consistent with the results of a study conducted by Christian (2024), which indicated a positive influence of stress management on employee productivity. This emphasizes the importance of good stress management in maintaining or enhancing employee productivity. Previous studies have also shown that unmanaged work-related stress can reduce employee productivity.

Several reasons why stress management positively and significantly affects employee productivity include improved concentration and focus, as effective stress management helps employees reduce mental distractions, thereby enabling them to complete tasks optimally. Furthermore, better mental and physical health also serves as a supporting factor, where employees who can manage stress well tend to have lower absenteeism rates and higher work energy. Good stress management also enhances job satisfaction, as employees feel more comfortable and motivated in performing their duties. Additionally, effective stress management facilitates better decision-making, as employees can think more clearly without excessive pressure. Therefore, the implementation of effective stress management programs can be an important strategy for organizations to enhance employee productivity and create a healthier and more productive work environment.

The Impact of Work-Life Balance on Employee Productivity

Based on the results of the t-hypothesis test, the calculated t_{value} for the work-life balance variable is 2.520 > 1.292, and the significance value is 0.014 < 0.10. It can be concluded that work-life balance has a positive and significant effect on employee productivity, leading to the rejection of H0 and acceptance of H3. In other words, the better the work-life balance achieved by employees, the higher their productivity will be. This research finding is in accordance with the study conducted by Okorie (2024), which states that work-life balance positively and significantly affects productivity. Work-life balance plays a crucial role in maintaining employee productivity by creating a balance between job responsibilities and personal life. In daily life, employees who have sufficient time to rest, exercise, or spend time with family tend to be more focused and motivated while working. For example, an employee with a flexible work schedule can manage their tasks more effectively without sacrificing time for their health and social life.

Moreover, a good work-life balance helps reduce stress and the risk of burnout. Employees who continuously carry work outside of set hours without clear boundaries are at risk of experiencing mental fatigue, which can ultimately decrease their productivity. On the contrary, when they have sufficient leisure time to rest and engage in enjoyable activities, they can return to work feeling refreshed and more efficient. Support in creating a work-life balance is also a crucial factor in enhancing employee satisfaction and loyalty. Policies such as flexible working hours, mental health programs, and other supportive facilities can make employees feel more valued and comfortable in their work environment. When employees feel balanced between their work and personal lives, they tend to be more productive and contribute better to the company. Therefore, work-life balance is not only beneficial for individuals but also contributes to the success and sustainability of organizations.

The Impact of Workload, Stress Management, and Work-Life Balance on Employee Productivity

Based on the F hypothesis test, the calculated F value is 10.195, which is greater than the F table value, that is $10.195 > 2.372$, and the significance value of F is $0.001 < 0.10$. It can be concluded that simultaneously or together, workload, stress management, and work-life balance significantly affect employee productivity, and it is concluded that H0 is rejected and H4 is accepted.

Workload, stress management, and work-life balance play an important role in daily employee productivity. Excessive workload can lead to physical and mental exhaustion, thereby decreasing focus and work efficiency. For example, someone who takes the time to exercise or engage in hobbies can cope with stress better, thus remaining productive in their work. Companies that support mental health and provide stress management programs can help improve employee performance. A balanced work-life balance allows employees to balance work and personal life, which enhances enthusiasm and work motivation. Employees who have sufficient breaks or flexibility in their work tend to be more productive. For instance, flexible work policies and supporting wellness facilities can help employees stay motivated. Overall, these findings emphasize the importance of proper workload management, effective stress management, and the implementation of work-life balance in enhancing employee productivity. Companies that pay attention to these three aspects tend to have healthier, more motivated, and productive employees, which ultimately contributes to the achievement of organizational goals.

CONCLUSION AND SUGGESTIONS

Conclusion

This research shows that workload, stress management, and work-life balance have a significant influence on employee productivity at Advent Hospital Medan, both partially and simultaneously. Excessive workload has been proven to reduce productivity as it causes physical and mental fatigue, increases work pressure, and disrupts employees' personal life balance. On the contrary, good stress management can enhance concentration, maintain mental and physical health, and encourage employees to work more effectively and efficiently. A balanced work-life balance also contributes to productivity, as it allows employees to maintain energy, reduce the risk of burnout, and increase satisfaction and loyalty to the organization.

Overall, wise workload management, the implementation of appropriate stress management programs, and support for work-life balance are crucial factors in creating a healthy, motivated, and productive workforce. These three variables contribute to creating a work environment that supports the achievement of optimal performance.

Suggestion

The management of Advent Hospital Medan is advised to organize employee workloads more proportionally, through balanced task distribution and supervision of working hours to prevent excessiveness. Additionally, a structured stress management program should be implemented, such as stress control training, relaxation activities, or providing counseling facilities.

To support work-life balance, hospitals should also consider flexible working policies, increased break times, and facilities that comprehensively support employee well-being. These efforts can help maintain motivation, improve job satisfaction, and support long-term productivity.

Furthermore, subsequent research is encouraged to incorporate other variables that have not been analyzed in this study, to gain a more comprehensive understanding of the factors influencing employee productivity in the healthcare sector.

BIBLIOGRAPHY

Aprinawati, Manalu, T. A., Samosir, R. V., Trinovel, G., Pandiangan, & Khaira, I. (2024). Manajemen Stres Kerja: Solusi Dampak Pandemi Covid-19. *Jurnal Ekonomi Bisnis, Manajemen dan Akuntansi (Jebma), 4*(3), 1351-1357.

Christian, S. (2024). *Analisis Lingkungan Kerja dan Manajemen Stres Kerja dalam Meningkatkan Produktivitas Kerja Karyawan (Studi pada PT Djitoe Indonesia Tobako).* Salatiga: Universitas Kristen Satya Wacana.

Fathoni, M. I. (2020). Pengaruh Beban Kerja Terhadap Produktivitas Kerja Karyawan Tenaga Non Kesehatan di Unit Pelaksana Teknis Rumah Sakit Pratama Kota Yogyakarta. *Jurnal Optimal, 18*(1), 74-100.

Fauziah, S., Sutrisna, A., & Oktaviani, N. F. (2024). Pengaruh Beban Kerja dan Work-Life Balance Terhadap Produktivitas Kerja Pegawai pada Dinas Pendidikan dan Kebudayaan Kabupaten Tasikmalaya. *Maeswara: Jurnal Riset Ilmu Manajemen dan Kewirausahaan, 2*(4), 364-376.

Galuh, M. P., & Purnamasari, A. (2020). Implikasi Manajemen Stres dan Dukungan Sosial Terhadap Kualitas Hidup Lansia. *Jurnal Psikologi Terapan dan Pendidikan, 2*(2), 70-79.

Idris, H. (2023). *Manajemen Sumber Daya Manusia: Aplikasi dalam Kesehatan.* Jakarta: Kencana.

Kalonio, G. (2019). Pengaruh Kualitas Kehidupan Kerja dan Kepercayaan Diri Terhadap Manajemen Stres dan Peningkatan Kinerja. *Jurnal EMBA, 7*(3), 4212-4221.

Kurniasari, D. (2024). Pengaruh Beban Kerja, Lingkungan Kerja dan Insentif terhadap Produktivitas Kerja Pegawai di Rumah Sakit Sumber Hurip. *Jurnal Kajian Ekonomi & Bisnis Islam, 5*(4), 2834-2837.

Lukmiati, R., Samsudin, A., & Jhoansyah, D. (2020). Pengaruh Work-life Balance Terhadap Kinerja Karyawan pada Staff Produksi PT. Muara Tunggal Cibadak-Sukabumi. *Jurnal Ekobis Dewantara, 3*(3), 46-50.

Mahawati, E., Yuniawati, E., Ferinia, R., Fani, T., & Rahayu, P. (2021). *Analisis Beban Kerja dan Produktivitas Kerja.* Semarang: Yayasan Kita Menulis.

Nurfitriani. (2024). *Pengembangan SDM Dalam Meningkatkan Produktivitas Kerja Karyawan.* Parepare: IAIN Parepare Nusantara Press.

Okorie, O. U. (2024). Work-Life Balance of Nurses on Organization Productivity in the Rivers State University Teaching Hospital (RSUTH). *Social Science and Humanities Journal, 8*(12), 6027-6042.

Pantow, S. (2019). Hubungan antara Beban Kerja dan Kelelahan Kerja dengan Produktivitas Kerja Perawat di Ruang Rawat Inap Rumah Sakit Umum Bethesda GMIM Tomohon. *Jurnal Ilmiah Kedokteran Klinik, 7*(2), 113-118.

Saring. (2022). *Peningkatan Kinerja Guru Melalui Penguatan Kepemimpinan Tranformasional, Budaya Organisasi, dan Keseimbangan Kehidupan Kerja.* Malang: Media Nusa Creative .

Sariningrum, W. (2024). *Menuju Keseimbangan Kehidupan dan Kerja.* Surabaya: CV. Garuda Mas Sejahtera.

Sidabalok, S. Y., & Sayekti, A. (2020). Pengaruh Kebahagiaan dan Manajemen Stres terhadap Kinerja Perawat Rawat Inap (Studi Kasus di RSUD dr. Djasamen Saragih Pematangsiantar, Sumatera Utara). *Jurnal Ilmu-ilmu Sosial, 17*(1), 57-70.

Sutrisno, E. (2019). *Manajemen Sumber Daya Manusia.* Jakarta: KENCANA.

Wardhana, A. (2021). *Perilaku Organisasi.* Bandung: CV. Media Sains Indonesia.

___________ (2023). *Ergonomi dan Lingkungan Kerja.* Bandung: Media Sains Indonesia.

Wijaya, C. (2021). *Produktivitas Kerja: Analisis Faktor Budaya Organisasi, Kepemimpinan Spiritual, Sikap Kerja, dan Motivasi Kerja untuk Hasil Kerja Optimal.* Jakarta: KENCANA.

Vol. 8 No.1
Januari-Juni
2025

THE EFFECT OF EXPERIENTIAL MARKETING ON WORD OF MOUTH WITH CUSTOMER SATISFACTION AS A MEDIATION VARIABLE (CASE STUDY AT SRIVIJAVA COFFEE)

Aditya Liliyan

Management Study Program, Sekolah Tinggi Ilmu Ekonomi Surakarta

adityaliliyan@gmail.com*

Fahmi Rizka Luqmana

Management Study Program, Sekolah Tinggi Ilmu Ekonomi Surakarta

Abstract

This study aims to analyze the effect of experiential marketing on word of mouth, with customer satisfaction as a mediating variable, in the context of Srivijava Coffee consumers. The research is based on the importance of customer experience in shaping satisfaction and encouraging positive communication behavior among consumers. A quantitative research method was employed using Structural Equation Modeling (SEM), with primary data collected through questionnaires distributed to 100 respondents. Data analysis was conducted using R software with the Maximum Likelihood estimation method. The results show that experiential marketing has a positive and significant effect on customer satisfaction, with a standardized estimated value of 0.738. Furthermore, customer satisfaction significantly influences word of mouth (0.349), and experiential marketing also has a direct impact on word of mouth (0.464). These findings indicate that customer satisfaction partially mediates the relationship between experiential marketing and word of mouth. The R-squared values of 0.544 for customer satisfaction and 0.576 for word of mouth demonstrate that the model has a strong explanatory power for the dependent variables. The model fit indices also indicate a good fit, with CFI = 0.973, TLI = 0.969, RMSEA = 0.046, and SRMR = 0.044. The study concludes that enhancing customer experience significantly increases satisfaction, which in turn encourages customers to recommend Srivijava Coffee to others. Therefore, it is recommended that management continues to strengthen high-impact aspects of experiential marketing, such as service quality, store atmosphere, and emotional interaction with customers.
Keywords: Customer Satisfaction, Experiential Marketing, SEM, Word of Mouth

INTRODUCTION

Indonesia, as one of the largest coffee producers in the world, has a very potential market for the coffee shop business. According to data from the Indonesian Coffee Exporters and Industry Association (AEKI), coffee consumption in Indonesia continues to increase, with an average annual growth of 8%. In 2023, coffee consumption in Indonesia will reach more than 300,000 tons, and this figure is predicted to continue to increase along with the increasing interest of the younger generation in specialty coffee. Another report from the United States Department of Agriculture (USDA), coffee consumption in Indonesia in the 2024/2025 period is expected to increase by 10,000 bags, from 4.45 million bags in the 2020/2021 period to 4.8 million bags by the end of 2025. The instant and roasted coffee market, both for home and away-from-home consumption, is expected to continue to increase in 2024 to 2028, with a market value reaching 11.58 billion US dollars by the end of 2025.

The coffee shop market in Indonesia is dominated by two types of players: international coffee shops such as Starbucks, Coffee Bean & Tea Leaf, and local coffee shops such as Kopi Kenangan, Janji Jiwa, Kopi Kulo, Kopi Lain Hati, Point Coffee, Fore Coffee, Kopi Soe, Djournal Coffee, Tanamera Coffee, Kopi Tuku, and others. Local coffee shops have shown rapid growth, especially with franchise business models and effective digital marketing strategies. According to a report from Nielsen, 65% of Indonesian consumers prefer local coffee shops because of competitive prices and more familiar flavors. In addition, the younger generation of Indonesia, especially Gen Z and millennials, now tend to be more interested in new experiences and more authentic products. This makes local coffee shops, especially those offering specialty coffee and unique concepts, more in demand.

Local coffee shop businesses in Indonesia have great potential to grow. The increasing trend of coffee consumption and the deep-rooted coffee culture in this country create great opportunities for local coffee shop businesses. According to a report from the International Coffee Organization (ICO), the specialty coffee market in Indonesia is predicted to grow by 12% per year until 2025. This shows great potential for local coffee shops that focus on product quality and uniqueness. Data also notes that in 2023, the number of coffee shop outlets in Indonesia has reached more than 20,000 outlets, a very significant increase from local coffee shops. Business concepts can also be very varied and adapted to market interests. For example, coffee shops with an environmentally friendly concept, coffee shops with a certain theme, or even virtual coffee shops that only serve online delivery. This room for innovation opens up opportunities for business actors to highlight the unique character of their products and services, which can attract consumers' attention amidst market competition.

In an era of increasingly tight business competition, especially in the culinary industry such as coffee shops, creating a memorable customer experience is an important strategy in attracting and retaining consumers. Today's consumers are not only looking for quality products, but also a comprehensive experience that includes the atmosphere of the place, interaction with staff, and the emotional value felt while in the place. The concept of experiential marketing emerged as an approach that emphasizes the creation of experiences that touch the emotions and senses of customers, so as to foster a stronger attachment to the brand.

In the context of coffee shops, experiential marketing is realized through various elements such as attractive interior design, friendly service, unique menus, and a comfortable atmosphere for relaxing or working. When the experience succeeds in forming a positive impression, customers tend to feel satisfied and have a tendency to share their experiences with others voluntarily through word of mouth (WOM). Positive word of mouth is very influential in influencing the purchasing decisions of other potential consumers and becomes an effective promotional tool without large costs.

However, the direct effect between experiential marketing and word of mouth does not always occur linearly. Customer satisfaction plays an important role as a mediating variable, where a pleasant experience must first create satisfaction before encouraging customers to recommend the coffee shop to others. Therefore, a deep understanding of the relationship between experiential marketing, customer satisfaction, and word of mouth is important for coffee shop business actors to be able to design effective marketing strategies that are oriented towards customer experience.

Based on this background, this study aims to analyze the influence of experiential marketing on word of mouth, as well as the mediating role of customer satisfaction in this relationship, with a case study of coffee shop consumers at Srivijava Coffee.

LITERATURE REVIEW AND HYPOTHESIS

1. Experiential Marketing Theory

Experiential Marketing is a marketing strategy that emphasizes creating direct and meaningful experiences between brands and consumers. The goal is not only to convey marketing messages, but to engage consumers' emotions, senses, and active interactions with products or services, thereby creating deep emotional attachments.

The goal of Experiential Marketing (Kotler and Keller, 2010) is to create memorable and emotional experiences for consumers through direct interaction with products or services.

a. Building emotional engagement between consumers and brands. Experiential marketing focuses on creating moments that touch consumers' feelings. When consumers feel emotionally connected to a brand, for example because of a pleasant or surprising experience, they will feel a stronger and more personal bond with the brand.
b. Increasing customer loyalty through positive experiences that are difficult to forget. Unique and enjoyable experiences create a deep impression that will continue to be remembered by customers. This can make them return to using the product or service in the future because of the satisfaction and good impression they have experienced.
c. Encourages word of mouth as consumers feel compelled to share their experiences. Consumers who experience extraordinary things tend to want to tell others. Through personal stories, testimonials, or social media posts, they voluntarily spread positive information about the brand, which is very effective and credible in the eyes of other potential customers.
d. Differentiate the brand from competitors by offering more value through experiences, not just products. In a competitive marketplace, experiential marketing provides a competitive advantage. Brands that provide memorable

experiences, such as interactive events, unique packaging, or personalized service, will be more easily recognized and remembered than brands that only offer standard products.

e. Improve brand perception and image in the eyes of consumers. Positive experiences have a direct effect on consumer perceptions of the quality and value of a brand. If the experience is pleasant, consumers will tend to consider the brand premium, trustworthy, or caring about customers, which strengthens its positive image.

f. Increase purchase intention and conversion, because consumers directly feel the benefits of the product/service. When consumers can try, touch, or feel a product/service themselves, they will be more confident and motivated to buy. This direct experience reduces doubt and speeds up purchasing decisions.

Experiential Marketing measurement indicators are based on Schmitt's five dimensions (1999):

a. **The Sense dimension** is measured by linking how the brand stimulates the consumer's five senses (sight, hearing, smell, touch, and taste) to create a pleasant experience. Thus, it appears:
   1) The visual appearance of the product/service is aesthetically attractive, that is, by presenting well-designed visuals (color, design, layout) it will attract attention and increase the perception of product quality.
   2) The atmosphere of a place or physical environment is pleasant and comfortable, namely by creating a clean, tidy and comfortable shop or service environment, it can increase comfort when interacting with the brand.
   3) Sound, aroma, or other sensory elements enhance the customer experience, such as background music, a distinctive aroma, or certain lighting can create a positive atmosphere and enhance brand impressions.

b. **The Feel dimension** is measured by linking the target emotional aspect, namely how the brand evokes certain positive feelings or moods. So that it appears:

1) Interaction with the brand creates a feeling of joy and appreciation, that is, providing warm and attentive service creates a feeling of appreciation that strengthens the bond with the brand.
2) Experience with the brand evokes positive emotions (joy, satisfaction, impression), namely by eliciting memories that are more easily remembered by consumers and brands that are able to provide pleasant or touching moments.
3) The brand provides an emotionally touching experience, by eliciting deeper emotions such as pride, inspiration, or touch can strengthen emotional loyalty to the brand.

c. **The Think dimension** is measured by encouraging consumers to think creatively, logically, or reflectively, by providing mentally challenging experiences. Thus, it appears:
1) The brand presents a concept that is creative and different from others, namely by fostering innovation or a unique approach it will attract attention and create differentiation in the minds of consumers.
2) Experience with brands encourages innovative or critical thinking, namely by raising the idea that brands can make consumers think outside the box, thereby strengthening the impression of being intellectual and intelligent.
3) Brand activities stimulate my thinking on a topic or value, by providing a social campaign approach or educational theme from the brand can create a deeper mental and social impact.

d. **The Act dimension** is by measuring the focus on how brands can influence consumer behavior, lifestyle, and real actions. So that it appears:
1) Experiences with a brand encourage positive lifestyle or habit changes, by suggesting that the brand can influence consumers to be healthier, more environmentally friendly, or more productive.
2) The urge to try new things after interacting with a brand, by showing that an inspiring brand can encourage exploration and courage to try new products, services or activities.

e. The Relate Dimension (Social Relationships) is measuring consumers' relationships with other people and creating a sense of belonging to a group or community. So that it appears:
    1) The feeling of being connected to other people or a community through the brand, by creating a sense that the brand can build a customer community, for example, loyal users, forums, events can strengthen social ties and shared loyalty.

2. Customer Satisfaction Theory

Customer Satisfaction (Richard L. Oliver, 1997) is a measure of how satisfied customers are with a product, service, or experience provided by a company. This measurement reflects the extent to which customer expectations are met or even exceeded. Customer satisfaction depends not only on product quality, but also on the overall experience felt by customers when interacting with the company, from the purchasing process, after-sales service, to how the company handles complaints.

Customer satisfaction is very important because satisfied customers tend to show loyalty to the brand or company. Because customers are more likely to make repeat purchases, provide positive reviews, and recommend the product or service to others. Conversely, dissatisfied customers have the potential to leave the company and switch to competitors, and spread negative experiences that can damage the business image.

The objectives of measuring Customer Satisfaction (Kotler & Keller, 2009) are as follows:

a. Increase Customer Loyalty, satisfied customers tend to continue using the product or service and become loyal customers.
b. Encourage Repeat Purchases, customer satisfaction increases the likelihood of customers making repeat purchases.
c. Increase Word of Mouth Promotion, satisfied customers will recommend the product/service to others.
d. Reduce Complaints and Complaints, high satisfaction usually means fewer problems and complaints from customers.
e. Improve Company Reputation and Image, satisfied customers will form a positive perception of the company in the eyes of the public.

f. Increase Competitive Advantage, companies with high levels of customer satisfaction are better able to compete in the market.
g. Provide Input for Product/Service Improvement, satisfaction evaluation helps companies identify areas that need improvement.
h. Increase Revenue and Profitability, satisfied customers tend to make more transactions and spend less money to attract new customers.

The customer satisfaction measurement indicators according to Oliver (1997) used in this study are as follows:

a. Expectancy Confirmation
1) Customers are satisfied when what they expect from a product or service matches, or even exceeds, the reality they experience.
2) If performance is below expectations, customers tend to be dissatisfied.

b. Perceived Quality
1) The level of customer perception of the quality of the product or service received.
2) Includes aspects of reliability, durability, clarity, and ease of use.

c. Perceived Value
1) Comparison between the benefits received by customers and the sacrifices made (price, time, effort).
2) The higher the perceived value, the higher the level of satisfaction.

d. Product/Service Performance
1) Customers' assessment of how well the product or service works to meet their needs.
2) This is the basis for evaluating whether they are satisfied or dissatisfied.

e. Overall Satisfaction
1) It is the customer's final assessment of the entire experience of using a product or service.
2) This is the result of a combination of all previous factors.

3. Word of Mouth

Word of Mouth (WOM) is a form of marketing communication that occurs informally when someone shares experiences, opinions, or recommendations about a product, service, or brand to others, either directly or through digital media. WOM is very influential because it comes from sources that are considered reliable, namely fellow consumers, so it is often more convincing than traditional advertising. In a business context, WOM can be a very effective promotional tool, especially if the experiences shared are positive and widespread. The purpose of measuring Word of Mouth (WOM) is to understand how much influence and involvement consumers have in spreading information, opinions, and their experiences of a product or service. In more detail, here are some of the main objectives:

a. Assessing the effectiveness of marketing strategies
   Measuring WOM helps companies know whether a marketing campaign or program is successful in encouraging consumers to talk about the product positively.
b. Detecting customer loyalty and satisfaction
   Satisfied consumers tend to speak positively and recommend products. WOM can be an indirect indicator of their loyalty.
c. Identifying natural brand advocates
   Companies can identify consumers who actively spread positive experiences and have the potential to become promotional partners.
d. Predicting other consumers' purchasing behavior
   Because WOM influences the decisions of others, this measurement helps estimate its impact on sales and brand image.
e. Managing reputation risk
   By measuring WOM, companies can identify negative opinions that could potentially damage the brand’s reputation and take corrective action more quickly.

So, WOM is not just a communication phenomenon, but also a strategic tool in business decision making. The four indicators of Word of Mouth (WOM) according to Arndt (1967) and Silverman (2011) generally include the following: intention to recommend, positive talking, experience sharing, and frequency of talking about a product or brand.

Mediation becomes a tool in Word of Mouth because it helps explain the mechanism or process of how and why an independent variable affects a dependent variable. In the marketing context, mediation is often used to identify psychological or behavioral factors that mediate the relationship between a company's strategy (such as experiential marketing or price) and an end result such as WOM.

4. Previous Research

The literature review on the influence of experiential marketing on word of mouth with customer satisfaction as a mediating variable reveals various yet complementary findings. Marisa and Elmi (2023), in their study at ProFIT Gym Malang, found that experiential marketing does not have a direct effect on word of mouth, but it does exert an indirect influence through customer satisfaction. In contrast, price has both direct and indirect effects on word of mouth, while customer satisfaction shows a significant positive effect on word of mouth. These results were obtained using Partial Least Square (PLS) analysis with a 5% significance level. Meanwhile, Rohima (2022), found that experiential marketing has a significant positive effect on customer satisfaction, customer loyalty, and word of mouth. Furthermore, customer satisfaction also significantly affects customer loyalty and word of mouth. Although customer loyalty shows a positive relationship with word of mouth, the effect is not significant. However, the mediating roles of customer satisfaction and customer loyalty in the relationship between experiential marketing and word of mouth were found to be significant. Similarly, Wijaya and Suparna (2017), in their study at Mangsi Coffee in Denpasar, revealed that experiential marketing has a significant positive impact on customer satisfaction, which in turn influences repeat purchase. Experiential marketing also has a direct and significant effect on repeat purchase, and customer satisfaction was proven to significantly mediate this relationship. Lastly, Suparno and Aksari (2023) showed that both experiential marketing and electronic word of mouth (eWOM) have a significant positive influence on brand image and revisit intention. Brand image plays an important role as a partial mediator between experiential marketing and eWOM on revisit intention. Overall, these studies highlight that customer satisfaction often serves as a strong mediating variable in the relationship between experiential marketing and various customer behavioral outcomes, such as word of mouth, loyalty, and revisit intention.

Variabel 1

Experiential Marketing, measured based on five dimensions according to Schmitt (1999): sense, feel, think, act, and relate.

Variabel 2

Customer Satisfaction, measured based on indicators from Oliver (1997), such as conformity to expectations, service quality, and overall satisfaction.

Variabel 3

Word of Mouth, measured using indicators from Arndt (1967) and Silverman (2001), including the intention to recommend, talk positively, and spread experiences.

Hypothesis

Based on the research title "The Effect of Experiential Marketing on Word of Mouth with Customer Satisfaction as a Mediating Variable (Case Study at Srivijava Coffee)", the following is a hypothesis formulation that can be put forward:

H_{01}: Experiential Marketing does not have a significant effect on Customer Satisfaction.

H_{02}: Customer Satisfaction does not have a significant effect on Word of Mouth.

H_{03}: Experiential Marketing does not have a significant effect on Word of Mouth.

H_{04}: Customer Satisfaction does not mediate the influence of Experiential Marketing on Word of Mouth.

H_1: Experiential Marketing has a positive and significant effect on Customer Satisfaction.

H_2: Customer Satisfaction has a positive and significant effect on Word of Mouth.

H_3: Experiential Marketing has a positive and significant effect on Word of Mouth.

H_4: Customer Satisfaction mediates the influence of Experiential Marketing on Word of Mouth.

METHODOLOGY

This research is a quantitative research through a causality approach. The purpose of this approach is to determine the effect of experiential marketing on word of mouth with customer satisfaction as a mediating variable. The population in this study were all Srivijava Coffee customers who had come and enjoyed the service at the shop at least twice. The sampling technique used purposive sampling, with respondents who had the following criteria: (1) In the last 6 months, have visited Srivijava Coffee. The visit occurred at least 2 times. (2) At least 18 years old. (3) Willing to fill out the questionnaire voluntarily. The number of samples is determined with at least 5–10 respondents for each indicator, using the formula of Hair et al. (2010). The minimum number of samples used is 100 respondents and there are 20 indicators in the questionnaire.

Data collection technique

Primary data were collected through direct distribution of questionnaires. The questionnaire was also distributed online using a Likert scale of 1–5. This scale is used to measure word of mouth, customer satisfaction, and the level of respondent perception of experiential marketing.

Data Analysis Techniques

The collected data were analyzed using Partial Least Square – Structural Equation Modeling (PLS-SEM) with the help of R software. PLS is used for its ability to handle non-normally distributed data and test complex models with mediating variables. The analysis steps include: (1) Test the validity and reliability of the instrument (outer model), (2) Test the quality of the structural model (inner model), and (3) Test the direct, indirect, and total influence between variables using the bootstrapping test.

RESULTS AND DISCUSSION

1. Analysis with SEM Model

This research model consists of one exogenous variable, namely experiential Marketing (EM) and two endogenous variables, namely Customer Satisfaction (CS) and Word of Mouth (WOM). Furthermore, compiling causal relationships with path diagrams and compiling structural equations. It is necessary to compile a structural model, namely connecting endogenous and exogenous latent constructs with indicator variables as in the picture.

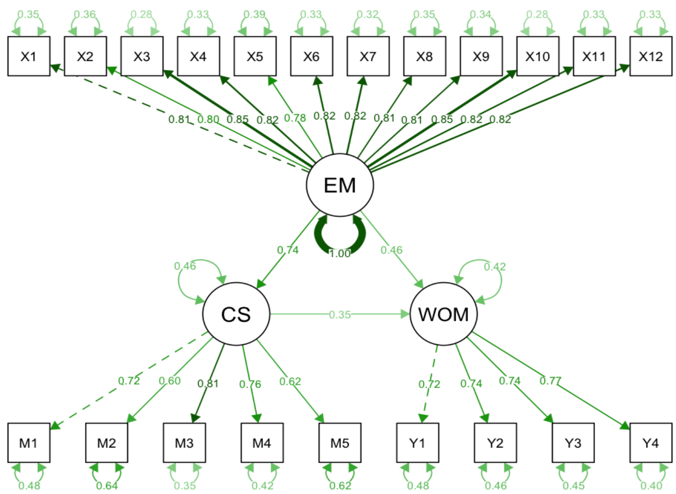

Figure 1. SEM Path Diagram (Sources : Output Software R)

SEM Path Diagram Interpretation

a. Relationship Between Latent Variables (Constructs)

- Experiential Marketing (EM) → Customer Satisfaction (CS):

  Coefficient value = **0.74**

  This means that experiential marketing has a positive and strong influence on customer satisfaction. The better the experience felt by customers, the higher their level of satisfaction.

- Customer Satisfaction (CS) → Word of Mouth (WOM):

  Coefficient value = **0.35**

  This means that customer satisfaction also has a positive influence on word of mouth behavior. Although its influence is not as large as the EM and CS variables, it is still significant in encouraging customers to spread positive information.

- Experiential Marketing (EM) → Word of Mouth (WOM):

  Coefficient value = **0.42**

  This shows the direct influence of experiential marketing on word of mouth. Customers are encouraged to recommend Srivijava Coffee directly from the experience they have had, without having to go through satisfaction first.

Thus, in the SEM path diagram above, there are direct and indirect effects of EM on WOM, with CS as a partial mediator. This supports the mediation model in this study.

b. Loading of Indicator Factors on Constructs

Based on the results of the SEM path diagram analysis, all indicators forming the construct in this study showed a fairly high factor loading value and were within an acceptable range, which was above 0.6. In the Experiential Marketing (EM) construct, twelve indicators (X1–X12) had loading values between 0.60 and 0.85, with the highest values shown by indicators X3 (0.85), X6 (0.81), and X12 (0.82), which means that the three indicators most strongly represent the EM construct. This shows that customer experience related to these elements is an important aspect in forming experiential marketing perceptions. The Customer Satisfaction (CS) construct is formed by five indicators (M1–M5), with loading values ranging from 0.52 to 0.72. Indicators M1 and M2 show the greatest contribution to this construct, indicating that the dimensions of satisfaction related to service expectations and perceived quality have a dominant influence. Meanwhile, the Word of Mouth (WOM) construct has four indicators (Y1–Y4) with loading values between 0.64 and 0.77. Indicators Y3 (0.77) and Y2 (0.74) have the highest values, indicating that customer behavior in recommending or talking about Srivijava Coffee to others is greatly influenced by these aspects. Overall, this high loading value indicates that the indicators used in the model have good construct validity and can be relied on to represent each of the latent variables studied.

c. Error Variance

In the Structural Equation Modeling (SEM) model, residual or error variance describes the magnitude of the indicator variance that cannot be explained by the latent construct that measures it. Based on the path diagram produced, all indicators in this model show residual error, which is indicated by a circular arrow from the indicator to itself. Although not displayed numerically in the diagram, visually it appears that the magnitude of the residual is within a reasonable range and is not extreme, which means that most indicators are able to explain the latent construct quite well. This is reinforced by the high factor loading value on each indicator, which automatically reduces the proportion of error in measurement. This means that the proportion of variance explained by the latent construct is quite dominant compared to the unexplained variance (error). Thus, this model has good measurement accuracy, and shows that the questionnaire instrument used in this study is quite valid and reliable in capturing the phenomena of experiential marketing, customer satisfaction, and word of mouth.

2. Model Fit Indices

Table 1. Model Fit Indices

Lavaan 0.6-19 ended normally after 67 iterations	
Estimator	ML
Optimization method	NLMINB
Number of model parameters	45
Number of observations	100
Model Test User Model:	
Test statistic	225.569
Degrees of freedom	186
P-value (Chi-square)	0.025
Model Test Baseline Model:	
Test statistic	1667.074

Degrees of freedom	210
P-value	0.000
User Model versus Baseline Model:	
Comparative Fit Index (CFI)	0.973
Tucker-Lewis Index (TLI)	0.969
Root Mean Square Error of Approximation:	
RMSEA	0.046
90 Percent confidence interval - lower	0.018
90 Percent confidence interval - upper	0.066
P-value H_0: RMSEA <= 0.050	0.604
P-value H_0: RMSEA >= 0.080	0.002
Standardized Root Mean Square Residual:	
SRMR	0.044

The evaluation of the model's suitability was carried out by referring to several goodness-of-fit indicators to determine how well the constructed structural model reflects the empirical data. Based on the results of the SEM analysis, the Chi-square value of 225.569 with degrees of freedom (df) 186 and a significance value of p = 0.025 indicates that there is a small difference between the model and the data, but it is still within the tolerance limit because SEM is sensitive to large sample sizes. Furthermore, this model shows a very good level of fit, indicated by the Comparative Fit Index (CFI) value of 0.973 and the Tucker-Lewis Index (TLI) of 0.969, both of which are far above the minimum threshold of 0.90, so it can be concluded that the model has a very good fit to the data. The Root Mean Square Error of Approximation (RMSEA) value was recorded at 0.046 with a 90% confidence interval between 0.018

and 0.066, indicating that the approximation error in the population is very small and the model is acceptable. In addition, the Standardized Root Mean Square Residual (SRMR) value of 0.044, which is also below the threshold of 0.08, confirms that the difference between the model-predicted covariance and the actual covariance is relatively low. Based on all of these indicators, it can be concluded that the structural model built in this study has a very good level of fit and can be relied on to explain the relationship between experiential marketing, customer satisfaction, and word of mouth in Srivijava Coffee consumers.

3. Standardized Estimates

Table 2. *Standardized Estimates*

Regressions:

	Estimate	Std.Err	z-value	P(>|z|)	Std.lv	Std.all
CS ~ EM	0.560	0.092	6.117	0.000	0.738	0.738
WOM ~ CS	0.358	0.156	2.295	0.022	0.349	0.349
EM	0.361	0.115	3.140	0.002	0.464	0.464

Standard estimation results show that all paths between latent variables in the model have a significant and statistically relevant influence. The Experiential Marketing (EM) variable has a positive and significant effect on Customer Satisfaction (CS) with a standard coefficient of 0.738 and a p-value <0.001. This indicates that increasing positive customer experiences with Srivijava Coffee will substantially increase their satisfaction. Furthermore, Customer Satisfaction has a positive effect on Word of Mouth (WOM) with a coefficient of 0.349 and a p-value of 0.022, indicating that satisfied customers tend to recommend or talk about Srivijava Coffee more to others. In addition, Experiential Marketing also has a direct effect on Word of Mouth, with a coefficient of 0.464 and a p-value of 0.002. This indicates that a pleasant customer experience can encourage them to immediately share the experience, without having to go through satisfaction first. Thus, it can be concluded that experiential marketing not only has an indirect impact on word of mouth through customer satisfaction, but also has a significant direct influence, indicating a partial mediation role of customer satisfaction in this model.

4. R-Squared

Table 3. *R-Squared*

R-Square:	
Estimate	
X1	0.653
X2	0.642
X3	0.724
X4	0.674
X5	0.608
X6	0.670
X7	0.675
X8	0.652
X9	0.656
X10	0.723
X11	0.667
X12	0.675
M1	0.522
M2	0.362
M3	0.653
M4	0.582
M5	0.383
Y1	0.523
Y2	0.545

R-Square:	
Estimate	
Y3	0.552
Y4	0.595
CS	0.544
WOM	0.576

The R-squared (R^2) value results indicate the extent to which the latent variables are able to explain the variance of each manifest indicator and endogenous construct in the SEM model. In the Experiential Marketing (EM) construct, indicators such as X3 (0.724), X10 (0.723), and X4 (0.674) have high R^2 values, indicating that the EM construct is able to explain more than 65% of the variance in most of its indicators, which means that these indicators are very representative in measuring customer experience. The relatively high and even R^2 value (ranging from 0.608 to 0.724) indicates the consistency and strength of the construct in explaining its constituent indicators. Meanwhile, the Customer Satisfaction (CS) construct has an R^2 value of 0.544, meaning that as much as 54.4% of the variation in customer satisfaction can be explained by Experiential Marketing as a predictor variable. In the CS indicators, the highest R^2 value is owned by M3 (0.653), while the lowest is M2 (0.362), which indicates that there are indicators that are less strong and can be re-evaluated in further research. Furthermore, the Word of Mouth (WOM) construct has an R^2 value of 0.576, meaning that 57.6% of the WOM variance can be explained simultaneously by EM and CS. Among the WOM indicators, Y4 (0.595) and Y3 (0.552) show the highest proportion of variance explained by their constructs. Overall, these R^2 values indicate that the structural model has quite strong explanatory power, especially in the WOM and CS constructs as endogenous variables, and in the EM indicators as exogenous variables.

5. Discussion

The Effect of Experiential Marketing on Customer Satisfaction

Based on the results of SEM analysis using R software, it is known that experiential marketing (EM) has a positive and significant effect on customer satisfaction (CS) with a regression coefficient value of 0.56 and a significance value of $p < 0.001$. This shows that the higher the quality of experience provided by Srivijava Coffee to its customers through aspects such as atmosphere (sense), emotion (feel), thinking power (think), action (act), and social connectedness (relate), the level of customer satisfaction will also increase. This finding is in line with Schmitt's theory (1999) which states that experiential marketing is able to create emotional and psychological values that have a direct impact on customer evaluation of a brand or place. In other words, a well-managed customer experience can encourage increased satisfaction because customers feel that their needs and expectations are met or even exceeded.

The Effect of Customer Satisfaction on Word of Mouth

Furthermore, the results of the analysis show that customer satisfaction has a positive and significant effect on word of mouth (WOM) with a coefficient of 0.358 ($p < 0.05$). This means that the higher the level of customer satisfaction with Srivijava Coffee, the more likely they are to recommend the place to others, either through direct conversation or social media. These results support previous findings by Anderson (1998) which stated that satisfied customers are more likely to communicate positively about the brand to others. In the context of Srivijava Coffee, customer satisfaction is the main trigger for the emergence of voluntary promotional behavior or word of mouth which can strengthen the image and attract new customers.

The Effect of Experiential Marketing on Word of Mouth

The analysis also shows that experiential marketing has a direct effect on word of mouth with a coefficient value of 0.361 and a significance value of $p < 0.01$. This means that in addition to customer satisfaction, experiential marketing also has a direct effect on customer behavior in spreading positive information about Srivijava Coffee. This shows that a pleasant and memorable customer experience can directly encourage customers to tell others about the experience. Customers who feel emotionally and socially involved will tend to share their stories, even if they have not explicitly evaluated their satisfaction.

The Role of Customer Satisfaction Mediating

These findings also show that customer satisfaction acts as a partial mediating variable in the relationship between experiential marketing and word of mouth. This is indicated by the direct and indirect influence of experiential marketing on word of mouth through customer satisfaction. Thus, experiential marketing not only increases word of mouth directly, but also indirectly through increasing customer satisfaction. This finding is consistent with the mediation model proposed in this study, where customer satisfaction is an important bridge in creating customer loyalty and advocacy. The experiential marketing strategy implemented by Srivijava Coffee turns out to not only create a pleasant experience, but also contribute to satisfaction and, ultimately, to voluntary promotion from the customers themselves.

CONCLUSION

Based on the analysis of the influence of experiential marketing on word of mouth with customer satisfaction as a mediating variable among Srivijava Coffee customers, it can be concluded that experiential marketing plays a crucial role in shaping customer satisfaction. The comprehensive experiences perceived by customers—ranging from sensory, emotional, cognitive, to social aspects—enhance their positive evaluation of the services provided. This directly impacts the increase in customer satisfaction levels, which in turn significantly drives word-of-mouth behavior. Additionally, experiential marketing also shows a direct effect on word of mouth, encouraging customers to share their positive experiences even without being strongly driven by high levels of satisfaction. In this study, customer satisfaction is proven to partially mediate the relationship between experiential marketing and word of mouth, indicating that customer satisfaction serves as an important pathway in linking experiences to consumer behavioral loyalty, particularly in the form of recommendations and stories shared with others.

Based on these findings, it is recommended that Srivijava Coffee continue to enhance the quality of its experiential marketing by optimizing various elements such as the café atmosphere, personalized service, and interactive events that can strengthen customers' emotional attachment. Customer satisfaction should also be treated as a strategic indicator in business development through staff training, prompt responses to complaints, and innovation in products and services. Furthermore, the company can more actively encourage word-of-mouth behavior through strategies such as loyalty programs, referral systems, or digital campaigns involving customer testimonials. For future research, it is suggested to expand the scope to other industries and consider additional variables such as brand trust or customer loyalty to enrich the understanding of consumer behavior dynamics more comprehensively.

REFERENCES

Anderson, E. W. (1998). Customer Satisfaction and Word of Mouth. *Journal of Service Research*, 1(1), 5–17. https://doi.org/10.1177/109467059800100102

Arndt, J. (1967). Role of Product-Related Conversations in The Diffusion of a New Product. *Journal of Marketing Research*, 4(3), 291. https://doi.org/10.2307/3149462

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to Use and How to Report The Results of PLS-SEM. *European Business Review*, 31(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Kotler, P., & Keller, K. L. (2009). *Manajemen Pemasaran (1st ed.)*. Erlangga.

Marisa, E. (2023). *Pengaruh experiential marketing dan price terhadap word of mouth dengan customer satisfaction sebagai variabel mediasi di ProFIT Gym Malan*g. http://etheses.uin-malang.ac.id/50292/

Oliver, R. L. (2014). *Satisfaction: A Behavioral Perspective on the Consumer. Routledge*. https://doi.org/10.4324/9781315700892

Oliver, R. (1997). Customer delight: Foundations, Findings, and Managerial Insight. *Journal of Retailing*, 73(3), 311–336. https://doi.org/10.1016/S0022-4359(97)90021-X

Rohima, Aulia Izzatur. (2022). Pengaruh Experiential Marketing Terhadap Word Of Mouth, di Mediasi Customer Satisfaction dan Customer Loyalty (Studi Kasus: PT. Kereta Api Indonesia). *CBJIS : Cross-Border Journal of Islamic Studies*, 4(1), 1–12. https://doi.org/10.37567/cbjis.v4i1.1198

Schmitt, B. (1999). Experiential Marketing. *Journal of Marketing Management*, 15(1–3), 53–67. https://doi.org/10.1362/026725799784870496

Silverman, G. (2011). *The Secrets of Word-of-Mouth Marketing: How to Trigger Exponential Sales Through Runaway Word of Mouth (2nd ed.)*. American Management Association.

Suparno, I. N., & Aksari, N. M. A. (2023). Pengaruh Experiential Marketing dan Electronic Word of Mouth Terhadap Revisit Intention Melalui Brand Image Sebagai Variabel Mediasi. *Jurnal Penelitian Dan Pengembangan Sains Dan Humaniora*, 7(2), 244–255. https://doi.org/10.23887/jppsh.v7i2.54873

Wijaya, P. E. S. A., & Suparna, G. (2017). Peran Customer Satisfaction Memediasi Pengaruh Experiential Marketing Terhadap Repeat Purchase pada Mangsi Coffee di Denpasar. *E-Jurnal Manajemen*, 6(10), 5432–5459.

ARTIFICIAL INTELLIGENCE: PERSPECTIVE OF GEN Z AUDITING STUDENTS

Judith Tagal Gallena Sinaga[1]
Universitas Advent Indonesia
judith.sinaga@unai.edu

Valentine Siagian[2]
Universitas Advent Indonesia
valentine@unai.edu

Ria Chaniago[3]
Universitas Advent Indonesia
rkchaniago@gmail.com

Abstract

This study explores the relationship between Gen Z auditing students and artificial intelligence (AI), focusing on their competencies, awareness, and frequency of AI tool usage. Utilizing a qualitative research method, questionnaires were distributed to 50 auditing students at Universitas Advent Indonesia through Google Forms. The instrument was designed around four key perspectives: AI competencies, most used AI tools, level of AI awareness, and frequency of AI use in academic tasks. Respondents were selected using purposive sampling to ensure relevance, with ethical standards upheld through voluntary participation and data confidentiality. Findings reveal that while auditing students frequently use AI tools—particularly ChatGPT for tasks like communication, brainstorming, report writing, and presentation creation—their overall AI competence remains moderate, and their awareness tends to be surface-level, focusing more on tool usage than on understanding underlying principles or ethical implications. This highlights a clear gap between usage and mastery. As the future of the auditing profession becomes increasingly intertwined with AI, it is essential to enhance students' digital literacy and critical understanding of AI's capabilities and limitations. The study concludes that while Gen Z auditing students are technologically engaged, targeted educational interventions and curriculum development are needed to ensure their future relevance and leadership in a digitally evolving accounting profession.

Keywords: artificial intelligence, Gen Z auditing students, technologically engaged

INTRODUCTION

One significant advancement in accounting and auditing is the application of artificial intelligence (AI) (Damerji & Salimi, 2021). The way future auditors are trained needs to be reevaluated because the incorporation of Artificial Intelligence (AI) into the auditing industry is changing old procedures. People who were born between 1997 and 2012, or Generation Z, are positioned to lead this change. They are accustomed to technology because they are digital natives, but it is still important to investigate how ready and competent they are to use AI in the workplace. According to recent studies, Gen Z students are well aware of and use AI tools, but their comprehension of how AI is used in auditing and their level of readiness to embrace these technologies vary. According to a study by (Putu et al., 2024) that used the Technology Acceptance Model, Gen Z accountants' intention to adopt AI is highly influenced by perceived usefulness, underscoring the need of proving AI's worth in auditing jobs. On the other hand, there was no discernible impact on perceived ease of use, indicating that adoption of AI technologies may be influenced by their prospective advantages despite their complexity. Additionally, according to a (Wilson, J. et al. 2024) of Boston Consulting Group survey from 2024, Gen Z students want to learn about AI ethics, real-world applications, and career ramifications, but many say their institutions don't provide enough help in these areas. This disparity emphasizes the necessity of courses that critically analyze AI concepts' ethical implications and practical implementations in addition to introducing them.

The use of artificial intelligence (AI) tools into Gen Z students' academic practices, including auditing programs, highlights the generation's technical aptitude and flexibility. Even though these technologies are very helpful and efficient, they also require careful consideration of the ethical implications and the maintenance of academic integrity.

Future accounting professionals (that includes auditor) must be familiar with AI tools in order to adjust to the changes brought about by the integration of digital technology into business operations (Szadziewska & Kujawski, 2024). in order to improve the efficiency and performance of accounting functions, accountants and accounting firms should stay up to date with ongoing advancements in artificial intelligence (Mohammad et al., 2020).

The future of accounting could be significantly impacted by AI, which could change the accountant's position in data analysis, education, and lifelong learning. AI will shift the accountant's responsibilities from mundane activities to more complex ones like analysis, advising services, and moral decision-making for clients or employers. Accounting professionals (auditor) who adopt these innovations will ensure their continued success and relevance (Hubler et al., 2024). More widespread use of AI in the accounting and auditing fields is anticipated to boost productivity, accuracy, and efficiency while posing problems with wealth and income disparity, the loss of traditional jobs, and an unskilled labor force (Hasan, 2022).

There are several AI tools that an auditing students must learn. Understanding AI is essential since it will influence every industry worldwide and define our future. However, research on people's awareness and knowledge of AI in everyday life has been scant. We therefore hope to close this gap by carrying out this study, which has as its primary goal evaluating students' awareness and understanding of artificial intelligence, specifically in the context of auditing. This study intends to investigate how Gen Z auditing students view artificial intelligence (AI), evaluate their competence to integrate AI into auditing procedures, and pinpoint the instructional approaches required to close current gaps. Understanding these viewpoints will help the research build professional training programs and curricula that meet the changing needs of the auditing industry.

REVIEW OF RELATED LITERATURE

Auditing Students

Auditing students are those students who enrolled accountancy course that specializes in auditing. These students must be equipped with skills in technology that will fasten their tasks when they become employees of different companies. These days, artificial intelligence is being integrated into practically every facet of accounting, which makes auditing students anxious and afraid about human intervention in a company's financial and accounting operations in the near future. Compared to earlier methods that are rapidly becoming obsolete, the introduction of AI tools and techniques that enable task automation and better analysis capabilities can have a significant positive impact on the finance and accounting industries (Mohammad et al., 2020). Professionals who have already experimented with AI implementation and who think AI will be applied in accounting in the future are more likely to be interested in doing so in the future. The latest advancements in AI and technology have a significant impact on the accounting industry (Nouraldeen, 2023). In other words, auditing students are the accounting professionals that could be affected by these growing technology.

The Audit Environment

Auditing plays a very important role in every aspect of business. Auditing is a way to evaluate accumulated evidences to check if all accounting data entered are align with the established criteria (Arens, 2014). To ensure that all departments are adhering to the documented procedure of documenting transactions, an auditor will physically check inventory after examining or inspecting various books of accounts. This is done to determine whether the organization's financial accounts are accurate (Times, 2025). Uncertainty and litigation characterize the contemporary audit and assurance environment, which is perhaps the most prominent and significant aspect of the accounting profession. Following a wave of high-profile audit failures with significant financial ramifications, professional associations and the government have been altering accountant training, legislation, and standards. Many regulations and potential hazards that were not evident a few years ago now apply to both the audited and the auditors (Baldwin et al., 2007). Auditing students are taught on how to conduct auditing appropriately in preparation to be a good auditor someday.

The Importance of Artificial Intelligence (AI)

Modern auditing is growing more and more reliant on artificial intelligence (AI), which is radically changing the way audits are organized, carried out, and assessed. Understanding and interacting with AI is not just a theoretical exercise but also a professional necessity for auditing students, particularly those from Generation Z who will soon be entering the job. Auditing students use AI to complete their activities more quickly and precisely; to create technologies that can help them to accomplish their activities and jobs and make life easier; and to increase the effectiveness, precision, and value-added of accounting procedures (Awadallah Awad & A. Elnady, 2020). Efficiency and effectiveness, consistency, framework for audit activities, better communication and decision-making, increased staff training, experience development for new hires, and quicker decision-making are just a few of these advantages (Hasan, 2022). The incorporation of AI technology in accounting education has enhanced learning efficiency by facilitating rapid and effortless access to instructional resources (Nouraldeen, 2023).

These AI enhances the auditing students to finish their assignments quickly. Also, AI prepares the students about modern audit realities. And lastly, when auditing students are familiar with AI, it fosters their minds of a continuous learning.

AI Tools Used Nowadays

There are several AI Tools to be considered these days. Following are the 24 AI tools:

Table 1 – List of AI Tools Used

Category	AI Tools Used
Writing	1. ChatGPT 2. Compose AI Grammarly 3. BetterFeedback 4. Featherly 5. Lyro 6. Anyword 7. Claude 8. Perplexity

	9. Google AI 10. Gemini
Coding	1. GitHub Copilot 2. DeepSeek 3. Meta AI 4. AI developed by employer
Create Presentation	1. Beautiful.ai 2. Gamma AI 3. Canva Magic
Design	1. Midjourney 2. Canva Magic 3. HitPaw 4. Synthesis 5. Murf
Social/Communication	1. Fireflies 2. Speechify 3. Lyro

Source: (Szadziewska & Kujawski, 2024)

There will be more AI tools to consider which the auditing students have to be aware of. If possible these must be integrated in the curriculum to better educate students for the changing needs of the industry (Abdo-Salloum & Al-Mousawi, 2025). Auditing students are quite fast learning so this can be learned as long as they the desire to adopt artificial intelligence.

RESEARCH METHOD

The research method used is a qualitative method, in which a questionnaires were distributed to all auditing students of Universitas Advent Indonesia. Distributed questionnaires composed of four (4) perspectives: 1.) AI competencies; 2.) the most used

AI tools; 3.) level of AI awareness; 4.) the frequent used of AI tools during their studies. Data were gathered through Google form and were given to 50 auditing students. The population comprised of all accounting students but since purposive sampling method is used, only those students who specialize in auditing selected as the respondents. Data were tabulated, analyzed, and interpreted to answer above perspectives. This guarantees that the information gathered is pertinent to the goals of the study and concentrates on auditing students. Respondents were made aware that participation is entirely voluntary and that their answers will remain private. Unless specifically required and with consent, no personally identifiable information is gathered. The study conforms to the ethical guidelines set forth by the institution.

RESULTS AND DISCUSSION

Demography

The respondents composed of 27 females and 23 males. These are all active students that specializes in auditing. It shows that there are more females than males. See Table I below for a clearer explanation:

Table II – Gender of Respondents

Gender	Frequency	%
Female	27	54
Male	23	46
Total	**50**	**100**

AI Competencies

Auditing students are technology savvy. They motivate themselves to learn different AI Tools and how it is being used. Students must embrace this AI age, and nurture digital competencies. The following are the summary of the student's competencies:

Table III – AI Competencies

Competence	Frequency	%
Poor	1	2
Moderate	22	44
Competence	19	38
Very Competence	8	16
Total	**50**	**100**

These students have the ability to master artificial intelligence technologies more effectively (Sudaryanto et al., 2023). The Table shows that there are 27 (54%) students who demonstrated competence and very competence in using AI. This showed that more than half of the auditing students are well-prepared to apply AI tools in auditing tasks. Also there were 22 students (44%) fall into the Moderate category. They likely have a basic understanding of AI but may struggle with advances applications. And lastly, only 1 student (2%) is categorized as Poor, indicating minimal exposure or understanding of AI in auditing. Auditing students individually integrate their AI expertise to all their projects and assignments (like making PPT, etc).

Level of Awareness of Auditing Students on AI Tools

There are so many AI Tools nowadays. In this portion, auditing students' awareness are being analyzed up to what extent.

Table IV – Level of Awareness

Awareness	Frequency	%
A Little	4	8
Moderate	16	32
Aware	22	44
Very Aware	8	16
Total	**50**	**100**

If the level of awareness are high, auditing students are ensure on their continued success and relevance (Hubler et al., 2024). The Table above shows that 30 out of 50 students (60%) are either *Aware* or *Very Aware* with AI systems. This indicates that a clear majority of auditing students have a solid level of exposure and understanding of AI tools, likely through coursework, self-learning, or practical experiences. There were 16 students (32%) fall into the *Moderate* category. These students likely possess basic conceptual understanding, but may lack confidence or experience in applying AI in auditing tasks. Lastly, only 4 students (8%) report *A Little* awareness. This is a small minority, showing that almost all students have at least some awareness of AI systems. The research showed that auditing students typically have a solid understanding of AI systems. The educational basis in AI seems solid, with 60% demonstrating high familiarity and another 32% having a decent knowledge. Only about 8% of them might need first assistance. This degree of familiarity indicates that the student body is prepared to use AI in real-world auditing scenarios, and with more training, the majority might become fully proficient in using AI. The result is supported by (Mansor et al., 2022) that says auditing students knew and understood AI to a reasonable degree. AI technology is influencing knowledge and interest, particularly among auditing students.

Most Widely Used AI Tools

Auditing students are not familiar with all the AI tools presented. The following list of AI tools which are most used by auditing students:

Table V – No. of AI Tools Used

No. of AI Tools Used	Frequency	%
13	1	2
11	2	4
10	2	4
9	3	6
8	7	14
7	2	4
6	5	10
5	2	4
4	11	22
3	4	8
2	4	8
1	7	14
Total	**50**	**100**

The Table above showed that most of the AI Tools used falls on ChatGPT. All the 50 respondents are competent and familiar with ChatGPT. The highest percentage falls on the 11 (22%) respondents who are familiar with 4 AI tools (22%). The four (4) AI tools are ChatGPT, Perplexity, Gamma AI, and Gemini. There is only one (1) respondent who is familiar with 13 AI tools, these are, ChatGPT, ComposeAI, Grammarly, midjourney, Featherly, GoogleAI, Claude, Perplexity, Gamma AI, DeepSeek, Meta AI, Gemini, and Canva Magic. There are still AI tools that have not been encountered by auditing students.

Number of Times AI Tools Were Used During Studies

Auditing students' life are not that easy especially when they have homework from different subjects. Auditing students frequently and consistently use AI technologies.

Table V – Frequency Use of AI Tools

No. of times during studies	Frequency	%
Rarely	1	2
Often	27	54
Occasionally	19	38
Always	3	6
Total	**50**	**100**

Table V shows that 60% of students (54 Often & 6 Always) reported using AI tools frequently or always. This indicates a strong integration of AI tools in the academic routines of auditing students. 38% used AI tools "Occasionally", suggesting they are somewhat engaged but not dependent on AI tools. Only 2% reported "Rarely" using AI tools, indicating very few students avoid AI tools altogether.

AI Tools Usage

There are various usages of AI tools. It can be for writing, brainstorming, create presentation, design, and communication. The Table below explains the number of usage of AI tools:

Table VI – Number of AI Usage

No. of AI Tools Usage	Frequency	%
1	13	26
2	10	20
3	12	24
4	15	30
Total	**50**	**100**

The Table above shows that there are 15 students (30**%)** use AI for writing, brainstorming, create presentation, and communication. There are students who use it for other purposes but most of the time it is use to create presentation.

CONCLUSION

This study emphasizes how Gen Z auditing students and artificial intelligence (AI) are developing their relationship, highlighting the revolutionary influence AI is expected to have on the auditing profession going forward. These students, who are digital natives, utilize AI tools frequently. They especially prefer ChatGPT, which they frequently use for communication, brainstorming, report writing, and presentation creation. Nevertheless, even with frequent use, students' general proficiency with AI is still moderate, and their awareness is typically surface-level, emphasizing application over comprehension. This disparity implies that although students are using technology, they might not yet have the essential abilities required to effectively utilize AI's potential in professional auditing settings. The auditing experts of the future will be those who successfully embrace and incorporate AI advancements, as stressed by (Hubler et al., 2024). It is obvious that improving students' AI skills as well as their comprehension of its ramifications, constraints, and ethical issues is necessary to guarantee that they are ready for this future. In summary, Gen Z auditing students are headed in the correct direction when it comes to their involvement with AI; however, to increase their knowledge and proficiency, certain educational interventions and curricular improvements are necessary. In addition to helping them succeed academically, doing this will guarantee their leadership and continued relevance in the technologically advanced accounting field.

REFERENCES

Abdo-Salloum, A. M., & Al-Mousawi, H. Y. (2025). Accounting Students' Technology Readiness, Perceptions, and Digital Competence Toward Artificial Intelligence Adoption in Accounting Curricula. *Journal of Accounting Education*, *70*. https://www.sciencedirect.com/science/article/abs/pii/S0748575125000028

Arens. (2014). *Auditing and Assurance Services: An Integreted Approach*.

Awadallah Awad, N., & A. Elnady, M. (2020). The impact of Artificial intelligence and big data on sustainable development. *11*(2), 376–400. https://doi.org/10.21608/jces.2020.88476

Baldwin, A. A., Brown, C. E., & Trinkle, B. S. (2007). *OPPORTUNITIES FOR ARTIFICIAL INTELLIGENCE DEVELOPMENT IN THE ACCOUNTING DOMAIN : THE CASE FOR AUDITING*. *86*(2006), 77–86. https://doi.org/10.1002/isaf

Damerji, H., & Salimi, A. (2021). Mediating effect of use perceptions on technology readiness and adoption of artificial intelligence in accounting. *Accounting Education*, *30*(2), 107–130. https://doi.org/10.1080/09639284.2021.1872035

Hasan, A. R. (2022). Artificial Intelligence (AI) in Accounting & Auditing: A Literature Review. *Open Journal of Business and Management*, *10*(01), 440–465. https://doi.org/10.4236/ojbm.2022.101026

Hubler, M., Felder-strauss, J., & Self, S. W. (2024). *POTENTIAL IMPACT OF ARTIFICIAL INTELLIGENCE ON THE ACCOUNTING PROFESSION : WILL ARTIFICIAL INTELLIGENCE BE THE NEW CPA ?* *4*(1), 93–107.

Mansor, N. A., Hamid, Y., Anwar, I. S. K., Mohd Isa, N. S., & Abdullah, M. Q. (2022). The Awareness and Knowledge on Artificial Intelligence among Accountancy Students. *International Journal of Academic Research in Business and Social Sciences*, *12*(11), 1629–1640. https://doi.org/10.6007/ijarbss/v12-i11/15307

Mohammad, S. J., Hamad, A. K., Borgi, H., Thu, P. A., Sial, M. S., & Alhadidi, A. A. (2020). How artificial intelligence changes the future of accounting industry. *International Journal of Economics and Business Administration*, *8*(3), 478–488. https://doi.org/10.35808/ijeba/538

Nouraldeen, R. M. (2023). The impact of technology readiness and use perceptions on students' adoption of artificial intelligence: the moderating role of gender. *Development and Learning in Organizations*, *37*(3), 7–10. https://doi.org/10.1108/DLO-07-2022-0133

Putu, N., Ayuningtyas, W., Lubis, S. H., Makaba, K. A., & Universal, U. (2024). *ANALYSIS OF TECHNOLOGY READINESS OF GENERATION Z ACCOUNTANTS WITH THE TECHNOLOGY ACCEPTANCE MODEL IN ADOPTING ARTIFICIAL*. *4*(11).

Sudaryanto, M. R., Hendrawan, M. A., & Andrian, T. (2023). The Effect of Technology Readiness, Digital Competence, Perceived Usefulness, and Ease of Use on Accounting Students Artificial Intelligence Technology Adoption. *E3S Web of Conferences*, *388*. https://doi.org/10.1051/e3sconf/202338804055

Szadziewska, A., & Kujawski, J. (2024). *ARTIFICIAL INTELLIGENCE AS PERCEIVED BY ACCOUNTING STUDENTS . AN OBSERVATION FROM POLAND*. *203*.

Times, T. E. (2025, May). *What is Audit*.

https://economictimes.indiatimes.com/definition/audit?from=mdr

Wilson, John, Ferrer, Santiago, Burchfiel Savannha, Coplon Jake Moreno, Ashton, Emily and Verdiyan, A. (2024). *What Gen Z Thinks About AI in Higher Ed*. https://www.bcg.com/publications/2024/gen-z-and-ai-in-higher-ed

THE INFLUENCE OF DIGITAL MARKETING CAPABILITY AND BEHAVIORAL CUSTOMER RELATIONSHIP MANAGEMENT ON INCREASING SALES OF MSMEs: EMPIRICAL STUDY IN SURAKARTA CITY

Muhammad Syhabuddin*
Management Study Program, Sekolah Tinggi Ilmu Ekonomi Surakarta
muhammadsyihabuddin74@gmail.com

Astuti Wulandari
Management Study Program, Sekolah Tinggi Ilmu Ekonomi Surakarta
wlndrastt13@gmail.com

Abstract

This study aims to analyze the influence of Digital Marketing Capability and Behavioral Customer Relationship Management (BCRM) on the sales performance of Micro, Small, and Medium Enterprises (MSMEs) in Surakarta, Indonesia. The research is motivated by the increasing need for MSMEs to adapt to digital transformation and to understand customer behavior in order to remain competitive. A quantitative approach was employed using survey data from 150 MSME owners, and the data were analyzed using multiple linear regression. The results show that both Digital Marketing Capability and Behavioral CRM have a positive and significant effect on sales improvement. Behavioral CRM has a stronger influence compared to Digital Marketing Capability, indicating that marketing strategies based on customer behavioral insights yield better performance outcomes. These findings are consistent with the Resource-Based View and Relationship Marketing Theory, and support previous studies emphasizing the importance of technology integration and customer relationship strategies. The managerial implication is that MSMEs should enhance their digital marketing capabilities and develop CRM systems that effectively utilize customer behavioral data. The study is limited to a specific geographic area and uses cross-sectional data; thus, future research is encouraged to adopt longitudinal designs and expand the study scope.

Keywords: Behavioral CRM, Digital Marketing Capability, MSMEs, Sales Performance, Surakarta

INTRODUCTION

Micro, Small and Medium Enterprises (MSMEs) are the backbone of the Indonesian economy. Based on data from the Indonesian Ministry of Cooperatives and SMEs in 2023, the number of MSMEs in Indonesia has reached around 65 million business units, or around 99% of the total national business actors. Its contribution to Gross Domestic Product (GDP) is also very significant, namely around 60.5%, and is able to absorb more than 97% of the workforce in Indonesia.

MSMEs in Indonesia are dominated by micro businesses, with more than 63 million units. The most common types of business run include the retail trade, food and beverage, creative industry and service sectors. As technology develops, digitalization of MSMEs has become the government's focus. By the end of 2023, around 22 million MSMEs have been connected to the digital ecosystem, either through e-commerce, social media or digital payment platforms. The government targets as many as 30 million MSMEs to go digital by 2024.

The city of Surakarta or Solo is known as one of the creative cities and a center for MSME growth in Central Java. Based on data from the Surakarta City Cooperatives and SMEs Service in 2023, it was recorded that there were around 63,000 active MSMEs in this area. MSMEs in Solo are spread across various sectors, with dominance in the culinary, fashion and craft sectors (including batik), as well as services and trade.

Laweyan and Banjarsari districts have become centers of concentration of MSMEs, especially those operating in the batik sector and other creative industries. The Surakarta City Government is also active in encouraging the digitalization of MSMEs through marketplace onboarding programs, digital marketing training, and technology facilitation at Solo Techno Park and Rumah MSME Digital. By 2023, more than 12,000 MSMEs in Surakarta have joined the digital ecosystem and utilized online platforms for marketing and sales. The city of Surakarta shows a strategic role in supporting people-based economic growth in Indonesia, especially through strengthening the capacity and competitiveness of MSMEs in the digital era.

In the current era of digital transformation, the business landscape is experiencing very rapid and dynamic changes. The development of information technology has driven changes in consumer behavior who increasingly rely on digital platforms in the process of searching, purchasing and interacting with products or services. In this situation, digital marketing is no longer an option, but rather a strategic necessity for business actors, including Micro, Small and Medium Enterprises (MSMEs). The ability to implement digital marketing strategies effectively allows MSMEs to reach a wider market, increase brand visibility, and compete with large-scale companies.

The development of digital technology has had a significant impact on various aspects of life, including the business world. In the midst of increasingly fierce market competition, Micro, Small and Medium Enterprises (MSMEs) are required to be able to adapt to changes and utilize technology optimally. Digital marketing capability is a crucial aspect that can increase the competitiveness of MSMEs in reaching consumers more widely, effectively and efficiently. On the other hand, managing relationships with customers through a behavioral customer relationship management (CRM) approach also plays an important role in creating loyalty and increasing customer value.

In this context, understanding how digital marketing capabilities and the application of behavioral CRM contribute to increasing sales is very relevant, especially for MSMEs in the city of Surakarta, which is one of the centers of informal sector-based economic growth in Indonesia. This study aims to empirically examine the influence of these two factors on the sales performance of MSMEs, as well as provide strategic recommendations that can be implemented by business actors in optimizing digital potential and customer relationship management.

Various previous studies have discussed the importance of digital marketing and CRM separately, but there is still little research that combines the two simultaneously, especially in the context of MSMEs in developing areas such as Surakarta. More specifically, the behavioral CRM approach has not been widely used as the main focus in studies related to strategies for increasing MSME sales. Behavioral CRM has the advantage of utilizing real-time customer behavior data, which allows MSMEs to develop strategies based on consumer preferences more accurately. Therefore, this research presents novelty by empirically testing the integration between digital marketing capabilities and behavioral CRM in the context of increasing MSME sales.

Based on this background, this research aims to analyze the influence of digital marketing capability and behavioral customer relationship management on increasing MSME sales: Empirical study in the city of Surakarta.

LITERATURE REVIEW AND HYPOTHESIS

1. Theory Digital Marketing Capability

   Digital Marketing Capability refers to the ability of an organization or business, including MSMEs, to design, manage and implement digital technology-based marketing strategies effectively to achieve business goals. This capability covers various aspects, such as mastery of digital tools (e.g. social media, SEO, email marketing, And website), utilization of analytical data for decision making, as well as the ability to create digital content that is relevant and interesting for the target market.

   According to Trainor et al. (2014), digital marketing capability is a combination of technological resources and knowledge that enables companies to develop more effective customer relationships through digital channels. This is not just about having access to technology, but also includes competence in managing digital interactions strategically. In general, digital marketing capability includes three main dimensions: Digital Technology and Infrastructure, Human Resources and Skills, and Data Analysis and Use.

   The following is an explanation of the ability assessment indicators Digital Marketing Capability:

   a. Ability to Use Digital Media

      Assess how effective an organization or individual is in utilizing various digital media for marketing purposes. Indicator:

      1) Active and strategic use of social media (Instagram, Facebook, TikTok, LinkedIn, etc)

2) Utilization of digital advertising such as Google Ads, Meta Ads, or platform DSP
3) Ability to manage digital platforms (website, marketplace, application)
4) Consistency in utilizing digital channels that suit the target audience

b. Content Management

Assess capabilities in designing, producing, distributing, and evaluating digital content. Indicator:

1) Quality and relevance of content to the target market
2) A planned and structured editorial schedule
3) Adaptability of content for various formats (text, images, videos, infographics)
4) Use of techniques THIS in writing web and blog content

c. Online Interaction

Assess the extent to which two-way communication between brand and audience is maintained and developed. Indicator:

1) Responsiveness to customer comments, direct messages, or questions
2) Engagement level (like, share, comment, retweet) on social media
3) Online community activities or customer forums
4) Utilization chatbot or features live chat to support digital services

d. Use of Digital Data

Assess the ability to collect, analyze and use digital data for marketing decision making. Indicator:

1) Use of analytical tools (Google Analytics, Meta Business Suite, etc)
2) Monitoring campaign proforma (CTR, conversion rate, bounce rate)
3) Personalize content and campaigns based on customer data
4) Based decision making insight from data (data-driven marketing)

2. Theory Behavioral CRM

Behavioral Theory (or Behavioral Theory) is an approach in the social sciences that emphasizes observable behavior as the basis for understanding humans, rather than focusing on internal thoughts or feelings. This theory is widely used in psychology, education, management, and leadership. Main Concepts of Behavioral Theory:

a. Behavior Can Be Learned.

   Humans learn through interaction with the environment, and desired behavior can be formed through reinforcement (reinforcement) and punishment (punishment).

b. Stimulus–Respons (S–R)

   Every behavior is considered a response to a stimulus. If a particular stimulus produces a desired response, it is reinforced.

c. Reinforcement (Reinforcement)

   Positive (rewards) and negative reinforcement (removing unpleasant things) increase the likelihood of a behavior being repeated.

d. Punishment (Punishment)

   Punishment is used to reduce or eliminate undesirable behavior.

e. Observation and Imitation (Modeling)

   People learn by observing the behavior of others, especially authority figures or respected figures. This concept is very deep Social Learning Theory (Bandura).

Indicators in the context of digital marketing and customer relationship management:

a. Customer Interaction Frequency

   Shows how often the brand interacts with customers via digital media. The goal is to increase engagement (engagement) and maintain loyalty. This indicator reflects:

   1) Communication consistency (email, social media, live chat, etc)
   2) The number of customer conversations or responses in a certain period
   3) Frequency of interactive content updates (polling, quizzes, Q&A sessions)
   4) Customer participation in online communities or forums

b. Promotional Adjustments

   Assess the ability to tailor promotional content to customer preferences and behavior. The goal is to increase campaign effectiveness and conversions. These indicators include:

   1) Segmentation audience based on behavioral data
   2) Personalize promotional messages based on purchase history or interests

3) Adapt promotional content to suit the time of day, season or trends
4) Utilize data from A/B testing to improve campaigns

c. Post-Purchase Follow-up

Shows brand activity after a customer makes a purchase. Goal: Increase loyalty, satisfaction and likelihood of repeat purchases. These indicators include:

1) Sending a thank you or confirmation email
2) Request a review or testimonial
3) Offering additional or complementary products (cross-selling / upselling)
4) Follow-up to ensure satisfaction and solutions if there are complaints

d. Management Feedback

Assess ability to manage and respond to customer feedback effectively. The goal is to improve service quality, reputation and customer trust. These indicators include:

1) Response time to feedback (positive or negative)
2) Real action based on customer input
3) Transparency in responding to complaints in public spaces (example: review Google, social media comments)
4) Internal feedback and follow-up reporting system

Study of Behavioral CRM from Ngai et al. (2009) in their research, namely Application of data mining techniques in customer relationship management: A literature review and classification states that CRM use is behavior-based in a digital context, including utilization machine learning and data mining to predict online customer behavior. Another study from Kumar et al. (2006) show that effective use of behavioral data in CRM can increase loyalty, retention, and lifetime value customer.

3. MSME sales

Measuring the sales performance of MSMEs (Micro, Small and Medium Enterprises) is a process of evaluating how effective and efficient sales activities are in achieving business goals. This measurement is important so that MSMEs can assess growth, identify weaknesses, and develop better sales strategies. The following are some general indicators to measure MSME sales performance:

a. Total Sales (Sales Volume/Revenue) : Measuring the amount or value of sales during a certain period. This is a basic indicator to see overall sales performance.
b. Sales Growth (Sales Growth) : Measuring the increase or decrease in sales over time. For example, comparing sales this month with the previous month or the previous year.
c. Number of Transactions : Measuring how many transactions occurred. This is useful for seeing how often customers make purchases.
d. Average Transaction Value (Average Transaction Value) : Total sales divided by the number of transactions. This helps evaluate how much the average customer purchases.
e. Customer Retention Rate : Assess how many customers return to buy. Loyal customers tend to increase sales stability.
f. Sales Conversion : The percentage of prospects or visitors who turn into buyers. Very useful for MSMEs that use digital marketing strategies.
g. Gross Profit from Sales : Calculate the difference between sales revenue and direct costs (for example production costs or purchasing goods). It measures the profitability of sales activities.
h. Ratio of Marketing Costs to Sales : Measures how much marketing expenditure is compared to revenue from sales. An efficient ratio means the marketing strategy is quite effective.
i. Market share : Although difficult to measure precisely by MSMEs, changes in local or niche market share can reflect performance growth.

This performance measurement can be carried out periodically (weekly, monthly, quarterly) and adjusted to the type of business and resource capacity of MSMEs.

4. Theory Resource-Based View

Theory Resource-Based View (RBV) is a theory in strategic management which states that a company's competitive advantage comes from the internal resources it has and how the company manages these resources effectively. In the context of theory Resource-Based View (RBV), indicators are used to identify and measure the internal resources and capabilities of an organization that can be a source of competitive advantage. Following are the main indicators based on the VRIO framework (Valuable, Rare, Inimitable, Organized).

Previous studies regarding the RBV theory are from Ismail, M. D., & Alam, S. S. (2019) which uses RBV to explain how innovation as an internal resource influences the performance of MSMEs. Another study from Pratono, A.H. (2018) who took a study in Indonesia that connected the RBV theory with risk taking and MSME performance.

5. Relationship Marketing Theory

Theory Relationship Marketing is a theory in marketing that focuses on building, maintaining, and strengthening long-term relationships between companies and customers, rather than just pursuing one-time transactions. Main Concepts of Relationship Marketing:

a. Long Term Orientation : Focus on creating ongoing, mutually beneficial relationships, not just a quick sale.
b. Loyalty Customers **:** The goal is to increase loyalty by meeting expectations, providing value, and building trust.
c. Consistent Interaction Continuous two-way communication, both online and offline, to maintain relationships and understand customer needs.
d. Personalization and Added Value **:** Customize products, services and communications based on customers' individual needs and preferences.
e. Customer Satisfaction and Trust **:** Two key factors in building long-term relationships. Trust is formed from consistent positive experiences.
f. Customer Retention : It is cheaper to retain old customers than to find new ones. Relationship marketing prioritizes retention strategies.

Implementation of RMT based on (Morgan, Robert & Hunt, Shelby, 1994) for example in loyalty programs (loyalty card), follow-up customers personally, use of CRM (Customer Relationship Management), customer community.

6. Framework of thinking

In the current digital era, MSMEs are required to adapt to technological developments and increasingly dynamic consumer behavior. One important strategy that can encourage sales growth is strengthening digital marketing capabilities. This capability includes MSME skills in utilizing digital channels such as social media, websites, online advertising and data analytics to reach wider customers and increase the effectiveness of marketing communications.

On the other hand, the application of Behavioral Customer Relationship Management (BCRM) is very relevant for maintaining and deepening relationships with customers. Through BCRM, MSMEs can collect and analyze customer behavior data such as purchasing habits, product preferences and responses to promotions. This information allows MSMEs to provide more personalized service and more effective customer retention strategies.

Based on perspective Resource-Based View (RBV), both digital capabilities and behavior-based customer relationship management are internal resources that can create competitive advantages if managed appropriately. Meanwhile, Relationship Marketing theory supports the importance of building long-term relationships with customers as a way to increase loyalty and encourage repeat sales.

Thus, in the context of MSMEs in the City of Surakarta, this research views that Digital Marketing Capability and Behavioral CRM individually and simultaneously have great potential in improving sales performance. It is hoped that MSMEs that are able to develop these two aspects strategically will experience significant sales growth. The following is a diagram of the thinking framework above:

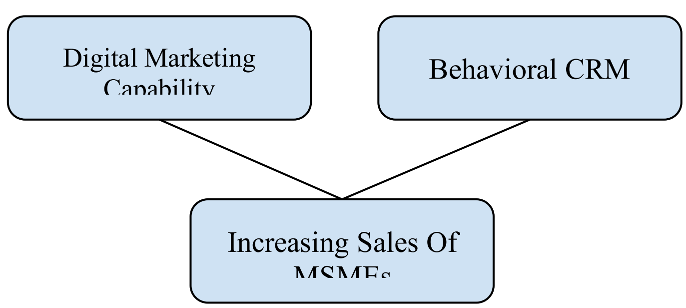

Figure 1. Relationship between variables
Source: Author

Hypothesis

Based on the thinking framework of the research title "The Influence of Digital Marketing Capability and Behavioral Customer Relationship Management on Increasing MSME Sales: Empirical Study in Surakarta City", the following is a hypothesis formulation that can be proposed:

a. $H0_1$: Digital Marketing Capability and Behavioral Customer Relationship Management do not have a significant effect on increasing MSME sales in Surakarta City.
b. $H0_2$: Digital Marketing Capability and Behavioral Customer Relationship Management simultaneously do not have a significant effect on increasing MSME sales in the city of Surakarta.
c. H_1: Digital Marketing Capability has a positive and significant effect on increasing MSME sales in the city of Surakarta.
d. H_2: Behavioral Customer Relationship Management has a positive and significant effect on increasing MSME sales in Surakarta City.
e. H_3: Digital Marketing Capability and Behavioral Customer Relationship Management simultaneously have a positive and significant effect on increasing MSME sales in the City of Surakarta.

METHODOLOGY

This type of research is explanatory quantitative, which aims to test the causal relationship between variables *Digital Marketing Capability* (DMC), *Behavioral Customer Relationship Management* (BCRM) and Increased MSME Sales. The analysis was carried out statistically using multiple linear regression techniques. The population used is active MSMEs in the city of Surakarta, especially those who have used it *platform* digital (social media, e-*commerce*, or a simple CRM application). Samples taken using *purposive sampling* with criteria:

1. Have been running digital marketing for at least 1 year
2. Have customer data (at least contact based/transaction history)
3. Have carried out CRM activities (eg *follow-up*, personalization of promotions)

Table 1. Variable

Variable Type	Variable Name	Key Indicators
Independent (X1)	*Digital Marketing Capability* (DMC)	Ability to use digital media, content management, online interaction, use of digital data
Independent (X2)	*Behavioral CRM* (BCRM)	Frequency of customer interactions, customization of promotions, post-purchase follow-up, feedback management
They depend (And)	Increased Sales	Increase in turnover, increase in the number of customers, increase in repeat transactions (repeat orders)

*Instruments will be measured using a scale **Like 1-5**.

Data analysis techniques are a systematic process of processing, testing and interpreting data that has been collected so that it can be used to answer problem formulation and test research hypotheses.

1. **Validity and Reliability Test**
   The Corrected Item Total Correlation test aims to measure the extent to which the questions in the questionnaire actually measure the variable in question. An item is declared valid if the Corrected Item Total Correlation value is > 0.3 (r table depends on the number of respondents and significance level). Cronbach's Alpha is used to measure the consistency or stability of a research instrument.
2. **Classical Assumption Test**

Gujarati, D. N. (2003) and Wooldridge, J. M. (2012) state that the classification assumption test is used before carrying out regression analysis, to ensure the data meets statistical requirements. Generally include:

a. Normality Test: Assesses whether the data is normally distributed (e.g. Kolmogorov-Smirnov, Shapiro-Wilk).

b. Multicollinearity Test: Tests whether the independent variables are highly correlated with each other. Indicators: VIF < 10 and Tolerance > 0.1 → free from multicollinearity.

c. Heteroscedasticity Test: Tests whether there is unequal variance in the residuals (error). If the residual values are spread randomly, then the data is heteroscedasticity free.

d. Autocorrelation Test (if time series data): Tests the relationship between one error and another. Usually the Durbin-Watson Test is used.

3. **Multiple Linear Regression Analysis**

Model:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$$

Information:

Y = Increased Sales

X_1 = *Digital Marketing Capability* (DMC)

X_2 = *Behavioral CRM* (BCRM)

ε = error

RESULTS AND DISCUSSION

Classic Assumption Test Results

1. Normality Test

Table 2. Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		150
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	10.27005503
Most Extreme Differences	Absolute	.035
	Positive	.035
	Negative	-.030
Test Statistic		.035
Asymp. Sig. (2-tailed)		.200[c,d]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

Source: Output SPSS 25

Because the significance result (0.200) > α (0.05), then Failed to Reject H_0 so it can be concluded that the sample comes from a normally distributed population.

2. Homoscedasticity Test

Table 3. Homoscedasticity Test

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	8.378	2.175		3.851	.000
	Digital Marketing Capability (DMC)	-.005	.027	-.016	-.190	.850
	Behavioral CRM (BCRM)	.004	.034	.009	.103	.918

a. Dependent Variable: Abs_RES

Source: Output SPSS 25

The significance of variable DMC and BRCM > α (0.05), then Fails to Reject H_0 so it can be concluded that the error variance is homoscedastic.

3. Autocorrelation Test

Table 4. Autocorrelation Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.818[a]	.669	.664	10.339683	1.824

a. Predictors: (Constant), Behavioral CRM (BCRM), Digital Marketing Capability (DMC)

b. Dependent Variable: Increase in Sales

Source: Output SPSS 25

That dL 1.634 and dU 1.715. Because the value of Durbin Watson (DW) is 1.824 more than dU (4-1.715 = 2.284), so Autocorrelation does not occur.

4. Multicollinearity Test

Table 4. Multicollinearity Test

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	-12.112	3.710		-3.265	.001
	Digital Marketing Capability (DMC)	.532	.046	.552	11.631	.000
	Behavioral CRM (BCRM)	.764	.059	.617	12.989	.000

Coefficients[a]

Model		Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)		
	Digital Marketing Capability (DMC)	.999	1.001
	Behavioral CRM (BCRM)	.999	1.001

a. Dependent Variable: Increase in Sales

Source: Output SPSS 25

Because the VIF calculation result is <10 and the Tolerance calculation result is >0.10, all variables meet the non-multicollinearity assumption.

Regression Test Results

1. Partial Test

Table 5. Partial Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-12.112	3.710		-3.265	.001
	Digital Marketing Capability (DMC)	.532	.046	.552	11.631	.000
	Behavioral CRM (BCRM)	.764	.059	.617	12.989	.000

a. Dependent Variable: Increase in Sales

Digital Marketing Capability towards increasing sales, because the significance < α (0.05), then Reject H_0. It can be partially concluded that Digital Marketing Capability has a significant effect on Increased Sales. Behavioral CRM towards increasing sales, because the significance < α (0.05), then Reject H_0. It can be partially concluded that Behavioral CRM has a significant effect on Increased Sales.

2. Regression Equations

$$Y = -12.112 + 0.532X_1 + 0.764X_2$$

Interpret $Beta_0$ = -12.112
If Digital Marketing Capability (X1) and Behavioral CRM (X2) is constant, then the Sales Increase (Y) is -12.112.

Interpret $Beta_1$ = 0.532

If Behavioral CRM (X2) has a constant value, so for each increase Digital Marketing Capability (X_1) by 1 unit will increase Sales Increase (Y) by 0.532.

Interpret $Beta_2 = 0.764$
If Digital Marketing Capability (X1) is constant, then for each increase Behavioral CRM (X_2) by 1 unit will increase Sales Increase (Y) by 0.764.

Discussion

The results of the multiple linear regression test show that it is good Digital Marketing Capability (DMC) or Behavioral Customer Relationship Management (BCRM) has a significant effect on increasing MSME sales in the city of Surakarta. Partially, DMC has a p value <0.05 with a regression coefficient of 0.53155. This indicates that every one unit increase in digital marketing capabilities will increase sales by 0.53155 units, assuming other variables remain constant. These findings are consistent with theory Resource-Based View (Barney, 1991), which states that internal capabilities such as digital marketing can become a strategic resource for MSMEs. In the context of digitalization, the ability to utilize platform digital, social media and technology-based marketing strategies provide competitive advantages in reaching wider consumers and responding to the market more quickly.

Meanwhile, BCRM also shows a significant effect with a p value <0.05 and a coefficient of 0.76417. This means that every one unit increase in behavior-based customer relationship management capabilities will increase sales by 0.76417 units. These findings strengthen the concept Relationship Marketing (Berry, 1983) and approaches Behavioral CRM (Buttle, 2009), which emphasizes the importance of utilizing customer behavior data to build valuable long-term relationships. Understanding customer preferences, purchasing patterns and habits allows MSMEs to provide more personalized and relevant services, which ultimately increases loyalty and repeat purchases.

Overall, the results of this research support various previous studies which state that digital marketing capabilities and behavior-based customer relationship management are important factors in improving the sales performance of MSMEs (Chaffey & Ellis-Chadwick, 2019; Setiawan et al., 2020). Thus, MSMEs that want to increase their competitiveness need to invest in increasing digital capabilities and strategic use of customer data. This research confirms that integration between technology and understanding consumer behavior is key in today's MSME marketing strategy.

CONCLUSION

Based on the results of multiple linear regression analysis, this research concludes that Digital Marketing Capability and Behavioral Customer Relationship Management have a significant effect on increasing MSME sales in the City of Surakarta. This finding answers the problem formulation that these two independent variables partially or simultaneously have a real contribution in driving the sales performance of MSMEs. In particular, Behavioral CRM shows a greater impact, indicating the importance of understanding customer behavior in building long-term relationships and driving consumer loyalty. The managerial implications of this research show that MSME players need to develop more structured digital-based marketing strategies, such as optimizing social media, using analytical data, and managing digital content that is relevant to the target market. In addition, it is important for MSMEs to start adopting a behavior-based CRM approach, for example by segmenting customers based on transaction history or preferences, in order to increase the relevance of communications and the effectiveness of promotions.

However, this research has several limitations, including the use of cross-sectional data which does not capture the dynamics of changes in customer behavior over time, as well as a geographical focus that is limited to the Surakarta area, so generalizing the results to other regions needs to be done with caution. Additionally, this study did not explore moderator or mediating variables that might strengthen the relationships between variables. For future research, it is recommended to use a longitudinal design to observe changes in the influence of variables more comprehensively. Researchers can also expand the scope of the study area and add other variables, such as intensity of technology use, customer satisfaction, or product innovation, as supporting factors for increasing sales.

With a broader and deeper approach, future research is expected to provide richer theoretical and practical contributions to the development of MSMEs in the digital era.

REFERENCES

Barney, J.B. (1991), “Firm resources and sustained competitive advantage”, *Journal of Management*, Vol. 17 No. 1, pp. 19-120.

Berry, L.L. (1983). *Relationship marketing. Emerging Perspectives on Services Marketing*, 66(3), 33–47.

Buttle, Francis. (2009). *Customer Relationship Management Concepts and Technologies*. Second Edition. Elsevier, Oxford.

Chaffey, D., & Chadwick, F.E. (2019). *Digital Marketing: Strategy, Implementation and Practice*, 7th ed. London: Pearson.

E.W.T. Ngai, Li Xiu, D.C.K. Chau. (2009). Application of data mining techniques in customer relationship management: A literature review and classification, *Expert Systems with Applications*, Volume 36, Issue 2, Part 2, Pages 2592-2602, https://doi.org/10.1016/j.eswa.2008.02.021.

Gujarati, D.N. (2003). *Basic Econometrics*. 4th Edition, McGraw-Hill, New York.

Ismail, Md Daud and Alam, Syed Shah (2019) "Innovativeness and Competitive Advantage among Small and Medium Enterprise Exporters: Evidence from Emerging Markets in South East Asia," *The South East Asian Journal of Management*: Vol. 13: No. 1, Article 5. DOI: 10.21002/seam.v13i1.9872

Kumar, V. & Reinartz, Werner. (2006). *Customer Relationship Management: A Databased Approach*.

Morgan, Robert & Hunt, Shelby. (1994). The Commitment-Trust Theory of Relationship Marketing. *The Journal of Marketing*. 58. 20-38. 10.2307/1252308.

Pratono, A.H. (2018), "Does firm performance increase with risk-taking behavior under information technological turbulence? Empirical evidence from Indonesian SMEs", *Journal of Risk Finance*, Vol. 19 No. 4, pp. 361-378. https://doi.org/10.1108/JRF-10-2017-0170

Setiawan, A. S (2020). Market orientation, strategic choice and the functional role of accounting: A study of the hotel industry in South Sumatra. *Journal of Business and Information Systems*, Vol. 2 (1). pp. 1 – 11.

Wooldridge, Jeffrey. (2012). *Introductory Econometrics: A Modern Approach*. 20.

Vol. 8 No.1
Januari-Juni
2025

LINKING HUMAN RESOURCE COMPETENCY TO THE PERFORMANCE OUTCOMES OF MSMEs

Almas Farah Dinna Dewi*
Universitas Jember, Indonesia
almasfarah@unej.ac.id*

Isti Fadah
Universitas Jember, Indonesia
isti.fadah@unej.ac.id

Handriyono
Universitas Jember, Indonesia
handriyonofeb@gmail.com

Abstract

Every year, micro, small, and medium enterprises (MSMEs) play a vital role in boosting economic growth and increasing gross domestic product (GDP) in many countries, including Indonesia. Among various business categories, agroindustry-based MSMEs stand out as one of the most resilient segments within the informal sector, particularly during economic crises. This resilience was evident in various situations, including the post-COVID-19 recovery period. However, the rapid advancement of digitalization, technology, and heightened market competition has created both opportunities and challenges for small and medium-sized enterprises. To enhance their performance, it is essential to identify the key components required for developing and strengthening human resource (HR) quality in alignment with current industry demands. This study employs a descriptive research design with a quantitative approach, utilizing multiple linear regression analysis. The findings indicate that human resource competencies—namely education, skills, and abilities—significantly impact the performance of agroindustry-based MSMEs. The study focuses on a city known for its contribution to Indonesia's agribusiness sector, with the aim of offering a replicable model for enhancing MSME performance in other agroindustry-oriented countries.

Keywords: HR Competency; Performance Improvement; MSMEs; Agroindustry.

INTRODUCTION

Strategic themes in national development increasingly emphasize economic activities rooted in agriculture, industry, and trade. One of the key approaches to improving community welfare is through the advancement of agroindustry, which has been recognized as a sector with high potential for growth. Agroindustry development plays a critical role in enhancing added value and income, generating employment opportunities, stimulating regional development, empowering the national economy, and maximizing the use of local resources through integrated upstream to downstream linkages.

Micro, small, and medium enterprises (MSMEs) are vital drivers of Indonesia's economic progress. They have consistently demonstrated resilience during economic downturns and have shown continuous growth in number and economic contribution. Each year, MSMEs help create substantial employment, boost GDP, and stimulate national economic development. Their strength lies in their ability to utilize locally sourced raw materials, operate with minimal capital, and adopt efficient production technologies. Given the ongoing importance of agriculture in the lives of Indonesians, agroindustry-based MSMEs—especially in agribusiness-focused regions like Jember—deserve strategic focus and support.

Despite their potential, the performance of many MSMEs remains constrained, particularly in the domain of human resources. This highlights the need for a parallel effort in human resource development to support MSME growth. Contrary to the assumption that MSME entrepreneurs in Indonesia have low educational backgrounds, survey data indicates that a significant proportion hold senior high school diplomas (44.1%), bachelor's degrees (17.9%), and associate degrees (7.4%), with fewer below high school level. Nonetheless, improving the quality of human capital remains crucial. Core competencies—including knowledge, technical skills, capabilities, and entrepreneurial attitudes—are essential for boosting MSME performance.

Moreover, entrepreneurs and their employees require continuous HR development, particularly in adapting to technological advancements that can enhance productivity and entrepreneurial capacity. Current gaps in science and technology mastery, along with limited marketing skills among MSME personnel, further underline the urgency of strengthening human resource competencies.

In light of these conditions, prioritizing HR competency development within MSMEs is fundamental for fostering a competitive and innovative workforce capable of navigating both domestic and global markets. This study aims to examine the influence of HR competencies on the performance of agroindustry-based MSMEs by employing a multiple linear regression approach. The findings are expected to inform strategic efforts in improving MSME performance through competency enhancement initiatives.

LITERATURE REVIEW

Performance, according to Simamora (2001), refers to the accomplishment of job requirements, observable through both the quantity and quality of outputs, which can be either tangible or intangible. Nawawi (1997) emphasizes that performance results from completing a task, whether physical or non-physical. Baswir, cited in Ardiana et al. (2010), expands this definition by stating that performance is the outcome of work executed by individuals or groups in an organization, aligned with their duties, responsibilities, and authority in achieving organizational goals.

The performance of micro, small, and medium enterprises (MSMEs) is influenced by both internal and external factors (Attahir, 1995). Internal factors include entrepreneurial competence and characteristics, which, when improved, can enhance human resource (HR) performance (Hadiyati, 2014). Competence—defined as the set of personal characteristics such as motives, self-concept, traits, knowledge, and skills—serves as a measure of individual workplace performance (Mitrani et al., 1992). Spencer and Spencer

(1993) categorize competencies into “borderline competencies,” which are necessary but do not distinguish high performers from average ones, and “differentiating competencies,” which do.

Competence is closely linked to performance at both individual and organizational levels, including MSMEs (Armstrong, 1994). Entrepreneurial competence enables individuals to face challenges and competition while supporting decision-making (Ng & Kee, 2013). The development of entrepreneurial characteristics—such as adaptability, resilience, a drive for excellence, and a willingness to learn—is also crucial (Muharastri et al., 2015; Darya, 2012). These are complemented by business competencies, which include business knowledge, skills, and adaptive capabilities.

Entrepreneurial, managerial, and technical competencies are essential for MSME success (Ng & Kee, 2013). Managerial competence reflects conceptual, interpersonal, and technical skills, whereas entrepreneurial competence involves environmental awareness and opportunity identification for business development.

The correlation between employee performance and HR competence is well-established. Skills are defined as the capacity to execute tasks effectively (Widayati et al., 2022). Knowledge management plays a critical role in strategically developing, implementing, and utilizing knowledge to improve performance (Awaliyah, 2017; Desembrianita et al., 2022). Studies by Winarto (2021), Amelia and Hendra (2019), and Widayati et al. (2021) demonstrate that knowledge, skills, and abilities significantly affect MSME performance.

Marampa et al. (2022) found that owner competencies and attitudes positively influence business performance. Competencies—encompassing skills, knowledge, behaviors, and traits—are essential to organizational success regardless of size (Dharmanegara et al., 2016). However, Setiyono et al. (2022) argue that knowledge management alone does not directly impact MSMEs; instead, its influence is mediated by market orientation and product innovation.

Digital literacy is another critical factor that enhances MSME performance, particularly in marketing (Widiastuti et al., 2021). Mutuku et al. (2022) found a significant positive correlation between entrepreneurial skills and SME performance. Similarly, Bai and He (2021), along with Sembiring (2016), highlight that HR skills have a more substantial effect on MSME performance than knowledge alone.

METHODOLOGY

This research is included in the type of descriptive research which aims to describe the state of population competence or empirical facts. The population situation or empirical facts that will be described in this research are about the influence of MSME HR competencies which include knowledge, skills, and abilities on the performance of MSMEs in agroindustry-based.

This research is based on the results of a field survey conducted on MSME actors who focused on the agro-industry-based sector in Jember as a population with a sample of 150 MSMEs who are members of the Jember Regency, Indonesia Cooperatives and MSMEs Service.

The survey was carried out by conducting interviews and filling out questionnaires online and offline regarding personal data, information about the entrepreneurship that the respondent is pursuing, and the competencies possessed by the respondent. All data from the questionnaire was then collected, analyzed for completeness, validity, and reliability of the data, and then analyzed using the multiple linear regression method. In the multiple linear regression method, the data must meet existing assumptions, such as the multicollinearity test, homoscedasticity test, and autocorrelation test. The multicollinearity test aims to test the existence of correlation between independent variables in the regression model. The heteroscedasticity test aims to test whether the regression model has unequal variances from the residuals of one observation to another observation.

There are four variables analyzed in this research, namely variables that indicate competence, such as knowledge seen from the level of education possessed by MSME business actors, skills and abilities which are independent variables, and performance which in this case is measured by the income of business actors. MSMEs which are the dependent variable. Each variable is represented by a question that refers to the data to be obtained based on the definition of that variable. The resulting data will be data in the form of ratios which are then analyzed using multiple linear regression to determine the influence of the independent variable on the dependent variable partially and simultaneously. To prove and test whether there is a significant partial influence or not, the t-test will be used, while to test whether there is a simultaneous influence, the F test will be used.

Data collection in this study was carried out using several techniques, as follows:

1. Documentary technique, used to collect data sourced from secondary data such as the physical and geographical conditions of the region, existing MSME centers, and the number and characteristics of MSMEs.
2. Questionnaire technique, carried out by creating a series of questions related to the competency of MSME human resources for Agribusiness-based processed that are members of PLUT Jember Regency.
3. Interview technique, used as a complement to obtain data that cannot be collected through other techniques, as well as a cross-check of the data collected.

In the data collection process, a combination of questionnaires and interviews was also carried out, with the questionnaire used as a guide so that the interviews were more structured and standardized. The steps to be taken in the data collection process are as follows:

1. Prepare questionnaires and conduct validity and reliability tests;
2. Recruiting surveyors and supervisors as field implementers;
3. Organizing training for surveyors and supervisors;

4. Implementation of data collection;
5. Submission of data collection results to the research team
6. Next, the collected data is tabulated, processed, and interpreted according to the research objectives.

RESULTS AND DISCUSSION

This study involved 150 MSME participants. The majority of respondents held a senior high school diploma (72 individuals), followed by 53 with a bachelor’s degree, 17 with a diploma, 7 with a junior high school education, and 1 respondent with a master’s degree. These findings suggest that most respondents had attained secondary or higher education levels.

Despite this, the majority had limited exposure to business development training, such as marketing, product packaging, legal business registration, and other relevant topics. Interview results revealed several contributing factors to the low training participation rate, including the unequal distribution of training information for MSMEs, internal constraints such as lack of time due to business activities, limited awareness of the importance of training for business growth, and other barriers.

Based on the combined data from questionnaires and interviews, 48% of respondents had completed senior high school, 35% held a bachelor's degree, 11% had a diploma, 5% had completed junior high school, 1% had a master’s degree, while none had completed only elementary education or held a doctoral degree. These figures are illustrated in the graph below.

In addition to the educational profile, data also revealed limited participation in MSME-related training programs. Specifically, 53% of respondents had attended only one training session, 32% had participated in two, 5% had completed three sessions, 4% had attended four trainings, 3% had never participated in any training, 2% had taken part in six sessions, and 1% had attended five training events. These findings highlight the low level of training engagement among MSMEs, emphasizing the need for greater efforts to increase participation in capacity-building initiatives. This information is also visualized in the following graph.

From the results of the normality test that has been carried out, the results show that the data is normally distributed with a significance value of more than 0.05. This means that there is no trend in the data on one side but rather that the data is evenly distributed and from these results, it can be continued with testing assumptions.

Table 1. Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		150
Normal Parameters[a.b]	Mean	.0000000
	Std.	.96926124
Most Extreme Differences	Deviation	.038
	Absolute	.037
	Positive	-.038
Test Statistic	Negative	.038
Asymp. Sig. (2-tailed)		.200[c.d]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.

Classic Assumption Test

In testing the assumptions of the classical regression model, the test results show that the main model does not violate the assumption that there is no heteroscedasticity. The results also show that between variables do not violate the assumption that there is no multicollinearity and autocorrelation. The results can be seen as follows.

Table 2. Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	Knowledge (X1)	Skill (X2)	Ability (X3)
1	1	3.453	1.000	.01	.01	.03	.01
	2	.343	3.172	.02	.01	.92	.06
	3	.133	5.098	.00	.73	.05	.43
	4	.071	6.998	.97	.24	.00	.50

a. Dependent Variable: Kinerja (Y)

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.2665	5.8654	3.3771	1.00564	150
Residual	-2.55176	2.36909	.00000	.96926	150
Std. Predicted Value	-2.099	2.474	.000	1.000	150
Std. Residual	-2.606	2.419	.000	.990	150

a. Dependent Variable: Kinerja (Y)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.720[a]	.518	.509	.97917	1.844

a. Predictors: (Constant), Ability (X3), Skill (X2), Knowledge (X1)
b. Dependent Variable: Kinerja (Y)

In testing the multiple regression model, the results show that the relationship between the independent variable and the dependent variable has a strong positive relationship as shown by the R square value. In this result, the value of R square is 0.518 which indicates that 51.8% of the variation in performance can be explained by education, skill, and ability, and the rest is explained by other variables outside the model. A high R square value also indicates that the model used is good. This shows that the independent variables in the form of education, skills, and abilities are positively related to the dependent variable, namely the performance of MSMEs, but other variables outside the main model also have an effect. From these results, it can also be seen that the Durbin-Watson value is 1.844 which is in the H0 acceptance area, which means that the model does not violate the assumption that there is no multicollinearity. R square is a number that shows the proportion of variation of the dependent variable that can be explained by the variation of the independent variable in the model. Decision-making regarding the multicollinearity test can also be seen from the VIF and Tolerance values which in the results of this test the VIF value <10 means that multicollinearity does not occur.

Table 3. Hypothesis Testing

Coefficients[a]

a. Dependent Variable: Performance (Y)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.596	.249		2.397	.018		
	Knowledge (X1)	.375	.056	.405	6.702	.000	.905	1.105
	Skill (X2)	.325	.057	.339	5.697	.000	.933	1.072
	Ability (X3)	.148	.027	.323	5.514	.000	.964	1.037

Based on the results of the tests that have been carried out using the education, skill, and ability variables as independent variables, as well as the performance variable as the dependent variable, a constant value of 0.596 is obtained. From this value, it can be seen that the performance of MSMEs is 0.596 when there is no influence from competencies in the form of education, skills, and abilities owned by MSME actors. From this value, there could be influence from other factors outside the three independent variables used in this study.

In the education variable, the regression coefficient value is 0.375 which is the largest value among the three independent variables used. These results indicate that the performance of MSMEs can increase by 0.375 when there is influence from the education factor of MSME actors. This shows that the education variable is the competency variable that most influences performance compared to the other two competency variables. This means that the educational background of the respondents has a big contribution to their performance. Education also does not have to be formal, but can also be informal. If education is increased by 1 unit, performance can increase by 0.375.

In the skill variable, the coefficient value is 0.325 which indicates that after education, skill is a variable that supports the performance of MSME actors. These results indicate that the performance of MSMEs can increase by 0.325 when there is influence from the skill factor of MSME actors. The skills possessed can be honed self-taught or enhanced by attending training. From this value, it can also be seen that if skills are increased it will support better performance. If the skill is increased by 1 unit then the performance can increase by 0.325.

In the ability variable, the coefficient value is 0.148 indicating that apart from education and skills, abilities also have an influence, but not as big as education and skills. These results indicate that the performance of MSMEs can increase by 0.148 when there is influence from the ability factor of MSME actors. Ability can be innate or is the result of practice or practice and is used to do something. If ability is increased by 1 unit then performance can increase by 0.148.

From the results of the t-test, the significance values of the three independent variables show a significance value of <0.05, which means that education, skill, and ability partially have a significant effect on the performance of MSME actors, with a significance value of education of 0.000, skill of 0.000, and ability of 0.000.

ANOVA.

Table 4. F test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	150.685	3	50.228	52.388	.000b
	Residual	139.981	146	.959		
	Total	290.666	149			

a. Dependent Variable: Kinerja (Y)
b. Predictors: (Constant), Ability (X3), Skill (X2), Knowledge (X1)

In the F test, the results show that the independent variables simultaneously have a significant effect on the dependent variable with a significant value of 0.000 < 0.05. This means that together the education, skill, and ability variables have a significant influence on the performance of MSME actors so each variable must be maintained.

Performance is the output or result of work that has been done and can be directly seen and used as evaluation material for subsequent work. In MSMEs, performance is also an important thing that needs to be considered so that the business can continue to survive and develop amidst the rapid and innovative development of the business world. The performance of MSMEs can be improved by increasing the competence of these business actors. The results of research that has been conducted show that competencies in the form of education, skills, and abilities have a positive influence on improving the performance of MSMEs. The results of this research are in line with the results of previous studies with the same variables and results, both partially and simultaneously. This shows that the competence of MSME actors has a big influence on improving their performance, which is still lacking and needs to be improved in the future.

It is hoped that the results of this research can be input for business actors regarding the importance of increasing competence, both formal and informal education, skills either by participating in training or self-teaching, and abilities by honing them yourself or by participating in an activity or community that can help improve these things. Apart from that, the results of this research can also be input for related agencies, such as the Department of Cooperatives and MSMEs, to further expand the reach of providing training for business actors and be more aggressive in holding it. Relevant agencies can collaborate with local communities or business groups to improve the quality of MSMEs so they can move up in class and reach the national and even global stage.

This research only focuses on examining the influence of competency on the performance of MSMEs in the agro-industrial sector in Jember. In the next research, it is hoped that the coverage area can be even wider so that it can analyze this phenomenon in general. If you want to analyze phenomena in an area, it is hoped that in the future you can increase the number of respondents and have more representatives from the business subsector you want to analyze so that the data obtained can be more varied. In addition, in this study, the competency variables used were only education, skills, and abilities. In future research, it is hoped that we will be able to analyze the influence of competency on performance with different competency variables or a combination of the variables that have been studied with other variables, such as attitude, value, and interest.

LIMITATIONS

This research only focuses on examining the influence of competency on the performance of MSMEs in the agro-industrial sector in in one of the tourism areas in Indonesia. In the next research, it is hoped that the coverage area can be even wider so that it can analyze this phenomenon in general. If you want to analyze phenomena in an area, it is hoped that in the future you can increase the number of respondents and have more representatives from the business subsector you want to analyze so that the data obtained can be more varied. In addition, in this study, the competency variables used were only education, skills, and abilities. In future research, it is hoped that we will be able to analyze the influence of competency on performance with different competency variables or a combination of the variables that have been studied with other variables, such as attitude, value, and interest.

References

Amelia, D., and Hendra, N., Pengaruh Education, Skill dan Ability Sumber Daya Manusia Terhadap Kinerja UMKM Batu Bata di Kota Bukittinggi, vol. 5, no. 2132, pp. 8632, 2019.

Ardiana, I. D. K. R., Brahmayanti, I. A., and Subaedi, S., Kompetensi SDM UKM dan Pengaruhnya Terhadap Kinerja UKM di Surabaya, *Jurnal manajemen dan Kewirausahaan*, vol. 12, no. 1, pp. 42-55, 2010.

Armstrong, M., Manajemen Sumber Daya Manusia: *A Handbook of Human Resource Management*, Jakarta: PT Elex Mediakomputindo, 1994.

Arumsari, V., and Syamsiar, S., Pemberdayaan Masyarakat Perdesaan Berbasis Agroindustri Lokal (Suatu Kajian Agroindustri Gula Kelapa Kristal di Kecamatan Kokap Kabupaten Kulon Progo Propinsi Daerah Istimewa Yogyakarta), *Jurnal Sosial Ekonomi Pertanian dan Agroindustri* (SEPA), vol. 8, no. 1, pp. 35-41, 2011.

Attahir, Y., Critical Success Factor for Small Business: Perceptions of South Pacific Entrepreneurs, *Journal of Small Business Management*, vol. 33, no. 2, pp. 68-73, 1995.

Awaliyah, A., Pengaruh Education Management, Skill, dan Ability Terhadap Kinerja Karyawan di Rumah Mode Dwi Chy Jati Kudus, Doctoral Dissertation, STAIN Kudus, 2017.

Bai, J., and He, T., Research on Audit Data Analysis and Decision Tree Algorithm for Benefit Distribution of Enterprise Financing Alliance, *Scientific Programming*, vol. 2021, pp. 1-8, 2021.

Bawono, I., Maulina, E., Rizal, M., and Purnomo, M., The Role of education Management Capability, Financial Literacy, and Problem-Solving Skills on Organizational Performance for SMEs, *Frontiers in Psychology*, vol. 13, pp. 1-3, 2022.

Darya, I. G., Pengaruh Ketidakpastian Lingkungan dan Karakteristik Kewirausahaan terhadap Kompetensi Usaha dan Kinerja Usaha Mikro Kecil di Kota Balikpapan, *Jurnal Inovasi dan Kewirausahaan*, vol. 1, no. 1, pp. 65–78, 2012.

Desembrianita, E., Soelistya, D., Solichah, M., and Putra, T. A., Peran Fasilitasi dan Pelatihan Budidaya Ikan Sidat dalam Meningkatkan Skill serta Dampaknya Bagi Pemberdayaan Ekonomi Masyarakat si Kecamatan Kebomas Gresik, *DedikasiMU, Journal of Community Service*, pp. 460-472, 2022.

Dharmanegara, I., Sitiari, N., and Wirayudha, I., Job Competency and Work Environment: The Effect on Job Satisfaction and Job Performance among SMEs Worker, *IOSR Journal of Business and Management* (IOSR-JBM), vol. 18, no. 1, pp. 19–26, 2016.

Hadiyati, E., Karakteristik Kewirausahaan dan Perusahaan serta Kompetensi Kewirausahaan sebagai Penentu Kinerja Usaha Kecil Menengah (UKM), *Ekonomika Bisnis*, vol. 5, no. 2, pp. 117–124, 2014.

Hermawan, H., and Damai, D. C., Faktor-faktor yang Mempengaruhi Kinerja Usaha Mikro Kecil Menengah (UMKM) Kota Madiun, *Jurnal Ekomaks Universitas Merdeka Madiun*, 2012.

Kristanto, R. S., Suparwati, Y. K., Atiningsih, S., and Wahyuni, A. N., Pengaruh Kompetensi SDM, Kualitas Informasi Keuangan dan Locus of Control Terhadap Kinerja UMKM dengan Pengambilan Keputusan Sebagai Variabel Intervening, JIEF: *Journal of Islamic Economics and Finance*, vol. 1, no. 1, pp. 46-67, 2021.

Kristiyanti, M., Peran Strategis Usaha Kecil Menengah (UKM) dalam Pembangunan Nasional, *Majalah Ilmiah Informatika*, vol. 3, no. 1, pp. 63–89, 2012.

Marampa, A. M., Afandi, M., and Adawiyah, W. R., Does Owner's Competence and Skill Drive Small Business Performance, The 3rd International Conference on Vocational Innovation and Applied Sciences (ICVIAS) 2021, NST Proceedings, pp. 82-91, 2022.

Mathis, R. L., and Jackson, J. H., *Manajemen Sumber Daya Manusia*, Jakarta: Penerbit Salemba Empat, 2001.

Mitrani, A., Dalziel, M., and Fitt, D. X., Competency Based Human Resource Management: Value-Driven Strategies for Recruitment, Development and Reward, London: Kogan Page Limited, 1992.

Muharastri, Y., Pambudy, R., and Priatna, W. B., Hubungan Karakteristik Wirausaha dengan Kompetensi Kewirausahaan Peternakan Sapi Perah di Kabupaten Bogor, *Jurnal Sosial Ekonomi Pertanian*, vol. 8, no. 1, pp. 25–36, 2015.

Mutuku, A. K., Kiilu, B. N., Mathuku, P., and Auka, D. O., Effect of Entrepreneurial Skills on Organizational Performance of Small and Medium Enterprises in Nakuru City-Kenya, *International Journal of Economics and Business Administration*, vol. 10, no. 3, pp. 156-173, 2022.

Nawawi, H., Manajemen Strategik Organisasi Non-Profit Bidang Pemerintahan dengan Ilustrasi di Bidang Pendidikan, Yogjakarta: Gajah Mada University Press, 1997.

Ng, H. S., and Kee, D. M., Effect of Entrepreneurial Competencies on Firm Performance Under the Influence of Organizational Culture, *Life Science Journal*, vol. 10, no. 4, pp. 2459-2466, 2013.

Riptanti, E. W., Potensi UMKM Berbasis Agroindustri di Kabupaten Wonogiri dan Strategi Pengembangannya Melalui Pembiayaan, Lembaga Penelitian dan Pengabdian Masyarakat Universitas Sebelah Maret, pp. 1-12, 2011.

Sembiring, R., Impact of Human Resources' Education and Skills on SMEs' in Medan City, Indonesia, *International Journal of Management, Economics and Social Sciences*, vol. 5, no. 3, pp.95-104, 2016.

Setiyono, W. P., Iqbal, M., Alfisyahr, R., Pebrianggara, A., and Shofyan, M., Determinants of SME's Performance: The Role of Education Management, Market Orientation, and Product Innovation, *Jurnal Ilmiah Bidang Akuntansi dan Manajemen* (JEMA), vol. 19, no. 1, pp. 22-40, 2022.

Simamora, H., *Manajemen Sumber Daya Manusia*, Yogjakarta: Bagian Penerbitan STIE YKPN, 2001.

Spencer, L. M., and Spencer, S. M., *Competence at Work Models for Superrior Performance*, New York, USA: John Wiley & Sons, 1993.

Widayati, C. C., Anah, S., and Usman, M., Pengaruh Education Management, Skill, dan Attitude Terhadap Kinerja Karyawan (Studi Kasus PT Sun Life Syariah di Jakarta). JMPIS: *Jurnal Manajemen Pendidikan dan Ilmu Sosial*, pp. 128-138, 2022.

Widiastuti, E., Kurniasih, R., and Martini, S., Can Literacy Increase SMEs Performance? An Evidence from SMEs in Banyumas, *International Sustainable Competitiveness Advantage*, pp. 130-139, 2021.

Winarto, W. W. A., Pengaruh Education Manajemen Terhadap Peningkatan Kinerja UMKM. *Akuntansi Dewantara*, vol. 4, no. 2, pp. 138–145, 2021.