Indonesian Interdisciplinary Journal of Sharia Economics (IIJSE)
e-ISSN: 2621-606X
Vol. 8. No. 3 (2025)
Page: 11474-11486

ANALYSIS OF THE EFFECT OF SERVICE QUALITY ON USER SATISFACTION OF MCDONALD'S APPLICATION USING E-SERVQUAL AND IMPORTANCE PERFORMANCE ANALYSIS (IPA) METHODS

Indah Yansi Nofianto[1]
Universitas Pembangunan Nasional "Veteran" Jawa Timur, Surabaya, Indonesia
indahyansi@gmail.com

Dwi Sukma Donoriyanto[2]
Universitas Pembangunan Nasional "Veteran" Jawa Timur, Surabaya, Indonesia
dwisukama.ti@upnjatim.ac.id

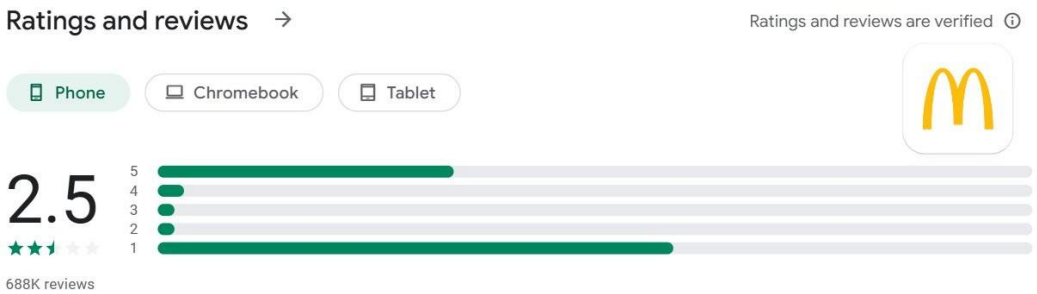
Abstract

The rapid expansion of digital services has intensified competition in the online food delivery (OFD) industry, pushing businesses to enhance service quality to meet customer expectations. This study evaluates the McDonald's mobile application using the E-SERVQUAL model and Importance Performance Analysis (IPA) to examine the link between service quality dimensions and user satisfaction. A quantitative approach was used, with data collected from McDonald's app users in Indonesia through online questionnaires. The findings highlight that responsiveness, reliability, and system efficiency are critical factors affecting customer satisfaction, while application security, transaction smoothness, and system responsiveness require improvement. Based on the results, recommendations were proposed to enhance system stability, security features, and user interface design, ultimately aiming to increase customer satisfaction and loyalty in the competitive digital food service market.

Keywords: E-SERVQUAL, Importance Performance Analysis, Service Quality, Customer Satisfaction, McDonald's Mobile Application

INTRODUCTION

The development of digital technology has transformed the landscape of the fast-food industry, including online food delivery services. McDonald's, as one of the major players in this industry, has adopted digital services through the McDelivery application. However, the effectiveness and customer satisfaction of this service remain a topic of debate, particularly in the context of competition with third-party services such as GoFood and GrabFood (Monica & Ciptomulyono, 2022).



Several previous studies have discussed digital services in the fast-food industry, but there are still gaps in understanding the strengths and weaknesses of the McDelivery application compared to third-party applications. For example, research by [Researcher's Name] (Year) highlights the importance of user experience in food delivery applications but has not specifically analyzed McDelivery in the context of market competition in Indonesia. Another study by [Researcher's Name] (Year) focuses on user satisfaction factors in Online Food Delivery (OFD) applications but does not delve deeply into how McDonald's can enhance its competitive advantage through its own digital services (Susilawati, 2022).

To measure the quality of McDelivery's digital service, this study employs the E-SERVQUAL and Importance-Performance Analysis (IPA) methods. These methods are more suitable than other models, such as the Technology Acceptance Model (TAM) or the Unified Theory of Acceptance and Use of Technology (UTAUT), because E-SERVQUAL focuses on evaluating service quality based on customer expectations and perceptions, while IPA helps identify service aspects that need improvement. The use of both methods provides a more holistic analysis of the effectiveness of McDonald's digital services (Tjitrarukmana, 2022).

Furthermore, to understand McDelivery's position in the Indonesian market, a comparison with third-party services such as GoFood and GrabFood is necessary. Available data indicate that many customers prefer using third-party applications over McDonald's official app. This preference may be due to factors such as ease of access, more attractive promotions, or integration with other services. Therefore, it is essential to determine whether McDelivery has sufficient appeal to compete with third-party applications and how McDonald's can increase the adoption of its service. Finally, analyzing McDelivery's rating trends on Google Play Store is a crucial factor in assessing its service performance. Currently, McDelivery holds a certain rating, but there has been no analysis of its rating trends over the past few years. Has the rating improved along with the enhancement of features and services? Or has it stagnated or declined due to customer complaints? Additionally, McDonald's response to customer complaints should also be examined to understand its digital service

improvement strategies. Thus, this study will provide a more comprehensive insight into the optimization of McDelivery services in Indonesia**.**

RESEARCH METHOD

This research analyzes the impact of service quality on user satisfaction with the McDonald's application using E-SERVQUAL and Importance Performance Analysis (IPA). The methodology includes research design, population and sample selection, data collection techniques, and data analysis methods. This study employs a quantitative approach using surveys to collect data from users of the McDonald's mobile application. The research aims to evaluate the gap between customer expectations and their actual experiences with the app's service quality, identifying key areas for improvement.

Data collection in this study consists of primary and secondary data. Primary data is obtained directly through online questionnaires distributed via Google Forms to respondents who have used the McDonald's application (Muttaqin et al., 2023). Meanwhile, secondary data is gathered from existing sources, such as online references, journals, and books that provide insights into service quality in the McDonald's application (Muttaqin et al., 2023). The data analysis process involves E-Service Quality (E-SERVQUAL) to assess the gap between user expectations and perceived service quality, while Importance Performance Analysis (IPA) is used to prioritize areas for improvement and optimize service performance. This approach helps identify key factors affecting customer satisfaction and provides actionable recommendations for enhancing the app's overall service quality.

RESULTS AND DISCUSSION

In this study, there are 6 dimensions of E-ServQual and 16 attributes used as the basis for preparing the questionnaire, while the explanations related to the dimensions and attributes used are as follows:

Table 1
Attributes in Each Variable

Variable	Indicator	Description	Source
Site Organization	SO1	The McDonald's application has an attractive visual appearance. For example, the McDonald's app features bright colors and appealing product images, with a clean and organized layout that enhances visual comfort and ease of navigation.	(Damayanti & Palupi, 2023)
	SO2	The McDonald's application has a well-structured user interface. For example, the main menu clearly categorizes options such as "Menu," "Promotions," "Orders," and "Account," making it easier for users to find what they need.	(Damayanti & Palupi, 2023)

Variable	Indicator	Description	Source
Responsive	RSP1	The McDonald's app system provides fast and effective responses. For instance, once users add items to their cart, the app promptly displays estimated delivery time and total cost without delays.	(Damayanti & Palupi, 2023)
	RSP2	The McDonald's app ensures quick responses without overwhelming users. For example, order status updates appear within seconds, minimizing customer waiting time.	(Damayanti & Palupi, 2023)
Reliability	RL1	The McDonald's app operates without errors. For example, users can complete orders without experiencing payment failures or menu selection errors, ensuring a seamless ordering process.	(Damayanti & Palupi, 2023)
	RL2	The McDonald's app ensures adequate security. For instance, the app uses data encryption to protect payment details and requires two-factor authentication for data security.	(Damayanti & Palupi, 2023)
	RL3	The McDonald's app should deliver services within the promised timeframe. For example, it provides accurate delivery time estimates and ensures food arrives as expected.	(Damayanti & Palupi, 2023)
User Friendliness	UF1	The McDonald's app is easy to use. For instance, account registration and ordering processes are simple, allowing users to complete transactions in just a few steps.	(Damayanti & Palupi, 2023)
	UF2	The app's navigation is user-friendly and intuitive. For example, users can easily access categories like "Popular Menu," "Promotions," and "My Orders" with just a few taps.	(Damayanti & Palupi, 2023)
	UF3	The McDonald's app functions smoothly without technical issues. For example, it operates without crashes or downtime, ensuring seamless product selection and payment processes.	(Damayanti & Palupi, 2023)
Personal Needs	PN1	Users feel secure when using the McDonald's app. For example, security notifications reassure users when entering personal and payment details.	(Damayanti & Palupi, 2023)

Variable	Indicator	Description	Source
	PN2	The McDonald's app meets users' personal preferences. For example, it offers meal recommendations based on past orders, such as vegetarian or low-calorie options.	(Damayanti & Palupi, 2023)
	PN3	The app provides personalized product recommendations. For example, it displays a customized menu based on previous orders, making it easier for users to find their favorite items.	(Damayanti & Palupi, 2023)
Efficiency	EF1	Users can complete transactions quickly within the McDonald's app. For example, they can order and pay in just a few steps using credit cards, e-wallets, or bank transfers.	(Damayanti & Palupi, 2023)
	EF2	The McDonald's app is easily accessible. For example, it is available on various devices, including Android and iOS, without technical issues.	(Damayanti & Palupi, 2023)
	EF3	The McDonald's app allows users to find what they need easily. For example, the search feature helps users quickly locate menus or promotions by entering specific keywords.	(Damayanti & Palupi, 2023)

Table 2
Validity Test Result

Indicator	Perception			Expectations		
	R count	R table	Result	R count	R table	Result
SO1	0,256	0,185	Valid	0,529	0,185	Valid
SO2	0,571	0,185	Valid	0,662	0,185	Valid
RSP1	0,494	0,185	Valid	0,587	0,185	Valid
RSP2	0,685	0,185	Valid	0,612	0,185	Valid
RL1	0,642	0,185	Valid	0,630	0,185	Valid
RL2	0,655	0,185	Valid	0,619	0,185	Valid
RL3	0,555	0,185	Valid	0,673	0,185	Valid
UF1	0,462	0,185	Valid	0,721	0,185	Valid
UF2	0,702	0,185	Valid	0,677	0,185	Valid
UF3	0,692	0,185	Valid	0,678	0,185	Valid
PN1	0,720	0,185	Valid	0,632	0,185	Valid
PN2	0,357	0,185	Valid	0,687	0,185	Valid
PN3	0,628	0,185	Valid	0,674	0,185	Valid
EF1	0,263	0,185	Valid	0,743	0,185	Valid
EF2	0,542	0,185	Valid	0,626	0,185	Valid
EF3	0,294	0,185	Valid	0,722	0,185	Valid

All attributes in the E-ServQual questionnaire perception and expectations are declared valid with r count. This is in accordance with the criteria of the Validity Test, namely, an attribute is said to be valid if r count ≥ r table.

Table 3
Reliability Test Result

Questionnaire	*Cronbach's Alpha*	Rtable	Result
E-ServQual Persepsi	0,929	0,185	Reliable
E-ServQual Harapan	0,911	0,185	Reliable

In this study, reliability testing was conducted on all E-ServQual questionnaire results that had been filled out by respondents, namely in the form of perception and expectation values. Validity testing was conducted with the help of IBM SPSS Statistics 27 Software. A measuring instrument can be said to be reliable when the Cronbach's alpha value ≥ 0.70. If the number of respondents is 110, the following are the results of the reliability test.

E-Servqual Method

After testing the questionnaire, the next stage is to calculate E-ServQual by calculating the Gap between the E-ServQual Expectation and Perception questionnaires. To obtain the E-ServQual (Gap) value, it is necessary to calculate the average value of the results of the E-ServQual Perception questionnaire.

Table 4
Calculation of E-ServQual Value (Gap) for Each Attribute

Indicator	Average Perception Level	Average Expectation Level	Gap
SO1	4,53	4,37	0,16
SO2	4,01	4,34	-0,33
RSP1	4,60	4,55	0,05
RSP2	3,99	4,51	-0,52
RL1	3,81	4,43	-0,62
RL2	3,96	4,47	-0,51
RL3	4,52	4,45	0,07
UF1	4,55	4,53	0,02
UF2	3,95	4,46	-0,51
UF3	3,97	4,51	-0,54
PN1	4,01	4,56	-0,55
PN2	4,57	4,44	0,13
PN3	4,07	4,56	-0,49
EF1	4,56	4,51	0,05
EF2	4,60	4,58	0,02
EF3	4,55	4,50	0,05

Based on the results of the Gap calculation for the SO2 attribute, a negative value of -0.33 was obtained. The negative Gap value results indicate that the SO2 attribute still does not meet user expectations. So, the SO2 attribute needs attention in improving quality. From the gap calculation value above, a ranking will be carried out on each attribute. The following is the E-ServQual (Gap) value for each attribute after being sorted:

Table 5
E-ServQual Value Ranking of Each Attribute

Indicator	Attributes	Gap	Rank
RL1	The McDonald's application has an attractive visual appearance.	-0,62	1
PN1	The McDonald's application has a well-structured user interface.	-0,55	2
UF3	The McDonald's app system provides fast and effective responses	-0,54	3
RSP2	The McDonald's app ensures quick responses without overwhelming users.	-0,52	4
RL2	The McDonald's app operates without errors.	-0,51	5
UF2	The McDonald's app ensures adequate security.	-0,51	6
PN3	The McDonald's app should deliver services within the promised timeframe.	-0,49	7
SO2	The McDonald's app is easy to use.	-0,33	8
UF1	The app's navigation is user-friendly and intuitive.	0,02	9
EF2	The McDonald's app functions smoothly without technical issues.	0,02	10
RSP1	Users feel secure when using the McDonald's app.	0,05	11
EF1	The McDonald's app meets users' personal preferences.	0,05	12
EF3	The app provides personalized product recommendations.	0,05	13
RL3	Users can complete transactions quickly within the McDonald's app.	0,07	14
PN2	The McDonald's app is easily accessible.	0,13	15
SO1	The McDonald's app allows users to find what they need easily.	0,16	16

Importance Performance Analysis

Before calculating the level of suitability, the first step that needs to be done is to assess the score for each attribute in the questionnaire, both at the level of perception and expectation. The score for each attribute is obtained by multiplying each criterion by its score, then adding them up to produce the value of the level of perception and expectation for each attribute.

Table 6
Level of Conformity Between Respondents' Perceptions and Expectations

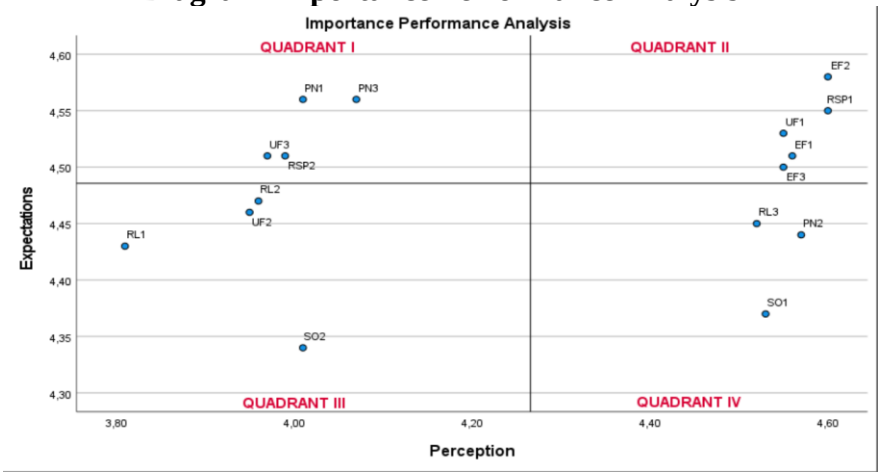
Indicator	∑X	∑Y	Level of Compliance	%
SO1	498	481	1,04	104%
SO2	441	477	0,92	92%
RSP1	506	501	1,01	101%
RSP2	439	496	0,89	89%
RL1	419	487	0,86	86%
RL2	436	492	0,89	89%
RL3	497	490	1,01	101%
UF1	501	498	1,01	101%
UF2	435	491	0,89	89%

Indicator	∑X	∑Y	Level of Compliance	%
UF3	437	496	0,88	88%
PN1	441	502	0,88	88%
PN2	503	488	1,03	103%
PN3	448	502	0,89	89%
EF1	502	496	1,01	101%
EF2	506	504	1,00	100%
EF3	500	495	1,01	101%
Rata-Rata			0,95	95%

The average level of conformity obtained was 91%, which means there is a slight mismatch between user expectations and perceptions, which is 9%. The level of conformity below 100% indicates that although most of the attributes have met user expectations, there are still some aspects that need to be improved to improve overall user satisfaction. In this case, the McDonald's application needs to conduct further evaluation on attributes that have low conformity to improve service quality and user experience.

After obtaining the perception and expectation values of users towards the McDonald's application service, the next step is to carry out mapping using the Importance Performance Analysis (IPA) diagram, which consists of the Performance/Perception and Importance/Expectation quadrants.

Figure 1
Diagram Importance Performance Analysis



Based on the mapping of the Importance Performance Analysis (IPA) diagram in Figure 4.1 above, the following explanation is obtained:

- Quadrant I

In Quadrant I, there are attributes that have a very high level of importance and are highly expected by customers, but the performance of the McDonald's application is considered unsatisfactory. This indicates that aspects in this quadrant need to be a top priority in the improvement process to improve user experience. Attributes included in Quadrant I include:

1. PN1: McDonald's Application users feel secure in using the service
2. PN3: The McDonald's Application System provides users with information and products according to their preferences

3. UF3: The McDonald's application system runs smoothly without technical disruptions that hinder use
4. RSP2: The McDonald's Application System provides services with a fairly fast response without being too busy responding to customer requests

• Quadrant II

In Quadrant II, there are attributes that have a high level of importance and have received good perceptions from customers. This shows that the attributes in this quadrant have performance that is in accordance with user expectations, so it is necessary to maintain and maintain its quality in order to continue to provide a satisfying experience for customers. Attributes included in Quadrant II include:

1. EF1: McDonald's Application Users can make transactions quickly within the system.
2. UF1: McDonald's Application System can be accessed easily.
3. EF3: McDonald's Application It is easy to find what users need in the system.
4. RSP1: McDonald's Application System provides services with fast and effective responses.
5. EF2: McDonald's Application System can be used easily.

• Quadrant III

In Quadrant III, there are attributes that have a low level of importance and also get low perceptions from customers. This shows that the aspects in this quadrant are not a top priority for users and do not have much influence on consumer satisfaction. Therefore, the company does not need to focus too much on its improvements, but can still make improvements if possible to improve the overall user experience. Attributes included in Quadrant III include:

1. SO2: The McDonald's application has a well-organized user interface.
2. RL1: The McDonald's application system is able to work error-free.
3. UF2: Navigation on the McDonald's application system is very easy to use and its usefulness is clear.
4. RL2: The McDonald's application system has adequate security.

• Quadrant IV

In Quadrant IV, there are attributes that have a low level of importance, but have received high perceptions from customers. This shows that the aspects in this quadrant already have good performance, but are not considered very important by users in influencing overall consumer satisfaction. Therefore, the company can allocate resources to prioritize improvements to attributes in quadrant I, while aspects in this quadrant are maintained in quality without requiring significant improvements. Attributes included in Quadrant IV include:

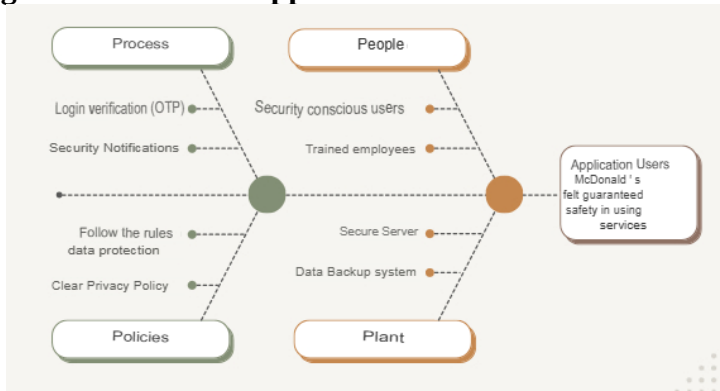
1. RL3: The McDonald's Application System needs to provide services according to the promised time
2. PN2: McDonald's Application users feel that their personal needs are met when using the service
3. SO1: The McDonald's Application has a visually attractive appearance

Improvement Recommendations

After knowing the service attributes of the McDonald's application that require service quality improvement and the IPA diagram analysis, then a proposal for improvement is made using a fishbone diagram analysis. Proposals for improving the service quality of the

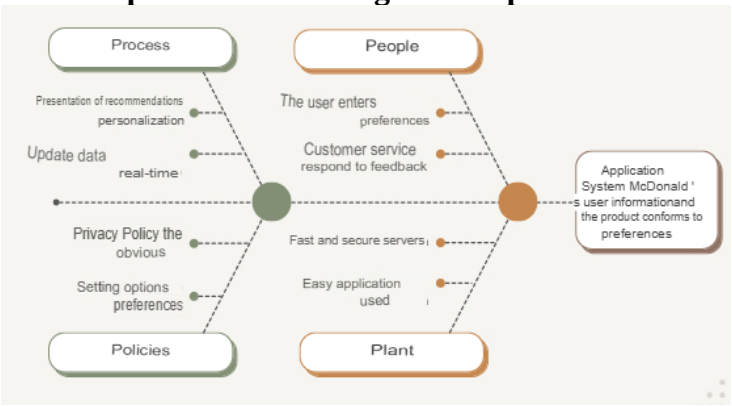
McDonald's application attributes that require improvement can be done by identifying the factors that cause low quality in these attributes. To find the root cause of the low quality of application services, a fishbone diagram can be used. Because McDonald's is part of the service industry, the type of diagram used is the 4P Fishbone Diagram. The following is a categorization of each problem along with an analysis of its root causes:

Figure 1
Fishbone Diagram McDonald's application users feel secure in using the service.



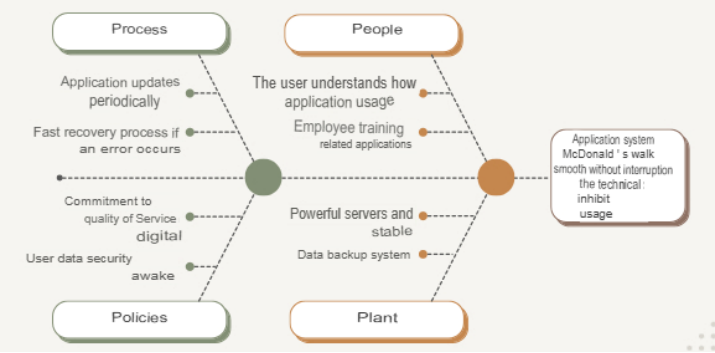
The McDonald's application ensures the security of its users by verifying logins using OTP (One Time Password) and security notifications. In addition, users are required to follow data protection rules and understand clear privacy policies. Employees involved in the development and maintenance of the application are also trained in security. The servers used are secure, and a data backup system is also run to prevent data loss. Thus, McDonald's Application users can feel secure when using this service.

Figure 2
Fishbone diagram of McDonald's application system provides users with information and products according to their preferences



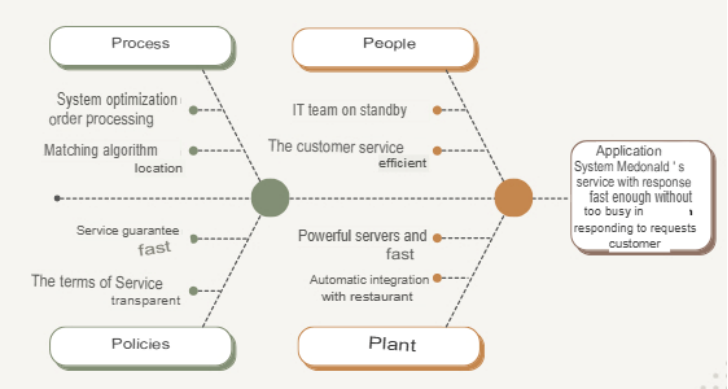
McDonald's process involves presenting personalized recommendations, real-time data updates, clear privacy policies, and preference-setting options. McDonald's People are the users who enter their preferences and get responses from customer service. McDonald's Plants have fast, secure servers and easy-to-use applications. All of this is supported by McDonald's Policies, which ultimately result in the McDonald's Application System that delivers information and products that match user preferences.

Figure 3
The fishbone diagram of McDonald's application system runs smoothly without any technical problems that hinder its use



The McDonald's application ensures the digital service quality process and user data security. This is realized through regular application updates, a quick recovery process in the event of an error, and a commitment to digital service quality. People play an important role in the smooth running of the system. Users must understand how to use the application. Employees must also be trained regarding the application to ensure smooth operations. Plants play a role in maintaining system stability. Strong and stable servers and data backup systems are important components in the plant. Policies act as guidelines for all elements, ensuring the alignment and sustainability of the system.

Figure 4
A fishbone diagram of McDonald's application system provides fast response service



The McDonald's application ensures the process refers to how customer orders are processed efficiently, including optimization of the order processing system, location matching algorithm, fast service guarantee, and transparent service provisions. People include an IT team that is ready and provides efficient customer service. Both of these aspects are important to ensure the smooth running of the service process. Policies relate to transparency and speed in providing services to customers. These policies are the foundation for the team to work professionally and in accordance with established standards. Plants refer to infrastructure, especially powerful servers and automatic integration with restaurants. This infrastructure supports processes and people to carry out tasks smoothly.

CONCLUSION

This study analyzed the service quality of the McDonald's mobile application using the E-SERVQUAL and Importance Performance Analysis (IPA) methods to assess its impact on user satisfaction. The findings indicate that several dimensions of service quality, including responsiveness, reliability, and efficiency, play a crucial role in shaping customer perceptions and expectations. The gap analysis results highlight discrepancies between expected and perceived service quality, with some attributes requiring immediate improvements.

The Importance Performance Analysis (IPA) mapping reveals that key attributes, such as application security, system responsiveness, and smooth operation, fall into Quadrant I, indicating areas that need urgent attention to enhance the overall user experience. Meanwhile, attributes in Quadrant II, such as transaction speed and ease of access, demonstrate high performance and should be maintained to sustain user satisfaction.

Based on these insights, recommendations for service improvements were formulated using fishbone diagram analysis, identifying root causes of service inefficiencies. Suggested improvements include enhancing system security, optimizing app responsiveness, and refining the user interface to align better with customer expectations. Implementing these recommendations will enable McDonald's to enhance digital service quality, improve user satisfaction, and strengthen customer loyalty in the highly competitive online food delivery market.

Future research could explore additional external factors influencing customer satisfaction, such as brand image, pricing strategies, and user engagement across various digital platforms, to gain a more comprehensive understanding of consumer behavior in digital food services.

REFERENCES

Damayanti, P. R., & Palupi, G. S. (2023). Application of E-Service Quality and Importance Performance Analysis (IPA) methods for analysis of transfer service quality on BRImo application user satisfaction. Journal of Emerging Information System and Business Intelligence (JEISBI), 4(3), 115–125. DOI: https://ejournal.unesa.ac.id/index.php/JEISBI/article/view/55156

Monica, R. D., & Ciptomulyono, U. (2022). Improving the quality of service of McDonald's application using the Importance Performance Analysis (IPA) and Quality Function Deployment (QFD) methods. ITS Engineering Journal, 11(3), A270–A275. DOI:10.12962/j23373539.v11i3.100088.

Muttaqin, P. S., Novitasari, N., & Setyawan, E. B. (2023). Risk management analysis in container yard development projects in Eastern Indonesia. Motivection: Journal of Mechanical, Electrical and Industrial Engineering, 5(1), 173–186. DOI: https://doi.org/10.46574/motivection.v5i1.183.

Sholihah, R., & Indriyanti, A. D. (2022). Analysis of CamScanner application user satisfaction using the Technology Acceptance Model (TAM) and End-User Computing Satisfaction (EUCS) methods. Journal of Emerging Information System and Business Intelligence (JEISBI), 3(3), 102–109. DOI: https://ejournal.unesa.ac.id/index.php/JEISBI/article/view/47236.

Susilawati, A. (2022). The effect of electronic service quality on McDelivery mobile application on Generation Z consumer satisfaction.

Syahwi, M., & Pantawis, S. (2021). The effect of product quality, service quality, corporate image, and customer value on Indihome customer satisfaction. ECONBANK: Journal of Economics and Banking, 3(2), 150–163. DOI: https://doi.org/10.35829/econbank.v3i2.52.

Tjitrarukmana, A. R. D. (2022). The effect of consumer satisfaction with e-service quality on consumer reuse intentions on the McDonald's application.

Toha, Mohamad & Habibah, N.J. (2023). MSME Empowerment and Development Program to Increase Consumer Satisfaction. *Sahwahita: Community Engagement Journal*, *1*(1), 26-39. https://e-journal.bustanul-ulum.id/index.php/Sahwahita/article/view/24

Triwijayanti, N., Sanoto, H., & Paseleng, M. (2022). The effect of educational service quality, school culture, and school image on parental satisfaction. Scholaria: Journal of Education and Culture, 12(1), 74–80. DOI: https://doi.org/10.24246/j.js.2022.v12.i1.p74-80.

Zuhaira, I. A., & Pujiani, I. (2024). Analisis manajemen data kualitas layanan e-commerce menggunakan metode E-SERVQUAL dan Importance Performance Analysis. Infotech Journal, 10(2), 245–251. DOI:10.31949/infotech.v10i2.10933.