


Analysis of Service Effectiveness on Customer Satisfaction in the Food & Beverage Business in Tarutung, North Tapanuli - North Sumatra

Syahrul Nugraha¹, Yon Supraoto², Masditou³
Tourism Planning Management, Politeknik Pariwisata Medan^{1,2,3}

| Article Info | ABSTRACT |
|---|---|
| <p>Article history: Received : 02 May 2024 Revised : 30 May 2024 Accepted : 27 July 2024 Available Online : 30 July 2024</p> <p>Keywords: Satisfaction, Effectiveness, Service, Digital, Technology.</p> | <p>The aim of this research is to determine the impact of service towards the consumer satisfaction, and the use of digital technology in service operations in the food and beverage business in Tarutung, North Tapanuli. The data processing techniques were obtained through distributing questionnaires to 80 respondents. The data analysis technique used is simple regression analysis. The research shows that a). physical appearance variables have a significant negative effect on consumer satisfaction; the reliability variable has an insignificant positive effect on consumer satisfaction; the responsiveness variable has a negative/insignificant effect on consumer satisfaction; the concern variable has a negative/insignificant effect on consumer satisfaction; and the guarantee variable has a significant effect on consumer satisfaction. The variables that have a dominant influence are the physical appearance variable and the guarantee variable which has a significant influence on consumer satisfaction. This means that service effectiveness (reliability, response has a positive and significant effect on consumer or customer satisfaction in the food and beverage business "is proven empirically and is acceptable, b) the use of technology in food and beverage café and restaurant services in Tarutung City still tends to be limited and low.</p> |
|  <p>This work is licensed under a Creative Commons Attribution 4.0 International License.</p> | <p>Corresponding Author: Syahrul Nugraha Tourism Planning Management, Politeknik Pariwisata Medan Email : syahrul@poltekparmedan.ac.id</p> |

INTRODUCTION

The food and beverage business are a form of business that promise very much to the businessman. The fact that every human being has primary needs, in which they need to eat and drink, makes the food and beverage business have a wider target market than other businesses. It is not surprising that there are so many business people in this business, so they must continue to try to make innovations so they can compete with their competitors who are also involved in the same business (Santosa, 2020). One of the innovations in the food and beverage business is a restaurant with effective service that aims to provide the maximum service to its customers (Lussak et al., 2020). Business in the food and beverage sector is currently developing quite rapidly (Primadhita et al., 2023). In every corner of the city, we can easily find restaurants,

cafes, stalls and others. The development of this business is in line with changes in people's lifestyles, where many people choose to eat or drink outside the home, either with family or with friends ([Muller et al., 2021](#)). As a form of business, this type of business has a commercial side which shows that this business focuses on the profits generated as a contribution to overall business income. That's why most large and medium-sized hotels have more than one business in the food and beverage section to give customers the opportunity to choose the type, location and variations of menu offered with different prices too ([Noviastuti et al., 2021](#)).

Basically, the food and beverage business are essentially a hospitality industry that sells hospitality services even though it has real products, they are food and drinks. As a hospitality industry, good interaction is required between service providers (staff) as hosts and (customers) as guests ([Ali et al., 2021](#)). Intangibles (unreal factors) are also important as determining factors of satisfaction. Many people's purposes for visiting cafes or restaurants are other than to enjoy food and drinks. Boredom of work and daily activities encourages people to relax by enjoying food and/or drinks accompanied by musical entertainment so that they can relax.

Sometimes people even go to restaurants or cafes together with their colleagues or even bring their family. Many residents in big cities like Jakarta go to cafes on the skirt area just to enjoy the natural atmosphere which makes the mind more relaxed. Conditions like this make people feel like they stay there for hours. Some even bring their work there.

In the current era of digitalization, there are different business flows that occur in the business world, especially in the food and beverage business sector. The use of technology changes conventional businesses or businesses into digital businesses which helps develop the business itself. By utilizing technology and digital transformation indirectly, the business will also be transformed because a business can reach a wider market, can optimize business performance, making it possible to provide a better transaction experience to customers through personalization features, offering ease of transactions ([Erwin et al., 2023](#)). Customers can do this either online, offline or a combination of both O2O (online to offline). Likewise, the availability of payment options and security guarantees when making transactions, product accuracy, speed in the service process and providing more value for customers, so that in the end customers will feel satisfied being customers of the business ([Danurdara, 2021](#)). Customer satisfaction cannot be separated from customer experience and the two are two different things. Customer satisfaction is the final result felt by customers from a product or brand, while customer experience refers to the buyer's perception of the brand as a whole ([Fornell et al., 2020](#); [Octaviani & Ekawati, 2023](#)). The presence of self-service technology in the food and beverage business sector has led to the development of self-check-out machines and self-scanning handheld devices. The food & beverage business is one of the businesses that has adopted a lot of self-service technology in Indonesia in various forms, for example self-order kiosks which are becoming widely available in several fast-food business branches from America which allow customers to choose, order and make

payments directly or independently without the help of a cashier.

The questions that are to be answered in this research are:

- a. How does service impact toward customer satisfaction and the food and beverage business in Tarutung, North Tapanuli?
- b. How is the usage of digital technology in service operations in the food and beverage business in Tarutung, North Tapanuli?

METHODS

This research is causal research that analyzes how a variable influences other variable where the independent variable is controlled by the researcher to see its impact on the dependent variable, the independent variable is service and the dependent variable is customer satisfaction ([Anjarwati et al., 2024](#); [Ruane, 2021](#)). This research is exploratory by conducting a survey directly in the field to obtain the data needed for research, both secondary and primary data.

1. Population and Sample

The population in this study were visitors to cafes, restaurants, eateries, bars and similar businesses in Tarutung and 80 people were sampled incidentally.

2. Data Collection

To collect data from respondents, this research uses data collection tools in the form of physical observation, literature study, questionnaire interviews. Distribution of questionnaires was carried out personally (personally administered questionnaires). Answers use a 5-point Likert scale with the scores used are: A means answer strongly agree (SS) = 5, B means Agree answer (S) = 4, C means Neutral answer (N) = 3, D means Disagree answer (TS) = 2 E means answer strongly disagree (STS) = 1 ([Aybek & Toraman, 2022](#); [Chow, 2023](#))

Data Analysis

The data analysis used in this research is descriptive analysis using the Impact Analysis method

RESULTS AND DISCUSSION

Respondent Characteristics

The number of respondents analyzed in this research was 80 people. Practically, data collection was carried out by distributing more than 80 questionnaires. This is based on the fact that quite a lot of questionnaires have incomplete responses. The following table is the profile of respondents based on gender.

Table 1. Respondent Based on Gender

| Gender | Quantity | Percentage |
|--------|----------|------------|
| Male | 57 | 71% |
| Female | 23 | 29% |

| | | |
|-------|----|------|
| Total | 80 | 100% |
|-------|----|------|

Table 1 shows that the majority of respondents were male, they are 57 persons (71%) while there were 23 female respondents or 29%. This is because men are often more active than female in visiting cafes and restaurants.

Table 2 said that the majority of respondents aged between 19-25 years, namely 50 persons or 63%, followed by respondents aged 31 - 50 years, namely 23 people or 28%. This is because at that age people usually have the desire to spend time visiting tourist destinations that provide a lot of food and beverage, both in the form of cafes and restaurants in Tarutung.

Table 2. Respondent Based On Age

| Age | Quantity | Percentage |
|-------------|----------|------------|
| <18 years | 7 | 9% |
| 19-25 years | 50 | 63% |
| Age | Quantity | Percentage |
| 31-50 years | 23 | 28% |
| Total | 80 | 100% |

Table 3 shows that the work of some respondents is as private employees, namely 33 persons or 42%, followed by respondents who work as civil servants, they are 20 persons or 25%. This provides an explanation that consumers who visit cafes and restaurants are people who already work in the private sector and are potential consumers of food and beverage business products in cafes and restaurants.

Table 3. Respondent By Occupation

| Occupations | Quantity | Percentage |
|------------------|----------|------------|
| Civil Government | 20 | 25% |
| Entrepreneur | 33 | 42% |
| House wife | 8 | 10% |
| Student | 19 | 23% |
| Total | 80 | 100% |

Table 4 shows that some respondents have visited cafes and restaurants that provide food and beverage services up to 2 - 3 times, namely 51 persons or 64%, followed by respondents who have visited up to 4 - 5 times, namely 19 persons or 23%. This shows that the research respondents are people who have visited cafes and restaurants in Tarutung City several times.

Table 4. Respondent Based On Visiting Frequency

| Visiting Frequency | Quantity | Percentage |
|--------------------|----------|------------|
| 2 - 3 times | 51 | 64% |

| | | |
|-------------------|----|------|
| 4 - 5 times | 19 | 23% |
| More than 5 times | 10 | 13% |
| Total | 80 | 100% |

The Impact of Service Towards Customer Satisfaction in the Food and Beverage Business in Tarutung

Validity and Reliability Test

Validity testing was carried out using the correlation analysis method. Calculations were carried out with the help of the SPSS program. A significance value below 0.05 indicates a valid item. Based on the results of validity testing, it was found that all indicators used to measure the variables used in this research had a correlation value greater than 0.197. These results show that all of these indicators are valid.

Reliability testing in this research is by using the Cronbach Alpha formula. The summarized results of reliability testing for each variable show that all variables have a fairly large Alpha coefficient, namely above 0.6, so it can be said that all measuring concepts for each variable from the questionnaire are reliable, which means that the questionnaire used in this research is a questionnaire.

Multicollinearity Testing

Multicollinearity testing is carried out using the VIF value. A variable showing symptoms of multicollinearity can be seen from the high VIF (Variance Inflation Factor) value in the independent variables of 59 models of a regression model. The test results show that the VIF value of all independent variables has a value smaller than 10. This means that the research variables do not show any symptoms of multicollinearity in the regression model.

Multiple Linear Regression Analysis

The complete results of data processing using the SPSS program are in the attachment and are further explained in the following table 5.

Table 5. Dependent Variabel

| Coefficients^a | | | | | | | | | |
|---------------------------------|--|-----------------------|--|--|----------|-------------|------------------------|----------------|-------------|
| Model | Unstandardi zed Coefficien ts | | Standar dized Coefficie nts | | t | Sig. | Correlations | | |
| | B | Std. Error | Beta | | | | Zero -order | Partial | Part |
| (Constant) | 1.660 | 0.563 | | | 2.949 | 0.004 | | | |
| X1 (Physical Evidence) | -1.451 | 0.360 | -0.838 | | -4.035 | 0.000 | -0.071 | -0.425 | -0.332 |

| | | | | | | | | |
|---------------------|--------|-------|--------|--------|-------|--------|--------|--------|
| X2 (Reliability) | 0.400 | 0.420 | 0.380 | 0.951 | 0.345 | 0.110 | 0.110 | 0.078 |
| X3 (Responsiveness) | -1.029 | 0.362 | -0.474 | -2.845 | 0.006 | -0.068 | -0.314 | -0.234 |
| X4 (Care) | -0.384 | 0.535 | -0.323 | -0.718 | 0.475 | 0.109 | -0.083 | -0.059 |
| X5 (Guarantee) | 3.112 | 0.384 | 1.388 | 8.103 | 0.000 | 0.288 | 0.686 | 0.667 |

a. Dependent Variable: LnY

The regression equation model can be written as follows: $Y = 1,660 - 1,451X_1 + 0.400X_2 - 1.029X_3 - 0.384X_4 + 3.112X_5$ that if the value of the variable X (X_1, X_2, X_3, X_4, X_5) has a significant negative effect on consumer satisfaction with a coefficient of - 1.451 and a significance level of 0.000. This means that the better the physical evidence, the lower consumer satisfaction will be. Variable X_2 (reliability) has a positive and insignificant effect on consumer satisfaction with a coefficient of 0.400 and a significance level of $0.345 > 0.050$. This means that the reliability provided by cafés and restaurants has not been able to increase consumer satisfaction. Variable X_3 (responsiveness) has a significant negative effect on consumer satisfaction with a coefficient of -1.029 and a significant level of 0.006. This means that the better the responsiveness, the lower consumer satisfaction. Variable X_4 (care) has an insignificant negative effect on consumer satisfaction with a coefficient of -0.384 and a significance level of 0.475. This means that awareness has not been able to increase consumer satisfaction. Variable X_5 (guarantee) has a significant positive effect on consumer satisfaction with a coefficient of 3,112 and a significance level of 0.000. This means that the guarantee will provide higher satisfaction and service. Based on the results of data processing for the coefficient of determination from the research model, where the correlation is symbolized by the R value and the determination or predictive power of the model is shown by the R² value, it is obtained that the correlation (closeness of the relationship) between service quality (X) and customer satisfaction (Y) is of 0.706, which means that service quality (X) has a very strong relationship with customer satisfaction. The R Square (Determination) value shows the predictive power of the model is 0.499, which means that the variable Service quality (X) can determine the ups and downs of customer satisfaction by 49.9%, while the remaining 50.1% is a limitation of the instruments determined in this research for exporting variables. Next, to see the level of significance and prove the hypothesis that the researcher proposed, a t test was carried out and the SPSS output was obtained showing a calculated t value of 2.949 with Sig 0.000. To determine the level of significance of the research model, the calculated t value is compared with the t table value. The calculated t value for an error degree of 5% ($\alpha = 0.05$) and df ($n-k = 80-2 = 78$) is 1.664, which means that the calculated t (2.949) is greater than the t table of 1.664 so that the influence of variable X on customer satisfaction is significant. Based on the results of this analysis, the hypothesis which states "service effectiveness" (reliability, response has a positive and significant effect on consumer or customer satisfaction in the food and beverage business" is proven empirically and is accepted.

Utilization of Technology in Services in the Food and Beverage Business

In a field survey in the form of questionnaires and direct observations carried out by researchers, it was found that the trend of food and beverage services in the field of digital technology in several cafes and restaurants in Tarutung City still tends to be low, of the 9 cafe and restaurant locations that were research locations only There are 2 cafes and restaurants that provide digital services both in the process of ordering food and drink menus, as well as payment methods using cashless methods via digital wallets in the form of QRIS, EDC machines and digital wallets. Meanwhile, other cafes and restaurants still use manual or cashless ordering and payment services. The differences in these methods affect the effectiveness of service and customer interest in visiting cafes and restaurants that still have manual ordering and payment methods. Tarutung City generally does not have many conventional bank ATM outlets, this of course affects visitors who do not always have sufficient cash stock. The use of payments using a cashless system is of course not only a trend, but has become a necessity that makes it easier for users, both cafe and restaurant owners and also visitors ([Insana & Johan, 2021](#)).

Based on the result of data collection regarding to the digital usage as media for non-cash payment methods, the researchers make 4 criteria used, they are K1 = usefulness, K2 = convenience, K3 = social situation, and K4 = satisfaction. To complete calculations using the WP method, we first have to know the weights in each criterion. The weights for each criterion can be seen as follows:

Table 6. Criteria and Score

| Criteria | Score |
|------------------|-------|
| Usage | 25 |
| Easiness | 20 |
| Social situation | 15 |
| Satisfaction | 40 |
| Total | 100 |

Then the weights are corrected so that $\sum W = 1$ with the formula:

$$W_j = W_j / \sum W_j. (1)$$

Information: W_j = attribute weight $\sum W_j$ = sum of attribute weights Obtained:

a. $W_1 = 25 / 25 + 20 + 15 + 40 = 0.25$

b. $W_2 = 20 / 25 + 20 + 15 + 40 = 0.2$

c. $W_3 = 15 / 25 + 20 + 15 + 40 = 0.15$

d. $W_4 = 40 / 25 + 20 + 15 + 40 = 0.4$ $\sum W = 0.25 + 0.2 + 0.15 + 0.4 = 1$ Description: $W_1 = K_1$, $W_2 = K_2$, $W_3 = K_3$, $W_4 = K_4$

OVO: Results of questionnaire statements which have been described using the weight product method. Based on the data, it shows that each Ovo criterion is $K_1 = 109$, $K_2 = 109$, $K_3 = 98$, $K_4 = 108$

Gojek: Results of questionnaire statements which have been described using the weight product method. Based on the data, it shows that each of the criteria for Gopay, it is $K1 = 243$, $K2 = 246$, $K3 = 214$, and $K4 = 246$

Debit: Results of questionnaire statements that have used the weight product method. Based on the data, it shows that each debit criterion is $K1 = 265$, $K2 = 260$, $K3 = 263$, and $K4 = 268$

Mobile Banking: Results of questionnaire statements that have used the weight product method. Based on the data, it shows that each criterion in Mobile Banking is $K1 = 1605$, $K2 = 1572$, $K3 = 1368$, and $K4 = 1550$

After calculating the vector V value for the three alternatives, the following results are produced (Table 7).

Table 7. The Results of Vector V

| Alternatives | Value Of Vector V |
|---------------------|--------------------------|
| OVO | 0.049 |
| Gopay | 0.112 |
| Debit/Credit | 0.123 |
| Mobile Banking | 0.715 |

By the results in the table above, it is stated that the best payment method is mobile banking with the value of 0.715, then debit with the value of 0.123, then Gopay with a value of 0.112, and finally OVO with a value of 0.049.

It was found that the data was obtained that the use of electronic money and virtual money in Tarutung City, North Tapanuli, is starting to develop and increase, although not significantly, as evidenced by the circulation and transactions of electronic money as well as the increase in the number of virtual wallets on the internet which offer the convenience of transactions with virtual money.

CONCLUSION

The research results show that: 1) physical appearance variables have a significant negative effect on consumer satisfaction; 2) the reliability variable has an insignificant positive effect on consumer satisfaction; 3) the responsiveness variable has a negative/insignificant effect on consumer satisfaction; 4) the concern variable has a negative effect/ not significant to consumer satisfaction; and 5) the guarantee variable has a significant effect on consumer satisfaction. The variables that have a dominant influence are the physical appearance variable and the guarantee variable which has a significant influence on consumer satisfaction. This means that service effectiveness, reliability, and response have a positive and significant effect on consumer or customer satisfaction in the food and beverage business. It has been proven empirically and is acceptable. It can be concluded that technological developments in food and beverage

café and restaurant services in Tarutung City still tend to be limited and low. The owner or owner of the café/restaurant immediately increases human resources through education and training for waiters and waiters in improving the quality of service so that responders feel satisfied, comfortable and effective in serving customers. Every café/restaurant business owner should use cashless-based digital technology in payments and orders to make them more effective and efficient. It is also hoped that further research will be able to research the field of sustainable technology use in this location and in other cities with more relevant context variables.

REFERENCES

- Ali, B., Jabbar Othman, B., Ali Ahmed, S., Jamal Ali, B., Gardi, B., Burhan Ismael, N., Abdalla Hamza, P., Mahmood Aziz, H., Yassin Sabir, B., Sorguli, S., & Anwar, G. (2021). Hotel Service Quality: The Impact of Service Quality on Customer Satisfaction in Hospitality. *International Journal of Engineering, Business and Management (IJEBM)*, 5(3), 2456–8678.
- Anjarwati, S., Isdwiyanto, A., Deni, A., K, L. H., Melati, Lusono, K. A., Flora, H. S., Christian, F., Lubis, D. S. W., & Iryanto, M. (2024). *Metodologi Penelitian Kuantitatif*. CV Rey Media Grafika.
- Aybek, E. C., & Toraman, C. (2022). How Many Response Categories Are Sufficient for Likert-Type Scales? An Empirical Study Based on Item Response Theory. *International Journal of Assessment Tools in Education*, 9(2), 534–547.
- Chow, S. L. (2023). *Integrating Research Methods and Statistics for Behavioral Sciences*. Cambridge Scholars Publishing.
- Danurdara, A. B. (2021). A Study of Service Quality on Customer Satisfaction and its Impact on Customer Loyalty: The Case of Food and Beverage Industry in Bandung. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 4(4), 9106–9112.
- Erwin, E., Subagja, A. D., Masliardi, A., Hansopaheluwakan, S., Kurniawan, S. D., Darmanto, E. B., & Muksin, N. N. (2023). *Bisnis Digital: Strategi dan Teknik Pemasaran Terkini*. In PT. Green Pustaka Indonesia. (Issue March).
- Fornell, C., Hult, G. T. M., Morgeson, F. V., & Vanamburg, D. (2020). The Reign of the Customer; Customer-Centric Approaches to Improving Satisfaction. In *The Reign of the Customer: Customer-Centric Approaches to Improving Satisfaction*. Springer International Publishing.
- Insana, D. R. M., & Johan, R. S. (2021). Analisis Pengaruh Penggunaan Uang Elektronik terhadap Perilaku Konsumtif Mahasiswa Pendidikan Ekonomi Universitas Indraprasta PGRI. *JABE (Journal of Applied Business and Economic)*, 7(2), 209–224.
- Lussak, A., Abdurachman, E., Gautama, I., & Setiowati, R. (2020). The Influence of Financial Performance and Innovation in Services and Products on the Survival of Small Food and Beverage Businesses in Jakarta, Mediated by Operational Improvement. *Management Science Letters*, 10(2), 463–468.
- Muller, J., Situmorang, H., Novania, R., Natalia, C., Pariwisata -Universitas, F., &

- Harapan, P. (2021). Faktor-Faktor Yang Memengaruhi Keputusan Pembelian Konsumen Generasi Z Di Restoran Wilayah Kelapa Gading. *Journal FAME: Journal Food and Beverage, Product and Services, Accomodation Industry, Entertainment Services*, 4(1), 26–37.
- Noviastuti, N., Astuti, I. W., Pariwisata, A., Nusantara, D., Akparda, S. (, & Yogyakarta,). (2021). Usaha Produk Makanan dan Minuman dalam Meningkatkan Pendapatan di Grand Puri Saron Boutique Hotel Yogyakarta. *JURNAL NUSANTARA*, 4(1), 27–35.
- Octaviani, D., & Ekawati, E. (2023). Mediasi Kepuasan Pelanggan dalam Hubungan Customer Experience dan Minat Beli Ulang di Aming Coffee Pontianak. *Jurnal Ekonomi STIEP*, 8(2), 198–206.
- Primadhita, Y., Budiningsih, S., Wicaksana, I., & Melani, A. (2023). Pengaruh Pemasaran Digital, Kualitas Produk, Dan Inovasi Hijau Terhadap Kinerja UMKM Makanan Dan Minuman. *Jurnal Manajemen & Bisnis Digital*, 2(1), 49–61.
- Ruane, J. M. (2021). *Analisis Sebab-Akibat; Satu Hal Mengarah ke yang Lain*. Nusamedia.
- Santosa, P. W. (2020). The Effect of Financial Performance and Innovation on Leverage: Evidence from Indonesian Food and Beverage Sector. *Organizations and Markets in Emerging Economies*, 11(22), 367–388.