



# Implementation of Management Information Systems at Janji Jiwa Coffee Shop in Medan Selayang City to Improve Customer Satisfaction

Muhammad Arif Lubis<sup>\*1</sup>, Malinda Sari Sembiring<sup>2</sup>, Ahmad Riyansyah<sup>3</sup>, Chandra Sentosa<sup>4</sup>

<sup>1\*</sup>Faculty of Economics and Business, Universitas Sumatera Utara, Medan, 20155, Indonesia

<sup>2</sup>Department of Accounting and Finance, The University of Auckland, Auckland, 1142, New Zealand

<sup>3</sup>Faculty of Business and Management, Universiti Sultan Zainal Abidin (Unisza), Terengganu, 21300, Malaysia

<sup>4</sup>Faculty of Economics and Business, Universitas Sumatera Utara, Medan, 20155, Indonesia

\*Corresponding Author: [muhammad.arif@usu.ac.id](mailto:muhammad.arif@usu.ac.id)

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## ABSTRACT

Indonesia's coffee market has grown significantly in recent years, and a large number of coffee shops have opened up. In the face of fierce competition, the Janji Jiwa Coffee Shop in Medan, Selayang City, must strive to retain and grow its clientele. This research aims to determine the application of the Management Information System used to increase customer satisfaction at Janji Jiwa coffee shop. This research uses a quantitative approach with survey methods. Data was collected from 30 customers of Janji Jiwa Coffee Shop in Medan Selayang through a specially designed questionnaire. Data analysis was carried out using descriptive statistical methods and linear regression to test the relationship between SIM implementation and customer satisfaction. The final regression results indicate that the dependent variable, Consumer Satisfaction of Janji Jiwa Medan Coffee, Medan Selayang District, is significantly impacted ( $p < 0.05$ ) by the independent variable, Management Information System. Customer satisfaction at the Janji Jiwa Coffee Shop in Medan Selayang has increased dramatically once SIM was implemented. These results suggest that coffee shops can enhance consumer loyalty and streamline their operations by implementing SIM.

**Keyword:** Management Information Systems, Customer Satisfaction, Coffee Shop



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## 1. Introduction

In recent years, the coffee industry in Indonesia has experienced significant growth, with an increasing number of coffee shops emerging in major cities, including Medan Selayang. Coffee Shop Janji Jiwa, as one of the leading players in the industry, faces tough competition and the challenge of maintaining as well as increasing customer satisfaction [1]-[3]. Customer satisfaction is a key factor that determines business success and long-term sustainability. Nonetheless, the Soul must make the commitment to implement a more effective and efficient strategy in order to manage its business operations given the growing number of clients and rising demands for services and goods. This is where putting Management Information Systems (MIS) into place becomes essential. In order to facilitate better decision-making processes, MIS are a tool that can aid in the gathering, processing, storing, and delivery of pertinent information [4,5].

A Toffin survey that includes modern stores (outlets in large cities, not Kopitiam stores) found that there were more than 2,950 coffee shops in Indonesia in August 2019—nearly three times as many as there were in 2016. Merely a thousand or so. The Ministry of Agricultural Affairs' Information Center and Information Systems of Agriculture reports that the country's coffee consumption was approximately 250 thousand tons in 2016 and grew by 10.54 percent to 276 thousand tons. The consumption of coffee in Indonesia is projected to increase by 8.22% on average per year between 2016 and 2021. It is predicted that 795 thousand tons of coffee will be produced by 2021, of which 370 thousand tons will be consumed, leaving 425 thousand metric tons in excess [6].

Coffee Janji Jiwa can compete with other coffee shops because of its distinct and unique flavour. But, the Coffee Janji Jiwa faces fierce competition from other cafes that provide a range of intriguing concepts in an effort to draw in customers. Therefore, businesses must consider how each product will satisfy customers once they buy it. Customer satisfaction, according to [7], is the degree of contentment or dissatisfaction following a comparison of the services or goods obtained and what was anticipated.

Some of the challenges faced by the Coffee Janji Jiwa in the Selayang Field can be overcome through the implementation of the Management Information System, among others [8]:

#### **Inconsistent Service Quality:**

In the food and beverage industry, consistency in service is the key to gaining customer satisfaction. Without a good system, it is difficult to ensure that all branches provide services that meet company standards.

#### **Stock and Supply Management:**

Inefficient stock management can result in exhaustion of raw materials or waste, which ultimately affects customer satisfaction. Management information systems can help monitor and manage inventory in real time [9].

#### **Order Processing Speed and Accuracy:**

Long waiting times and errors in order processing are common problems that can reduce customer satisfaction. With the Management Information System, the booking process can be faster and more accurate through the automation and integration of the booking system [10].

#### **Customer Data Analysis:**

Understanding customer needs and preferences requires in-depth data analysis. Management information systems can collect and analyse customer data to provide better insight to management in developing marketing and promotion strategies [11].

#### **Feedback and Further Action:**

Getting customer feedback and effectively tracking it is key to continuous improvement. Management information systems enable more systematic and responsive customer feedback management [12].

The study titled "Implementation of Management Information Systems at Janji Jiwa Coffee Shop in Medan Selayang City to Improve Customer Satisfaction" stimulates the author's attention in the issues raised above. Based on this phenomenon, the challenges studied in this work revolve around how Coffee House Promises Soul Field's management information system picture is implemented and how that picture impacts Coffee Proms Soul's customer satisfaction.

## **2. Method**

We conducted quantitative research through field surveys to collect data from Janji Jiwa Coffee Shop users. Our research targets the 10 customers of the best Janji Jiwa Coffee Shop who visit most frequently. We used purposive sampling, with a special focus on Janji Jiwa Coffee Shop users. Data collection was carried out by distributing questionnaires to customers, a technique that was effective in reaching our target audience. Respondents completed the survey via a completed questionnaire. A total of 30 respondents participated in this research [13,14].

## **3. Result and Discussion**

In this study, the sample used was as many as 30 respondents, distributed using Google Forms by the researchers so that the return rate of the questionnaire (response rate) was 100%.

To obtain an overview of the characteristics of the respondents to be studied, raw data processing with statistical calculations is carried out. The characteristics of the respondents in this study include age, gender, and occupation.

### 3.1 Distribution of respondents by age

Table 1. Respondents by age

Respondent age	Amount	Percentage
17-19 Years	7	21,9 %
20- 23 Years	16	50 %
24-27 Years	5	15,6 %
>28 Years	4	12,5 %

Source: Dissemination of questionnaires

From table 4.1, it can be seen that the majority of respondents were those who were between the ages of 20 and 23 years, that is, 16 people. This data shows that the majority of respondents are those who are between 20 and 23 years of age.

### 3.2 Distribution of respondents by gender

Table 2. Respondents by Gender

Gender Type	Amount	Percentage
Men	10	31,3 %
Female	22	68,8 %

Source: Dissemination of questionnaires

From table 4.2 it can be seen that the sexes of the most respondents are women, which is 22 people. This data shows that the majority of respondents is women.

### 3.3 Distribution of respondents by job

Table 3. Respondents Based on Jobs

Job	Amount	Percentage
Students	25	78,1 %
Private employees	1	3,1 %
Self-employed	4	12,5 %
Other	2	6,2 %

Source: Dissemination of questionnaires

From table 3, it can be seen that the majority of respondents are students, which is as many as 25 people. This data shows that the majority of respondents are students.

### 3.4 Validity and reliability test results

#### a. Validity Test Results

The validity test was carried out by comparing the calculated  $r$  and  $r$  table values using the product moment correlation coefficient formula developed by Pearson. If  $r_{count}$  is greater than  $r_{table}$ , then the instrument is declared valid, and vice versa. To determine the  $r$  table, the  $r$  product moment table is used with a significance level ( $\alpha$ ) of 0.05. With a sample size ( $n$ ) of 30 people, the  $r_{table}$  value obtained was 0.361.

Table 4. Validity Test Results

Validity Test Results of Management Information Systems (X)			
No Details	$r_{hitung}$	$r_{table}$ 5%	Criteria
1	0,602	0,361	Valid
2	0,711	0,361	Valid
3	0,754	0,361	Valid
4	0,529	0,361	Valid
5	0,702	0,361	Valid
6	0,509	0,361	Valid

Based on the comparison of the value of  $r_{hitung}$  with the  $r_{table}$ , if  $r_{hitung} > r_{table}$  5%, then it can be concluded that all question details for the Customer Satisfaction (Y) variable are valid.

#### b. Reliability Test Results

The reality test is used to determine whether a questionnaire is reliable or not, with the help of the SPSS program version 22.0. A structure or variable can be said to be reliable if it gives a cronbach alpha value  $> 0.60$  (Ghozali, 2011). Here is a table of the results of the dissemination of the questionnaire carried out by the researchers:

Table 5. Reliability Test Results  
Management Information System Instruments

Statement Items	Cronbach's value Alpha	Minimum Limit	Information
X1.1	0,827	0,60	Reliabel
X1.2	0,806	0,60	Reliabel
X1.3	0,797	0,60	Reliabel
X1.4	0,844	0,60	Reliabel
X1.5	0,811	0,60	Reliabel
X1.6	0,845	0,60	Reliabel

Source: Data processed by SPSS

Based on the above table it is seen that the entire statement instrument in the Brand Image variable (X) has a Cronbach alpha value  $> 0.60$ . Then this indicates that the whole statement can be declared reliable.

Table 6. Reliability Test Results  
Customer Satisfaction Instrument

Statement Iter	Cronbach's value Alpha	Minimum Limit	Information
Y.1	0,898	0,60	Reliabel
Y.2	0,907	0,60	Reliabel
Y.3	0,928	0,60	Reliabel
Y.4	0,912	0,60	Reliabel
Y.5	0,910	0,60	Reliabel
Y.6	0,909	0,60	Reliabel

Source: Data processed by SPSS

The above table shows that the entire statement instrument in the Customer Satisfaction (Y) variable has a Cronbach alpha value  $> 0.60$ . Then this indicates that the whole statement can be declared reliable.

#### c. Simple Regression Analysis

Simple regression analysis is an approach to modelling the relationship between one dependent variable and one independent variable. In simple regression analysis, relationships between variables are linear, where changes in the X variable will be followed by constant changes in the Y variable.

Table 7.  
Results of Multiple Linear Regression Analysis

		Coefficients <sup>a</sup>				
Model		Unstandardized Coefficients		Standardize d Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.456	3.468		1.573	.127
	Sistem Informasi Manajemen	.791	.139	.733	5.708	.000

a. Dependent Variable: Customer Satisfaction

Based on the above output, the known significance value of 0.000 is less than  $< 0.05$  probability, so it can be concluded that  $H_0$  is rejected and  $H_a$  is accepted, which means that there is an influence of SIM on customer satisfaction.

#### d. Discourse

Based on the regression analysis above, it is possible to conclude that the results of the management information system affect customer satisfaction. The result of the table above shows a significant value of 0,000 and a significance rate of 5%, where  $N-k = 30-1 = 29$ . Since the value of the management information system affects the table value of 2,045 and the significant level of  $0.000 < 0,05$ ,  $H_0$  is rejected and  $H_a$  is

accepted, and it can be concluded that the variable of management information systems has a significant influence on the satisfaction of the consumer with the Promise of the City of the Field.

#### 4. Conclusion.

Based on the above analysis and discussion, as well as the purpose of this research, which is to know the impact of the management information system on customer satisfaction, it can be concluded that the result of a simple regression test found that the independent variable of management information systems, with a significance rate of 0.000, has a significant impact on its dependent variable, customer satisfaction in the fields. According to this study, the Kopi Janji Jiwa Kota Medan Selayang saw a considerable increase in customer satisfaction after using the Management Information System (SIM) because of increased operational efficiency, consistent service, and better stock management. The study's primary contribution is illustrating the benefits of the SIM's application for the food and beverage industry, particularly with regard to raising consumer satisfaction. Additionally, the study offers an operational management model that other coffee shops may use in a comparable setting. The study's practical consequences imply that coffee businesses can manage orders, supplies, and customer service more skilfully by obtaining licenses, which in turn boosts consumer happiness and loyalty. This study has certain limitations, such as samples being confined to a single region, even though it offers insightful information. To obtain more general conclusions, samples from other sites may be used in future research. It is advised that more study be done to examine the effects of Management Information System (SIM) application in various coffee shop types with various features and to assess the long-term effects of SIM application on customer loyalty and satisfaction.

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#### References

- [1] Afandi, W.S. 2017. Management information systems and their impact on job performance among employees in the private sector: SAUDI Telecommunications companies. *International Journal of Computer Applications*, Volume 164 – No 11.
- [2] Ahmad, U. F., Mahdee, J., & Abu Bakar, N. (2024). Search engine optimisation (SEO) strategy as determinants to enhance the online brand positioning. *F1000Research*, 11, 714. <https://doi.org/10.12688/f1000research.73382.2>
- [3] Asrigo, R., & Kaburuan, E. R. (2024). Improving E-Commerce Website Rank Using Search Engine Optimization (SEO). *International Journal of Intelligent Systems and Applications in Engineering*, 12(14), 430–440.
- [4] Dirgantari, P. D., Hurriyati, R., Masharyono, M., Firdausi Sulaksana, R. D. I. Z., Hidayat, Y. M., & Widjadjanta, B. (2022). Strategi Digital Marketing dalam menumbuhkan Startup Jastip Indonesia-Jepang. *Jurnal Abmas*, 22(2), 81–88. <https://doi.org/10.17509/abmas.v22i2.52933>
- [5] Johan, J. T. P., Baidlowi, I., & Poernomo, A. H. (2022). Pengaruh Service Quality Terhadap Customer Loyalty Melalui Kepuasan Pelanggan Sebagai Variabel Intervening Studi Kasus Di Rumah Makan Dapur Tresya Mojokerto. *Prosiding SNABM 1th 2022*, 1(1), 312-326.
- [6] Nafiuddin, N., & Hamdan, H. (2020). Utilization of Digital Marketing to Improve Sales Volume of MSME's Products. *Journal of Digital Marketing and Halal Industry*, 2(1), 29. <https://doi.org/10.21580/jdmhi.2020.2.1.5282>
- [7] No, V., Edmond, D., Raihana, S., & Junaedi, P. (2024). Startupreneur Business Digital ( SABDA ) Successful Digital Marketing Techniques for Business Development. 3(1), 19–25.
- [8] Oktavia. (2015). Peranan Teknologi Informasi Dalam Audit. *Bhirawa*, 2(2), 78–84. <http://journal.uii.ac.id/index.php/Snati/article/viewFile/1033/989>

- [9] Santoso, H. B. (2021). “Pengaruh Digital Marketing Terhadap Customer Loyalty Dengan Online Promotion Dan Customer Experience Sebagai Variabel Intervening Pada Starbucks Surabaya.” *Jurnal Strategi Pemasaran*, 8(1), 1–15.
- [10] Sutjiadi, R., Rahmawati, T., & Thomas, I. (2022). Perancangan dan Pembuatan Website Jasa Titip Barang dengan Menggunakan Metode Prototyping. *KONSTELASI: Konvergensi Teknologi Dan Sistem Informasi*, 2(1), 111–123. <https://doi.org/10.24002/konstelasi.v2i1.5540>
- [11] Violinda, Q., Alfadila, A., Wattedgama, E. J., & Gultom, H. C. (2022). Customer Satisfaction: A Central Phenomenon in Digital Marketing J&T Express. *Journal of Digital Marketing and Halal Industry*, 4(1), 51–66. <https://doi.org/10.21580/jdmhi.2022.4.1.10889>
- [12] Widiastuti, T. (2021). Strategi Digital Marketing Untuk Peningkatan Penjualan Jajan Tradisional Umkm Di Kelurahan Mlatibaru Semarang. *Jurnal Riptek*, 15(1), 64–69. <https://doi.org/10.35475/ripteck.v15i1.116>
- [13] V. Manahuruk, "Home page - E-commerce Dorong Pertumbuhan Ekonomi Nasional, Belanja Makanan dan Minuman Jadi yang Terbanyak," September 2023. [Online]. Available: <https://www.pikiran-rakyat.com/ekonomi/pr-017146836/e-commerce-dorong-pertumbuhan-ekonomi-nasional-belanja-makanan-dan-minuman-paling-banyak?page=all> [Accessed: Maret. 23, 2024].
- [14] Central Statistics Agency of Indonesia. (September 18, 2023). E-commerce Statistics 2022/2023. [Accessed on March 23, 2024], from <https://www.bps.go.id/id/publication/2023/09/18/f3b02f2b6706e104ea9d5b74/statistik-ecommerce-2022-2023.html>