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ANALYSIS OF KENTUCKY CHICKEN PRODUCT QUALITY AND SERVICE ON CUSTOMER SATISFACTION USING VALIDITY TEST METHOD AND MULTIPLE LINEAR REGRESSION WITH SPSS

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Abstract

In an era of increasingly intense market competition, factors such as price, taste, and attractive packaging have a positive influence on product quality and service, which in turn enhances customer satisfaction. Simultaneously, product quality and service significantly contribute to making Kentucky fried chicken products more appealing to the public. Therefore, it is necessary to examine improvements in chicken production quality as well as the availability of raw materials to meet consumer demand and generate income. This business is located in the Depok area. In its implementation, to support business planning, demand forecasting, and to reduce purchasing costs, an effective inventory system is essential. An inventory information system can also help increase sales, improve quality, and provide better service to customers. To ensure competitiveness in terms of taste, price, quality, and service, proper decision-making in purchasing raw materials is required. By applying with validity testing and multiple linear regression analysis (t-test) using SPSS, the final results aim to determine the relationship between product quality, service, and customer satisfaction, ensuring that specified needs are met

Keywords: *product quality; service quality; customer satisfaction; validity test; multiple linear regression; t-test; SPSS.*

Abstract

Di Era persaingan dagang yang semakin tinggi. Pengaruh harga, rasa, packing yang bagus memiliki pengaruh positif terhadap kualitas serta pelayanan yang menyebabkan kepuasan pelanggan semakin baik. Secara simultan, kualitas produk dan pelayanan dapat secara signifikan menyebabkan hasil produk ayam kentucky di minati masyarakat. Penulis perlu melakukan pembahasan peningkatan kualitas produksi ayam serta persediaan bahan baku untuk ayam kentucky untuk memenuhi kebutuhan permintaan masyarakat dan menghasilkan sumber pendapatan. Usaha ini bertempat didaerah Depok. Dalam penerapannya untuk dapat membantu sebuah usaha dalam melakukan perencanaan, permintaan dan menurunkan biaya pembelian barang dibutuhkan juga inventory yang baik. Sistem informasi persediaan juga dapat membantu meningkatkan penjualan, kualitas serta menghasilkan pelayanan yang baik untuk pelanggan. Agar rasa, harga, kualitas dan pelayanan dapat bersaing perlu di dukung dalam pengambilan keputusan yang baik untuk pembelian meterial dasar. Dengan menerapkan uji validitas serta Analisa regresi linear berganda, uji t. dengan spss. Hasil akhir dari spss ini untuk mengetahui hubungan antara kualitas produk, pelayanan dan kepuasan pelanggan (customer satisfaction) yang diberikan bisa memenuhi kebutuhan yang dispesifikasikan.

Kata kunci: kualitas produk; kualitas pelayanan; kepuasan pelanggan; spss; korelasi linear berganda, uji t

I. INTRODUCTION

Facing increasingly fierce competition, businesses, whether large, medium, or small, need to focus on two crucial aspects: product quality and service quality. According to Putra and Maharani (2022), product quality, including taste, texture, aroma, and presentation, directly impacts customer satisfaction. Meanwhile, service quality, including speed of service, staff friendliness, and dining experience comfort, is also a key factor in building a positive customer experience.

Data source: Katadata Insight Center (KIC)

https://data.goodstats.id/statistic/ayam-goreng-krispi-terenak-di-indonesia-iPkuj

Figure 1. Graph of Crispy Fried Chicken The Most Delicious in Indonesia

The development of fried chicken in Indonesia is greatly influenced by companies' ability to maintain product and service quality. Brands that can optimally combine the two will be superior, widely recognized, and in demand.

This research is important to analyze how product quality and service quality influence customer satisfaction among college students. As explained by Pratama and Santoso (2023), customer satisfaction is closely related to customer loyalty, so understanding these factors is fundamental to maintaining and improving business performance.

An information system that automatically calculates inventory can simplify work processes and provide more accurate information.

Inventory is something a business acquires for the purpose of selling. It is a crucial asset for a business, as it represents a source of revenue. Other reasons for maintaining inventory include addressing fluctuations in demand and reducing purchasing costs. An inventory information system is expected to simplify and streamline data management and reporting. An inventory information system is a combination of information technology and procedures used to manage inventory.

With a computerized system, inventory data can be effectively monitored. In running a business, inventory management is a crucial aspect. Common inventory issues, such as recording incoming and outgoing goods, and controlling the quantity of goods available in storage, are still handled conventionally. This not only slows down work processes but also complicates purchasing decisions. Furthermore, an inventory information system can also assist employee performance in calculating the quantity of goods in storage. The information system can also generate necessary reports promptly.

The application of technology by business owners, including information technology, impacts revenue. Therefore, it is beneficial to build an information system to assist in inventory management. An information system that automatically calculates inventory can streamline work processes and provide more accurate information. It is hoped that with this inventory information system, the data management and reporting process can become easier and more effective.

II. THEORETICAL STUDIE

Product Quality

Product quality encompasses efforts to meet or exceed customer expectations, encompassing products, services, people, processes, and the environment. Product quality is also a constantly changing condition (for example, what is considered good quality today may be considered poor quality in the future).

Product quality is a set of characteristics of goods and services that can satisfy customer needs, through a combination of durability, reliability, accuracy, ease of maintenance, and other product characteristics.

According to Gunawan (2022:20), the factors that directly influence product quality are influenced by nine basic areas or nine (9) Ms, namely:

1. Market

   The number of new and improved products offered in the market continues to grow at an explosive rate. Consumers are led to believe that there is a product that can meet almost every need.

2. Money

   Increased competition in many sectors, coupled with global economic fluctuations, has reduced profit margins. At the same time, the need for automation and mechanization has driven significant expenditures on new processes and equipment.

3. Management

   Quality responsibility has been distributed among several specialized groups. Marketing, through its product planning function, must now establish product requirements. The design department is responsible for designing products that will meet those requirements. The production department develops and refines processes to provide sufficient capability to manufacture products according to design specifications. The quality control department plans quality measurements throughout the process flow to ensure that the final product meets quality requirements, and quality of service, once the product reaches the consumer, becomes an essential part of the total product package. This has increased the burden on top management, particularly the increasing difficulty in allocating appropriate responsibility for correcting deviations from quality standards.

4. People

   The rapid growth in technical knowledge and the creation of entirely new fields, such as computer electronics, has created a great demand for workers with specialized knowledge. At the same time, this situation has created a demand for systems engineers who will bring together all specialized fields to plan, create, and operate systems that will ensure the desired results.

5. Motivation

   Research on human motivation shows that, in addition to monetary rewards, today's workers need something that reinforces a sense of accomplishment in their work and recognition that they personally contribute to the achievement of company goals. This has led to an unprecedented need for quality education and better communication about quality awareness.

6. Materials

   Due to production costs and quality requirements, engineers are selecting materials under tighter constraints than ever before. As a result, material specifications have become more stringent and material diversity has increased.

7. Machines and Mechanization

   Companies' demands for reduced costs and increased production volume to satisfy customers have driven the use of increasingly complex factory equipment that relies heavily on the quality of the materials fed into the machines. Good quality is a critical factor in maintaining machine uptime and ensuring full facility utilization.

8. Modern Information Methods

   The evolution of computer technology has opened up the possibility of collecting, storing, retrieving, and manipulating information on a scale previously unimaginable. This new information technology provides ways to control machines and processes during production and to manage products even after they reach consumers. New and constant data processing methods provide the ability to manage useful, accurate, timely, and predictive information to inform decisions that guide the future of the business.
9. Mounting Product Requirements (Production Process Requirements)
10. Rapid advances in product design require stricter standards throughout the manufacturing process. Increasingly high-performance product requirements emphasize the importance of product safety and reliability.

Based on the factors influencing product quality above, it can be concluded that the external tangible factor of a product is not only visible in its shape but also in its color and packaging. The cost of acquiring an item, for example, the price of the item and the cost of delivering it to the buyer.

Service Loyalty

According to Kotler, there are five main dimensions of service quality, as follows: (Susanto & Otoluwa, 2020)

1. Tangibles, namely the physical appearance of the company's services, such as the appearance of physical facilities, equipment, personnel, neatness, and communication media.
2. Empathy, namely the willingness of business employees to provide more personal attention to customers.
3. Reliability, namely the company's ability to perform promised services accurately and dependably.
4. Responsiveness: The company's responsiveness in providing service to customers, providing prompt and prompt service in handling transactions and customer complaints.
5. Assurance: The company's ability to provide service assurance, which is reflected in the knowledge and courtesy of employees, as well as their ability to inspire trust and confidence. Based on these five dimensions of service quality, customer satisfaction can be measured, understood, and used as a positive outcome for improving the quality of service provided to customers, both first-time and repeat customers.

Customer Satisfaction

Kotler & Armstrong define product quality as the characteristics of a product that demonstrate its ability to meet customer needs. Consumer satisfaction is defined as a person's feelings of pleasure or disappointment resulting from comparing their impression of a product's performance (results) with their expectations.

Satisfied consumers will purchase other products sold by the company and become effective marketers through positive word of mouth. This can help increase sales and company credibility (Bahar & Sjaharudin, 2020).

III. RESEARCH METHODS

A. Descriptive Quantitative Method

This study aims to measure and describe the level of consumer satisfaction with Kentucky Fried Chicken service in Depok based on data obtained from respondents. This data collection indicates that, in the context of consumers in Depok, both product quality and service quality play an important role in increasing consumer satisfaction with fast food such as Kentucky Fried Chicken. This research was conducted at several Kentucky Fried Chicken outlets in Depok.

Population

The population in this study were students at the Margonda Campus in Depok who are consumers of Kentucky Fried Chicken. This population was selected because students are an active market segment, have fast food consumption habits, and can assess the product and service quality of Kentucky Fried Chicken outlets. The population in this study was 322 students.

Sample

To determine the sample size, the researcher used the Slovin formula with a margin of error of 5%, resulting in the following sample size:

$$n = N / 1 + N(e)^2$$

Where:

n = required sample size

N = population size

e = margin of error, we use 5% = 0.05

n = $322 / 1 + 322(0.05)^2$

= $322 / 1 + 0.805$

= $322 / 1.805 = 178.39$ (rounded to 178)

Therefore, the sample size determined was 178 respondents, and this rounding was adjusted to ensure more representative data.

Variables

In quantitative research, variables are the objects of observation and the primary focus of analysis. According to Sugiyono (2019), variables are attributes or characteristics possessed by research subjects that can be measured and vary from one subject to another. In this study, the variables used consist of:

1. Independent Variables (X)

These are variables that influence or cause changes in the dependent variable, consisting of:

a. Product Quality (X_1): This variable reflects consumer perceptions of the quality of Kentucky Fried Chicken products, such as taste, cleanliness, texture, and the attractiveness of the food served (Kotler & Keller, 2016).
b. Service Quality (X_2): This variable describes consumer perceptions of the service provided by Kentucky Fried Chicken outlets, such as employee friendliness, speed of service, comfort of the premises, and the accuracy of orders. (Tjiptono, 2017)

2. Dependent Variable (Y)

This variable is influenced by the independent variable:

Consumer Satisfaction (Y): This variable describes the level of consumer satisfaction after consuming the product and receiving service at Kentucky Chicken Margonda, Depok. This satisfaction can be seen from the comparison between expectations and the reality experienced by consumers. (Kotler & Keller, 2016)

B. Likert Scale Research Method

This study used a Likert scale as a measuring tool in the questionnaire. The Likert scale is used to measure respondents' attitudes, opinions, and perceptions of an object or statement (Sugiyono, 2019). This scale consists of five assessment levels as follows:

Table 1. Likert Scale Scores

No	Jawaban	Skor
1	Sangat Tidak Setuju (STS)	1
2	Tidak Setuju (TS)	2
3	Netral (N)	3
4	Setuju (S)	4
5	Sangat Setuju (SS)	5

Each indicator of each variable is measured using this scale so that the results obtained can be analyzed quantitatively through statistical data processing such as validity tests, reliability tests, and multiple linear regression.

IV. RESEARCH RESULTS

To test the research results, the author used SPSS software to ensure representativeness of the results. Validity and correlation tests, multiple linear regression, and t-tests were conducted.

A. Validity Test

1. Variable X

The following are the results of the Validity Test (Pearson correlation) for variable X with indicators X1.1 to X1.5, with the following criteria:

If calculated r > table r = the question item is valid.

If calculated r < table r = the question item is invalid.

All Pearson Correlation values (calculated r > table r) between items and the total variable range from 0.580 to 0.908. The Sig. (2-tailed) values are all <0.001, indicating significance with a sample size of 178 consumers at α = 0.05. The results are declared VALID.

Table 2. Validation of Variable X1

Correlations

		X1.1	X1.2	X1.3	X1.4	X1.5	VARIABEL_X1
X1.1	Pearson Correlation	1	.739**	.580**	.701**	.722**	.870**
	Sig. (2-tailed)		<,001	<,001	<,001	<,001	<,001
	N	178	178	178	178	178	178
X1.2	Pearson Correlation	.739**	1	.585**	.735**	.691**	.867**
	Sig. (2-tailed)	<,001		<,001	<,001	<,001	<,001
	N	178	178	178	178	178	178
X1.3	Pearson Correlation	.580**	.585**	1	.645**	.605**	.787**
	Sig. (2-tailed)	<,001	<,001		<,001	<,001	<,001
	N	178	178	178	178	178	178
X1.4	Pearson Correlation	.701**	.735**	.645**	1	.800**	.902**
	Sig. (2-tailed)	<,001	<,001	<,001		<,001	<,001
	N	178	178	178	178	178	178
X1.5	Pearson Correlation	.722**	.691**	.605**	.800**	1	.888**
	Sig. (2-tailed)	<,001	<,001	<,001	<,001		<,001
	N	178	178	178	178	178	178
VARIABEL_X1	Pearson Correlation	.870**	.867**	.787**	.902**	.888**	1
	Sig. (2-tailed)	<,001	<,001	<,001	<,001	<,001	
	N	178	178	178	178	178	178

**. Correlation is significant at the 0.01 level (2-tailed).

The following are the results of the validity test using Pearson correlation (Product Moment) for variable X2 with indicators X2.1 to X2.5. The criteria are: The variable is valid if:

The correlation value (calculated r) is greater than the table r (0.147) and the significance value is less than 0.05.

The conclusions drawn for all X2.1 to X2.5 are declared valid.

Table 3. Validation of Variable X2

Correlations

		X2.1	X2.2	X2.3	X2.4	X2.5
X2.1	Pearson Correlation	1	.654**	.691**	.585**	.571**
	Sig. (2-tailed)		<,001	<,001	<,001	<,001
	N	178	178	178	178	178
X2.2	Pearson Correlation	.654**	1	.802**	.573**	.642**
	Sig. (2-tailed)	<,001		<,001	<,001	<,001
	N	178	178	178	178	178
X2.3	Pearson Correlation	.691**	.802**	1	.605**	.672**
	Sig. (2-tailed)	<,001	<,001		<,001	<,001
	N	178	178	178	178	178
X2.4	Pearson Correlation	.585**	.573**	.605**	1	.513**
	Sig. (2-tailed)	<,001	<,001	<,001		<,001
	N	178	178	178	178	178
X2.5	Pearson Correlation	.571**	.642**	.672**	.513**	1
	Sig. (2-tailed)	<,001	<,001	<,001	<,001	
	N	178	178	178	178	178
VARIABEL_X2	Pearson Correlation	.831**	.882**	.902**	.775**	.806**
	Sig. (2-tailed)	<,001	<,001	<,001	<,001	<,001
	N	178	178	178	178	178

		VARIABEL_X2
X2.1	Pearson Correlation	.831**
	Sig. (2-tailed)	<,001
	N	178
X2.2	Pearson Correlation	.882**
	Sig. (2-tailed)	<,001
	N	178
X2.3	Pearson Correlation	.902**
	Sig. (2-tailed)	<,001
	N	178
X2.4	Pearson Correlation	.775**
	Sig. (2-tailed)	<,001
	N	178
X2.5	Pearson Correlation	.806**
	Sig. (2-tailed)	<,001
	N	178
VARIABEL_X2	Pearson Correlation	1
	Sig. (2-tailed)	
	N	178

2. Variable Y

The following are the results of the validity test using Pearson correlation for variable Y with indicators Y.1 to Y.5. The variable is valid if:

r count > r table or Sig (p-value) < 0.05. The calculation results are declared VALID.

Table 4. Variable Validation

Correlations

		Y1	Y2	Y3	Y4	Y5
Y1	Pearson Correlation	1	.639**	.634**	.642**	.513**
	Sig. (2-tailed)		<,001	<,001	<,001	<,001
	N	178	178	178	178	178
Y2	Pearson Correlation	.639**	1	.701**	.705**	.580**
	Sig. (2-tailed)	<,001		<,001	<,001	<,001
	N	178	178	178	178	178
Y3	Pearson Correlation	.634**	.701**	1	.746**	.645**
	Sig. (2-tailed)	<,001	<,001		<,001	<,001
	N	178	178	178	178	178
Y4	Pearson Correlation	.642**	.705**	.746**	1	.573**
	Sig. (2-tailed)	<,001	<,001	<,001		<,001
	N	178	178	178	178	178
Y5	Pearson Correlation	.513**	.580**	.645**	.573**	1
	Sig. (2-tailed)	<,001	<,001	<,001	<,001	
	N	178	178	178	178	178
VARIABEL_Y	Pearson Correlation	.809**	.862**	.886**	.876**	.780**
	Sig. (2-tailed)	<,001	<,001	<,001	<,001	<,001
	N	178	178	178	178	178

		VARIABEL_Y
Y1	Pearson Correlation	.809**
	Sig. (2-tailed)	<,001
	N	178
Y2	Pearson Correlation	.862**
	Sig. (2-tailed)	<,001
	N	178
Y3	Pearson Correlation	.886**
	Sig. (2-tailed)	<,001
	N	178
Y4	Pearson Correlation	.876**
	Sig. (2-tailed)	<,001
	N	178
Y5	Pearson Correlation	.780**
	Sig. (2-tailed)	<,001
	N	178
VARIABEL_Y	Pearson Correlation	1
	Sig. (2-tailed)	
	N	178

**. Correlation is significant at the 0.01 level (2-tailed).

Conclusion:

The validity test results can be seen in the X1, X2, and Y variable columns. The Pearson Correlation value shows a value greater than the r table of 0.1471 (i.e., with a value of 1). This Pearson Correlation value can be concluded that the question items asked in the questionnaire are VALID.

B. Multiple Linear Regression

The regression equation in Table 5 is Y = 0.039 + 0.0331 X1 + 0.665 X2

This means:

If X1 increases by 1 unit, then Y increases by 0.331 (with X2 constant).

If X2 increases by one unit, then Y increases by 0.665 (with X1 constant).

The constant 0.039 is the value of Y when X1 and X2 are equal to 0.

Table 5. Multiple Linear Regression

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.039	.254		.155	.877
	VARIABEL_X1	.331	.055	.335	6.036	<,001
	VARIABEL_X2	.665	.057	.654	11.762	<,001

a. Dependent Variable: VARIABEL_Y

Partial Test (t-test)

Judging from the t-column and sig. of the variables:

- X1 (Variable X1)

t = 6.096

Sig. = < 0.001

(significant because p < 0.05) X1 has a positive and significant effect on Y

- X2 (Variable X2)

t = 11.76

Sig. = < 0.001

(significant because p < 0.05) X2 has a positive and significant effect on Y

Judging from the Standardized Coefficients (Beta), X1 = 0.305 and X2 = 0.654, indicating that X2 has a more dominant influence on Y because its Beta is greater.

V. CONCLUSION

Based on the research results, it can be concluded that Kentucky Fried Chicken product quality and service significantly influence customer satisfaction. Product quality, including taste, price, and attractive packaging, can increase consumer interest and satisfaction. Furthermore, good service, such as speed, friendliness, and accuracy in serving customers, is also a crucial factor in building customer satisfaction.

The validity test results indicate that all indicators used in this study are valid and worthy of analysis. Furthermore, a T-test using SPSS revealed that product quality and service variables, both partially and simultaneously, significantly influence customer satisfaction.

Therefore, Kentucky Fried Chicken businesses need to continuously improve product and service quality to meet customer needs and expectations, thereby maintaining and increasing customer satisfaction and loyalty.

REFERENCE

Aswar Hanif, Endang Wahyudi,Harna Adianto, Lilik Martanto. "Sistem Informasi Persediaan Barang Pada UMKM Reseller Barang Pokok." *Jurnal Profitabilitas* 2 (2021): 50–57.

Engineering Life cycle Management. *Wireframes. IBM Engineering Lifecycle Management Documentation,* 2022.

Fatmawati, & Munajat, J. "Implementasi Model Waterfall Pada Sistem Informasi Persediaan Barang Berbasis Web (Studi Kasus: PT.Pamindo Tiga T)." *Jurnal Media Informatika Budidarma* 2 (2018): 1–9.

Fauziah, S., & Ratnawati. "Penerapan Metode FIFO Pada Sistem Informasi Persediaan Barang. Jurnal Teknik Komputer." *Jurnal Teknik Komputer,* 4(1) (2018).

GHARAJEH, M. S. "Waterative Model: An Integration of the Waterfall and Iterative Software Development Paradigms." *Database Systems Journal* X (2019).

Hasanah, R. L., Kholifah, D. N., & Alamsyah, D. P. "Pengaruh Modal, Tingkat Pendidikan Dan Teknologi Terhadap Pendapatan Umkm Di Kabupaten Purbalingga." *KINERJA: Jurnal Ekonomi Dan Manajemen* 17(2) (2020): 305–313.

Heriyanti, F., & Ishak A. "Design of Logistics Information System in the Finished Product Warehouse with the Waterfall Method: Review Literature." *IOP Conference Series: Materials Science and Engineering,* 2020, 1–5.

Meilano, R., Damanik, F., & Wr, T. "Pengembangan Sistem Informasi Persediaan Barang Dengan Metode Waterfall." *Jurnal ELTI* 2(2). (2020): 30–34.

Pahmi. "Kualitas Produk Dan Harga Mempengaruhi Minat Beli Masyarakat." *PT. Nas Media Indonesia.*, 2024.

Rochma, F., e al. "Analisis Pengaruh Kualitas Produk Dan Kualitas Pelayanan Terhadap Kepuasan Pelanggan." *Sambal Gami Jeet 81 Porong. Talijagad,* 2024.