



American Journal of Economics and Business Innovation (AJEBI)

ISSN: 2831-5588 (ONLINE), 2832-4862 (PRINT)

VOLUME 5 ISSUE 1 (2026)

**PUBLISHED BY
E-PALLI PUBLISHERS, DELAWARE, USA**

Determinants of Customer Satisfaction on Mobile Telecommunication Services in Malaysia

Rubyat Sharin¹, Md Muhibbullah^{2*}, Rafikul Islam³

Article Information

Received: January 02, 2025**Accepted:** March 26, 2025**Published:** January 22, 2026

Keywords

*Customer Satisfaction,
Customer Service, Mobile
Telecommunication, Price, Service
Quality*

ABSTRACT

This study delves into the overarching consumer satisfaction landscape within the telecommunications industry in Malaysia, examining factors influencing customer satisfaction and their interrelation with customer service, service quality, and price. Though these factors have separately been researched in many countries, at present, there is a limited and context-specific understanding of how they combine to shape customer satisfaction in Malaysia's highly competitive mobile market, especially within an integrated framework that is grounded in Expectation Confirmation Theory (ECT). To address this gap, data were collected through a self-administered, online questionnaire from 250 mobile telecommunication service users in Selangor and Kuala Lumpur. The study aimed to comprehensively understand customer satisfaction dynamics within the Malaysian telecom sector. Using SPSS for analysis, it has been found that customer service, service quality and price have a positive and significant influences on customer satisfaction, with service quality being the highest factor that explains customer satisfaction. The model explains 53.7% of the variance in customer satisfaction, underscoring the combined importance of the three determinants. This research extends existing knowledge in providing empirically grounded evidence from the Malaysian context and by shedding light on the relative influence of customer service, service quality, and price on satisfaction within an ECT-based framework. From a practical perspective, the results suggest telecom providers should focus on service quality improvements, enhance their customer service capabilities, and adopt fair and competitive pricing policies in order to develop customer satisfaction and retention in a rapidly changing market.

INTRODUCTION

In today's fiercely competitive telecommunications market, where consumers demand both affordability and quality, service providers face the challenge of striking the right balance to meet evolving expectations (Hallur & Sane, 2018). This industry, often portrayed as a technological battleground, has witnessed an exponential growth in mobile connections worldwide, particularly in populous nations such as China, India, and the United States (GSM Association, 2021). As mobile communications have advanced, manufacturers have not only emphasized functionality but also aesthetics, contributing to the sector's expansion, especially in developing countries (Calvo-Porrall & Otero-Prada, 2020). In the face of this explosive expansion, telecom companies are struggling to stay affordable while also innovating to keep a wide range of customers interested in what they have to offer. Recent research by Smith & Patel (2024) has shown how important it is to use strategic pricing and infrastructure investment to maintain growth and competitiveness in the ever-changing telecommunications industry.

The telecom market in Malaysia is characterized by a wide range of operators offering a variety of services to cater to customers' ever-increasing needs. Companies compete fiercely, trying to outdo one another with creative products, competitive pricing, and improved customer service (Sekaran *et al.*, 2024). Customer satisfaction, pivotal to business success, hinges on

surpassing consumer expectations (Ye *et al.*, 2020; Chen *et al.*, 2020). With a paradigm shift towards relationship marketing, there's a growing emphasis on understanding and meeting customer needs and expectations (Adeosun *et al.*, 2018). In Malaysia's dynamic telecommunications landscape, major players like Maxis, Digi, and Celcom compete vigorously for market dominance amidst shifting consumer preferences (Afroz *et al.*, 2020; Eu, 2016). However, despite industry efforts, customer churn remains a persistent challenge, necessitating a closer examination of factors influencing consumer decisions to switch service providers (Rahman & Mannan, 2018). Customer satisfaction in the telecommunications industry is influenced by various key factors. Studies from Bangladesh, Sri Lanka, and Saudi Arabia highlight significant determinants. Factors such as network facilities, service quality, loyalty programs, corporate image, trust, and customer communication behaviour play crucial roles in enhancing customer satisfaction (Chatterjee & Rahman, 2023; Karunaratna & Kumara, 2022; Gou *et al.*, 2023; Karim *et al.*, 2020, 2022). Additionally, the quality of telecommunication services, reasonable pricing, pleasant customer service, and meeting customer needs are essential aspects that impact satisfaction and loyalty (Soma *et al.*, 2021). Moreover, the use of advanced models like XGBoost and CatBoost to predict customer satisfaction based on network performance indicators and customer behavior further emphasizes the importance

¹ Australian Institute of Higher Education, 545 Kent St, Sydney, NSW, Australia

² Polytechnic Institute Australia, L16, 233 Castlereagh Street, Sydney 2000, Australia

³ Aliah University, New Town, Kolkata – 700156, India

* Corresponding author's e-mail: muhibbullah@pia.edu.au

of understanding and meeting customer expectations to ensure high satisfaction levels (Almuhanna & Alharbi, 2023).

However, existing literature lacks in-depth exploration of the specific factors shaping subscriber choices in the Malaysian telecom market. This study aims to bridge this gap by assessing the influence of price, service quality, and customer service on customer satisfaction among Malaysian mobile phone users. Drawing on the Expectation Confirmation Theory (ECT) by Whetten (1989), the study seeks to elucidate the relationships between these variables, offering both theoretical insights and practical implications for industry stakeholders.

The objectives of this study are threefold: (i) to assess the influence of customer service on customer satisfaction in Malaysian mobile telecommunications, (ii) to examine the impact of service quality on customer satisfaction, and (iii) to analyze the relationship between price and customer satisfaction. By addressing these objectives, the study endeavors to provide valuable insights into enhancing customer satisfaction and retention strategies in the Malaysian telecommunication sector, thereby contributing to the sustainable growth of service providers in this competitive market.

LITERATURE REVIEW

This section highlights past studies on customer satisfaction and other variables i.e. customer service, service quality and price. It also presents some hypotheses according to previous research, followed by a conceptual framework.

Customer Service and Customer Satisfaction

In the telecommunications sector, maintaining market competitiveness and client retention depend heavily on customer service and customer satisfaction. Current research highlights the significance of efficient communication, customized attention, and prompt resolution of issues in augmenting client contentment (Noviandy *et al.*, 2024). If a company wants to remain competitive and grow, it must grasp the importance of service quality and consumer satisfaction. High-quality service is the key to long-term success in today's highly competitive marketplace. A company's profitability can be improved by making customers happy. The foundation of any successful business is the customer's happiness, which leads to repeat purchases, brand loyalty, and favorable word-of-mouth (Khan *et al.*, 2022).

Although providing excellent service may require extra resources, time, and money, that will allow a business to distinguish itself from their competitors, retain a positive reputation among future clients, and encourage existing customers to buy from their company again. Customer service is all about how much importance a company gives to it in comparison to other factors like pricing and new product development. In this way, a company that prioritizes providing excellent customer service could invest more in employee training than the typical company

or might actively seek out input from clients through interviews. To measure satisfaction with customer service in this study, the respondents are to respond to their level of satisfaction with the support they get from a service provider.

Customer service, according to Angelova and Zeqiri (2011), is the culmination of all an organization does to satisfy customers and match their expectations. Meeting customer expectations is a way to provide customer satisfaction. To meet these expectations, retailers must provide excellent customer service. Kursunluoglu (2011) conducted research to analyze the customer service effects on customer satisfaction, which was done on 400 shopping mall customers who live in Izmir city, Turkey. Regression analyses were used to get the results, which showed a positive and significant relationship between customer service and customer satisfaction.

According to Zhao *et al.* (2019), improving communication with customers is the responsibility of the service and sales staff in the customer service department. In order to enhance customer relationship and communication efficiency, what companies can do are compiling client profile that includes information about past purchases as well as suggestions for how to improve the services offered. The service provider needs to make sure that all of their employees are knowledgeable and prepared to deal with their customers. An employee serves as a communication link between clients and service providers. Employee excellence in providing customer service will enhance the overall customer experience. The results indicate that customer service significantly influences the customers' purchase intentions (Shamsudin *et al.*, 2020). It has also been determined that some elements, such as unprofessional behavior by staff members, negative attitudes from them, failure to reach the call centre, and so forth, may influence customers' decisions to transfer from existing mobile service providers.

Another important factor that significantly influences consumer satisfaction is front-line service. According to Liang *et al.* (2013), customer service in the telecom sector is primarily concerned with the interactions and quality of communication that occur between customers and staff members of mobile service providers. Considering all the previous research, the following hypothesis has been formulated:

H1: There is a positive and significant relationship between customer service and customer satisfaction.

Service Quality and Customer Satisfaction

Quality is defined as the overall excellence or superiority that consumers perceive in a product or service (Zeithaml, 2000; Tuncer *et al.*, 2021). The telecom sector depends on prudent operations and reasonable investments. Service providers need to satisfy customers' needs and expectations in terms of pricing and quality of service in a competitive market. They have to compete on both sides as well (Ali *et al.*, 2021). Customer views of the effectiveness of a product or service's delivery in relation

to customers' expectations are related to service quality. A company that meets or beyond customers' expectations when they utilize a product or service is said to have high service quality (Hasim *et al.*, 2019). Customer feedback on the goods or services they received, and the delivery method employed for the business operation - are typically good indicators of service quality (Ruzanna *et al.*, 2020).

In the telecommunications industry, recent research emphasizes the critical relationship between customer satisfaction and service quality. Research highlights that in order to improve service quality and, in turn, consumer satisfaction, dependable network performance, effective issue resolution, and tailored customer care are essential. In this cutthroat business, tactics including proactive service performance monitoring, infrastructure upgrades, and continuous improvement activities are acknowledged as critical for satisfying changing expectations of customers and cultivating enduring loyalty (Walean *et al.*, 2024).

In the work of Parasuraman *et al.* (1985), the link between service quality and customer satisfaction was first observed. Hurley and Estelami (1998) claim that service quality influences consumer satisfaction, which in turn affects future purchase intentions. According to Cronin and Taylor (1992), service quality has an impact on customer satisfaction. As stated by Cronin *et al.* (2000), the relationship between service quality and behavioral intention is modified by total value and satisfaction.

A number of studies have found a correlation between customer satisfaction and the quality of the product or service, pricing or billing, data services, and customer service in developed and developing countries (Rita *et al.*, 2019; Hoe & Mansori, 2018; Abror *et al.*, 2019).

Palladan and Ahmad (2019) have conducted a study on leveraging customer loyalty in the telecommunications industry in Nigeria. Public university students at Gombe metropolis in Gombe State, Nigeria, were the targeted respondents, from whom they collected 383 responses. Using Smart-PLS, they used the five dimensions (tangibility, reliability, responsiveness, assurance, and empathy) of the SERVQUAL model suggested by Zeithaml *et al.* (2002) to assess customer loyalty in the Nigerian telecommunications industry. They used customer satisfaction as a moderator between five dimensions and customer loyalty, where they found a positive and indirect relationship between the three dimensions, i.e., assurance, empathy, and reliability, and customer loyalty. On the other hand, Silalahi *et al.* (2017) have contended that the SERVQUAL scale for five dimensions is significantly related to customer satisfaction.

Malik *et al.* (2012) have conducted a study to identify the impact of service on customer satisfaction in the Pakistani telecommunications sector. Customer satisfaction is closely connected with service quality, according to the Pearson correlation coefficient, which was calculated and examined using descriptive statistics.

Prakash and Srivastava (2019) also conducted research on

the role of internal service quality in enhancing patient centricity and internal customer satisfaction in a health care environment all over India. Structural Equation Modeling (SEM) was used to analyze the data collected from 238 service providers in the health-care system, including doctors, nurses, and other staff. The findings of this research have stated that there is a positive impact on internal service quality and internal customer satisfaction. For the telecommunications sector in Malaysia, to find the relationship between service quality and customer satisfaction, this study proposes the following hypothesis:

H2: There is a positive and significant relationship between service quality and customer satisfaction.

Price and Customer Satisfaction

Price has been a key factor in determining consumer satisfaction in the telecommunications sector. Current studies underscore the significance of competitive pricing strategies, fair billing procedures, and value-added service provisions in shaping consumers' opinions regarding fairness and financial value. Research indicates that in order to sustain consumer happiness and cultivate enduring loyalty, telecommunications companies must strike a balance between cost and service quality. In this dynamic market, effective pricing techniques like segmented pricing and bundling are recognized as critical instruments for satisfying a wide range of client wants and preferences (Wong *et al.*, 2024).

It is a non-disputable fact that service providers, particularly in a competitive market, are expected to compete on both price and quality of service. A product's or service's price refers to the amount of money charged for it, or the sum of values that customers exchange for the benefits of owning or utilizing the product or service, according to Kotler and Armstrong (2010). Service providers are expected to fulfill and exceed the needs and expectations of their customers in terms of price and service quality (Melody, 2001; Subram *et al.*, 2018).

Price dominance in the mass market generally leads to more options and opportunities for customers to compare the pricing structures of diverse service providers. Reduced rates would encourage more people to sign up for phone service, which could result in a significant increase in the number of "call minutes" used. Kollmann (2000) claims that network providers' basic commercial success is determined by the revenue they receive from the number of call minutes their customers use. Continuing usage and pricing policies are critical to the success of the telecom sector in a market, which must be taken into account on several levels. Vertical differentiation is one of the most common ways for companies to expand their product or service offerings (Draganska & Jain, 2006). The mobile telecommunications industry is experiencing fierce price competition in this era of information. Over the last three decades, consumer research has shown that price has a lasting impact on consumer perceptions of a product (Janakiraman *et al.*, 2006; Vanhuele *et al.*, 2006). Customer expectations of price and value in the telecom

industry are well-entrenched in the industry itself. Historically, customers have been more concerned about local charges than long-distance charges; however, local service is frequently offered at a lower price than the actual cost. Customer expectations for low prices for local services when long-distance services are overpriced are based on the fact that long-distance service could theoretically be less expensive, but they are not (Strouse, 1999). It was shown that there are considerable differences in price sensitivity across mobile service users: those who use mobile services moderately are least sensitive, whilst intensive and low-end users are most sensitive. Obtaining services often necessitates making a financial sacrifice in order to keep costs low.

For a long time, various social science fields, such as marketing and economics, have investigated how people perceive prices. Customer satisfaction and purchase behavior can be influenced by customers' price perceptions, as demonstrated by Konuk (2018). The price fairness impression positively influences customers' willingness to pay more if they had a great experience, according to Konuk (2018). The findings of the study show that customers are willing to pay more if they perceive the price to be fair. Price is one of the most important elements of the marketing mix, and it has a

significant impact on customers' purchasing decisions (Kotler *et al.*, 2017).

In Pakistan's telecommunications industry, a study by Malik *et al.* (2012) sought to determine the effect of pricing on customer satisfaction. According to the Pearson correlation coefficient, which was generated and analyzed using descriptive statistics, customer satisfaction was found to be closely related with price.

Wen and Hilmi (2011) have showed in their study on exploring price and customer satisfaction in the Malaysian mobile telecommunication industry that there exists a positive correlation between these two variables. In a similar context, Alzoubi and Inairat (2020) have identified a strong and positive relationship between perceived price fairness (PPF) and customer satisfaction (CS). For this telecommunications sector in Malaysia, to find the relationship between price and customer satisfaction, this study proposes the following hypothesis:

H3: There is a positive and significant relationship between price and customer satisfaction.

Based on the adaptation of previous research and the study objective, Figure 1 shows the proposed conceptual framework for this study.

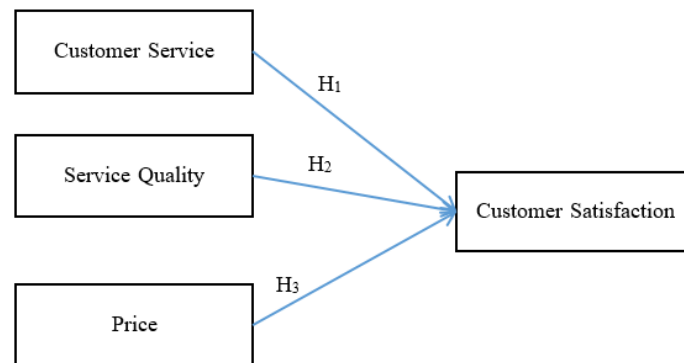


Figure 1: Conceptual Framework

MATERIALS AND METHODS

Research Design

A quantitative, cross sectional study design was used in this research to examine the determinants of customer satisfaction for mobile telecommunications service consumers in Malaysia. An online structured research instrument in the form of a self-administered online questionnaire was utilized to gather data for this study. An online research design was adopted because it is efficient and convenient, particularly in the current scenario of the Covid-19 pandemic, where it is difficult to conduct face-to-face research (Dillman *et al.*, 2014).

Sampling Strategy and Participants

The sampling frame consisted of the subscribers of the main telecommunication companies (Maxis, U Mobile, Digi and Celcom). Because there was no full sampling frame available and because the population was large

and varies, the study used non-probability convenience sampling, which is acceptable for exploratory model testing, especially if the intention was to establish the relationship between constructs rather than produce population estimates (Saunders *et al.*, 2019; Creswell & Creswell, 2018).

The sampling took place mainly in Selangor and Kuala Lumpur because they have high levels of urbanization and telecommunication usage, thus offering access to active mobile subscribers who were likely to have recent exposure relevant to the constructs under study (Koh & Samsudin, 2023).

A total of 250 usable responses were collected. This number exceeds the guidelines for multiple regression analysis, such as $N = 50 + 8m$, if m is the number of predictors, that is, adequate for analysis involving three predictors (Tabachnick & Fidell, 2013; Pallant, 2011). This also meets the guidelines for stable estimation in the

analysis (Hair *et al.*, 2018). Instrumentation The survey included demographic questions and scale measures of customer service, service quality, price, and customer satisfaction that were adapted from existing research for content validity. Small changes were also introduced for clarity after pilot-testing the survey on 15 participants. Cronbach's Alpha was employed for measuring the reliability of the survey, whereas relationships were determined by correlation and regression. Procedure for Collecting Data This was conducted using Google Forms and was disseminated online. This was an anonymous and voluntary online survey. Participants gave their consent online before undertaking the online survey.

Data Analysis

The data was analyzed using SPSS software (Version 25). The analysis included descriptive statistics, reliability analysis using Cronbach's Alpha, correlation analysis using Pearson correlation, and multiple regressions analysis to determine the impact of customer service, service delivery, and price on customer satisfaction. Variance inflation factors were also checked for multicollinearity (Hair *et al.*, 2019).

Biases & Limitations Convenience sampling and the use of an internet-based self-administered survey could lead to selection bias, which could result in an overrepresentation of young, educated, urban, and technology-literate respondents (Bethlehem, 2010; Fricker, 2008). Because this study relies upon self-reported data for all variables, it could potentially suffer from common method variance

and social desirability bias. Procedural remedies have been taken (e.g., anonymity, item centering), and post-hoc tests can be performed (e.g., Harman single-factor test) to check for method variance (Podsakoff *et al.*, 2012). Finally, the cross-sectional study provides a snapshot of perceptions at a single moment in time, which restricts causality and the ability to assess changes in satisfaction over time (Creswell & Creswell, 2017).

RESULTS AND DISCUSSIONS

Demographic Profile of Respondents

The survey received a total of 250 usable responses. As reflected in Table 1, more than nine out of every ten respondents belonged to the male gender (90.8%). In relation to age, more than four out of every ten belonged to either group A (18-27 years old, 42.4%) or group C (28-37 years old, 39.2%). For income, more than a third belonged to either level C (RM1,001 to RM2,000, 37.2%) or level A (RM1,000 or less, 24.8%). In terms of level of education attained, more than fifty-nine out of every one hundred belonged to level C (Bachelor's degree, 59.2%). Following is level A (STPM, 28%).

The data appears to depict a rather young as well as educated population of mobile-phone users, which is in line with past telecommunication research which targeted urban as well as engaged customers. Nonetheless, the marked preponderance of males as well as urban distribution in Selangor as well as Kuala Lumpur casts as to whether the

Table 1: Demographic profile of respondents

Items		Frequency	Percent (%)
1. Gender			
	Male	227	90.8
	Female	23	9.2
2. Age			
	18-27 Years	106	42.4
	28-37 Years	98	39.2
	38-47 Years	20	8.0
	48 and above years	26	10.4
3. Monthly Income			
	RM1,000 or less	62	24.8
	RM1,001 – RM2000	93	37.2
	RM2,001 – RM5,000	62	24.8
	RM5,001 – RM8,000	11	4.4
	RM8,001 and above	22	8.8
4. Education			
	SPM	6	2.4
	STPM	70	28
	Diploma	16	6.4
	Bachelor	148	59.2
	Postgraduate (Master & PhD)	10	4.0

Descriptive Statistics and Reliability

The details of descriptive statistics for each variable are presented in Table 2. The table shows mean values range from 3.3284 to 4.1684.

Table 2: Descriptive Statistics

Variables Name	Mean	Std. Deviation
Customer Service	3.3284	0.93736
Service Quality	4.1684	0.72628
Price	3.7576	0.80138
Customer Satisfaction	4.0696	0.7787

Table 3 shows the reliability measures in terms of Cronbach alpha. All the values of Cronbach alpha are found to be more than 0.70 indicating acceptable reliability of the variables.

Table 3: Reliability analysis

Variablez	No of items	Cronbach's Alpha
Customer Service	5	0.748
Service Quality	5	0.865
Price	5	0.843
Customer Satisfaction	5	0.890

The correlation analysis, as presented in Table 4, reveals several significant relationships among the variables. Educational qualification positively correlates with

monthly income, indicating higher qualifications are associated with higher incomes. Service quality positively correlates with customer service and price, as well as customer satisfaction, suggesting better service leads to higher prices and increased satisfaction. Additionally, customer satisfaction positively correlates with service quality and price, indicating that satisfied customers perceive higher quality service and are willing to pay higher prices. Age, gender, and monthly income show weaker or non-significant correlations with the other variables. These findings highlight the importance of education, service quality, and pricing strategies in influencing customer satisfaction within telecommunication industry in Malaysia.

The regression analysis output (Table 5) indicates that customer service, service quality, and price significantly influence customer satisfaction. Specifically, customer service ($\beta = 0.127, p = .003$), service quality ($\beta = 0.462, p = .000$), and price ($\beta = 0.268, p = .000$) have positive coefficients, demonstrating a positive and significant relationship with customer satisfaction as hypothesized. These results suggest that improvements in customer service, service quality, and appropriate pricing strategies are associated with higher levels of customer satisfaction. The adjusted R-squared value of 0.537 indicates that approximately 53.7% of the variance in customer satisfaction can be explained by the regression model, further supporting the model's validity in predicting customer satisfaction based on the examined variables.

Table 4: Descriptive statistics and correlation

Variables	1	2	3	4
1 Customer Service	1			
2 Service Quality	.438**	1		
3 Price	.382**	.567**	1	
4 Customer Satisfaction	.471**	.670**	.596**	1

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

Source: Authors

Table 5: Regression Analysis

Variables	Customer Satisfaction	VIF	t-value	p-value
Customer Service	0.127*	1.357	3.037	.003
Service Quality	0.462***	1.636	7.820	.000
Price	0.268***	1.567	5.113	.000
R. square	0.55			
Adj. R-square	0.537			
F	42.240***			

Source: Authors

Summary of Hypotheses Testing

The statistical analysis elucidates that the three independent variables—customer service, service quality, and price—are positively and significantly associated with the dependent variable, customer satisfaction.

Table 6 presents a concise summary of the hypothesis testing outcomes, affirming the hypothesized positive relationships between the independent and dependent variables.

Table 6: Summary result of hypothesis testing

No.	Hypotheses	Decision
H1	There is a positive and significant relationship between customer service and customer satisfaction	Accepted
H2	There is a positive and significant relationship between service quality and customer satisfaction	Accepted
H3	There is a positive and significant relationship between Price and customer satisfaction	Accepted

Discussion

This study contributes additional insights to the existing body of research on customer service and satisfaction within Malaysia’s telecommunications sector. The relationship between customer service, service quality, cost, and customer satisfaction sheds light on crucial dynamics within the industry.

Research objective 1 delves into the correlation between customer service and consumer satisfaction in Malaysian telecommunications. Customer expectations vary based on experiences, word-of-mouth recommendations, and other factors. Employing a five-item scale, this study confirms a positive and significant relationship between customer service and satisfaction, aligning with findings from prior research across diverse industries and countries (Angelova & Zeqiri, 2011; Kursunluoglu, 2011; Kraft *et al.*, 2019; Zhao *et al.*, 2019).

Research objective 2 focuses on the association between service quality and consumer satisfaction. Previous studies, including Sailalahi *et al.* (2017), have established a positive and significant relationship between service quality dimensions and customer satisfaction. Consistent with this, our study corroborates these findings, echoing results from studies by Palladan and Ahmad (2019), Rita *et al.* (2019), Hoe and Mansori (2018), Abror *et al.* (2019), and Prakash and Srivastava (2019).

Research objective 3 examines the connection between price and consumer satisfaction in Malaysian telecommunications. Our findings indicate a positive correlation between price and customer satisfaction. Customers value their experiences with the service provider, influencing their willingness to pay higher prices for enhanced satisfaction, in line with studies by Konuk (2018) and Alzoubi and Inairat (2020). Price perception, a key element in marketing and economics, significantly influences customer satisfaction and purchase behavior, as evidenced by existing literature (Kotler *et al.*, 2017).

In essence, this study contributes valuable insights into the dynamics of customer satisfaction in the Malaysian mobile telecommunications industry, emphasizing the importance of customer service, service quality, and pricing strategies in fostering positive consumer experiences and retention.

Managerial Implications

Study findings concludes with some managerial implications for Malaysian telecommunications service providers. To enhance customer satisfaction, improved retention rates and sustained competitiveness in the dynamic telecom landscape can be led by understanding and implementing these implications.

First and foremost, the paramount issue is to prioritise excellent customer service. Providers should invest in extensive training programs for front-line staff to provide excellent customer service, and foster strong relationships with subscribers through proactive communication tactics.

Secondly, the essential matter is to maintain high standards of service quality. Regularly assessing network functionality, including call clarity, internet speed, and coverage, can help service providers detect and address problems, while investing in technology and infrastructure can improve service quality.

Thirdly, the crucial issue is adopting competitive pricing strategies. Perceived value is maximized when pricing is fair and transparent and in line with consumer expectations and market trends.

Furthermore, adopting technology improvements also improves the general customer experience. AI-powered technologies and advanced analytics offer insights for individualized services.

In conclusion, Malaysian telecom providers may meet customer needs, promoting happiness and sustainable growth, by concentrating on service excellence, quality maintenance, competitive pricing, and technical advancements.

CONCLUSION

This research is significant to existing literature because it attempts to empirically examine the effects of customer service, service quality, and pricing on customer satisfaction in Malaysia’s mobile telecommunication industry. Results show that mobile users tend to have very high service expectations of their service providers. Therefore, it is important to continue improving mobile network reliability in areas such as a lower rate of dropped calls, better phone line clarity, and wider coverage areas. With consumers ever more dependent on uninterrupted digital connectivity, mobile service providers must adopt strategies to counter network outages.

The growing importance of online communication, especially among the younger and more online-savvy segment of the market, further reinforces the importance of having competitive Internet plans and responsive customer service. Data from the national usage of telecommunications in the country also show that customers are demanding faster and more reliable Internet and that Internet plans must adapt to new usage behaviors. Those that do are more likely to build customer loyalty and stay ahead in this new market.

Limitations

Notwithstanding the valuable insights that the research offers, the research still has some limitations. Firstly, the research employed a non-probability convenience sampling technique and an online self-administered questionnaire. This reduces the generalizability of the results to the wider population. For instance, the results may be skewed towards the youth and the educated. Additionally, the research employed a cross-sectional design. This reduces the ability to establish the causes and the ability to establish the changes that occur over time in the level of customer satisfaction.

Recommendations for Further Research

This study can be extended in the future by employing the probability-based sampling technique. This will enable the study to gain more insight into the diverse demographic and geographic settings. The study can be conducted longitudinally, and it will enable the researchers to gain insight into the satisfaction levels at various stages of the evolution of technology and changing market conditions. The study can also gain insight into the changing satisfaction levels influenced by the arrival of new technology and changing market conditions by employing additional methodologies such as conducting interviews and focus group sessions.

Overall, through embracing innovation and enhancing service quality and alignment with customer needs, Malaysian telecom companies can increase customer satisfaction and leverage a competitive advantage in a digital and customer-centric era.

REFERENCES

- Abror, A., Patrisia, D., Engriani, Y., Evanita, S., Yasri, Y., & Dastgir, S. (2019). Service quality, religiosity, customer satisfaction, customer engagement and Islamic bank's customer loyalty. *Journal of Islamic Marketing*, 11(6), 1691-1705. <https://doi.org/10.1108/JIMA-03-2019-0044>
- Adeosun, L. P. K., Ayodele, O., Tubosun, A. I., & Cecilia, A. (2018). Effect of relationship marketing on customers' satisfaction (A Study of GT Bank Plc.). *Journal of Economics, Management and Social Science*, 4(1), 163-174.
- Afroz, R., Muhibbullah, M., Farhana, P., & Morshed, M. N. (2020). Analyzing the intention of the households to drop off mobile phones to the collection boxes: empirical study in Malaysia. *Ecofeminism and Climate Change*, 1(1), 3-20.
- Aiello, A., & Czepiel, J. A. (1978). Customer satisfaction in a catalog type retail outlet: exploring the effect of product, price and attributes. IN: Indiana University, 129-135.
- Ali, B.J., Gardi, B., Othman, B.J., et al. (2021) Hotel service quality: The impact of service quality on customer satisfaction in hospitality. *International Journal of Engineering, Business and Management* 5(3), 14–28. <https://doi.org/10.22161/ijebm.5.3.2>.
- Almuhanna, N., & Alharbi, Z. H. (2023). Factors Affecting Customer Satisfaction with The Telecommunication Industry in Saudi Arabia. *TEM Journal*, 12(1). <https://doi.org/10.18421/TEM121-52>
- Alzoubi, H. M., & Inairat, M. (2020). Do perceived service value, quality, price fairness and service recovery shape customer satisfaction and delight? A practical study in the service telecommunication context. *Uncertain Supply Chain Management*, 8(3), 579-588.
- Angelova, B. and Zeqiri, J. (2011). Measuring customer satisfaction with service quality using American customer satisfaction model (ACSI model). *International Journal of Academic Research in Business and Social Sciences*, 1(3), 232-258.
- Bethlehem, J. (2010). Selection bias in web surveys. *International statistical review*, 78(2), 161-188.
- Calvo-Porrá, C. and Otero-Prada, L.-M. (2020). A profile of mobile service users in a mature market: from “uninvolved pragmatics” to “potential switchers”. *Spanish Journal of Marketing – ESIC, ahead-of-print(ahead-of-print)*. <https://doi.org/10.1108/SJME-03-2020-0046>
- Chatterjee, R. and Rahman, A. (2023). An empirical analysis of factors influencing customer satisfaction in the telecommunications industry through the mediating role of loyalty programs. *European Business & Management*, 9(4), 63-70. <https://doi.org/10.11648/j.ebm.20230904.11>
- Chen, T., Peng, L., Yin, X., Rong, J., Yang, J., & Cong, G. (2020). Analysis of user satisfaction with online education platforms in China during the COVID-19 pandemic. In *Healthcare* (Vol. 8, No. 3, p. 200). Multidisciplinary Digital Publishing Institute.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Cronin Jr, J. J., & Taylor, S. A. (1992). Measuring service quality: a reexamination and extension. *Journal of marketing*, 56(3), 55-68.
- Cronin Jr, J. J., Brady, M. K., & Hult, G. T. M. (2000). Assessing the effects of quality, value, and customer satisfaction on consumer behavioral intentions in service environments. *Journal of retailing*, 76(2), 193-218.
- Dillman, D. A., Smyth, J. D., & Christian, L. M. (2014). Internet, phone, mail, and mixed-mode surveys: The tailored design method. *Indianapolis, Indiana*, 17, 161-175
- Draganska, M., & Jain, D. C. (2006). Consumer preferences and product-line pricing strategies: An empirical analysis. *Marketing science*, 25(2), 164-174.
- Eu, G. T. (2016). *Slugfest: How Malaysia's Big 3 performed in 2015*. Digital News Asia. <https://www.digitalnewsasia.com/slugfest-how-malaysia-big-3-performed-2015>
- Fricker, R. D. (2008). Sampling methods for web and e-mail surveys. *The SAGE handbook of online research methods*. London: SAGE Publications Ltd.
- Gou, H., Su, L., Zhang, G., Li, H., & Li, Z. (2023, April). Research on telecom customer satisfaction prediction strategy. In *2023 8th International Conference on Cloud Computing and Big Data Analytics (ICCCBDA)* (pp. 593-598). IEEE. <https://doi.org/10.1109/ICCCBDA56900.2023.10154738>

- GSM Association. (2021). *The mobile economy 2021*. GSMA. https://www.gsma.com/mobileeconomy/wp-content/uploads/2021/07/GSMA_MobileEconomy2021_3.pdf
- Hair, J. F., Black, W. C., Babin, B. J. and Anderson, R. E. (2018). *Multivariate Data Analysis*. Cengage Learning, London.
- Hallur, G. G., & Sane, V. S. (2018). Indian telecom regulatory framework in comparison with five countries: structure, role description and funding. *Digital Policy, Regulation and Governance*, 20(1), 62-77. <https://doi.org/10.1108/DPRG-06-2017-0035>
- Hasim, M. A., Ishak, M. F., & Hassim, A. A. (2019). The relationship between online shopping environments, sales promotions, website quality, and impulsive buying behaviour: A structural equation modelling approach. *International Journal of Innovation, Creativity and Change*, 6(9), 215-230.
- Hoe, L. C., & Mansori, S. (2018). The effects of product quality on customer satisfaction and loyalty: Evidence from Malaysian engineering industry. *International Journal of Industrial Marketing*, 3(1), 20.
- Hurley, R. F., & Estelami, H. (1998). Alternative indexes for monitoring customer perceptions of service quality: A comparative evaluation in a retail context. *Journal of the academy of Marketing Science*, 26(3), 209-221.
- Janakiraman, N., Meyer, R. J., & Morales, A. C. (2006). Spillover effects: How consumers respond to unexpected changes in price and quality. *Journal of Consumer Research*, 33(3), 361-369.
- Karim, M. W., Chowdhury, M. A. M., & Haque, A. A. (2022). A study of customer satisfaction towards E-wallet payment system in Bangladesh. *American Journal of Economics and Business Innovation*, 1(1), 1-10.
- Karim, M. W., Muhibullah, M., Ulfy, M. A., & Hossain, M. A. (2020). Examining the antecedents of using ride-hailing services: a study in Dhaka city of Bangladesh. *Asian Journal of Multidisciplinary Studies*, 8(7), 40-51.
- Karunaratna, A. C., & Kumara, P. A. P. S. (2022). Determinants of customer satisfaction in the mobile telecommunications service industry. *South Asian Journal of Business Insights* 2(2), 3-25. <https://doi.org/10.4038/sajbi.v2i2.43>
- Khan, S., Jamil, S., & Seraj, S. S. (2022). Consumer buying behavior towards online shopping: A SEM analysis of financial capability. *Journal of Journalism, Media Science & Creative Arts*, 2(2), 91-110. <https://doi.org/10.56596/jjmsca.v2i2.18>.
- Koh, K., & Samsudin, S. N. (2023). *iMAP Malaysia 2023 Internet Censorship Report*. Sinar Project. <https://ooni.org/post/2022-state-of-internet-censorship-malaysia>.
- Kollmann, T. (2000). The price/acceptance function: Perspective of pricing policy in European telecommunication markets. *Journal of Innovation Management*, 3(1), 7-14.
- Konuk, F. A. (2018). Price fairness, satisfaction, and trust as antecedents of purchase intentions towards organic food. *Journal of Consumer Behaviour*, 17(2), 141-148.
- Kotler, P., & Armstrong, G. (2010). *Principles of marketing*. Pearson education, London.
- Kotler, P., Armstrong, G., Ang, S. H., Leong, S. M., Tan, C. T., & Ho-Ming, O. (2017). *Principles of marketing: an Asian perspective*. Pearson/Prentice-Hall.
- Kraft, F. B., Maity, D., & Porter, S. (2019). The salesperson wellness lifestyle, coping with stress and the reduction of turnover. *Journal of Business & Industrial Marketing*, 34(2), 347-359. <https://doi.org/10.1108/JBIM-03-2017-0058>
- Kursunluoglu, E. (2011). Customer service effects on customer satisfaction and customer loyalty: A field research in shopping centers in Izmir City-Turkey. *International Journal of business and social science*, 2(17), 52-59.
- Liang, D., Ma, Z., & Qi, L. (2013). Service quality and customer switching behavior in China's mobile phone service sector. *Journal of Business Research*, 66(8), 1161-1167.
- Malik, M. E., Ghafoor, M. M., & Hafiz, K. I. (2012). Impact of brand image, service quality and price on customer satisfaction in Pakistan Telecommunication sector. *International journal of business and social science*, 3(23), 123-129.
- Melody, W. H. (2001). *Policy objectives and models of regulation”, telecom reform principles, policies and regulatory practices*, Chapter 2 (ed.) William H. Melody, Den Private Ingeniorfond, Technical University of Denmark, Lyngby, 387-405.
- Noviandy, T. R., Idroes, G. M., Hardi, I., Afjal, M., & Ray, S. (2024). A Model-Agnostic Interpretability Approach to Predicting Customer Churn in the Telecommunications Industry. *Infolitika Journal of Data Science*, 2(1), 34-44.
- Palladan, A. A., & Ahmad, M. A. (2019). Leveraging customers loyalty in telecommunication industry: the role of service quality and customer satisfaction a PLS approach. *International Journal of Marketing Research Innovation*, 3(1), 1-10.
- Pallant, J. (2011). *For the SPSS Survival Manual: A step by Step Guide to Data Analysis using IBM SPSS* (6th ed). New York: Mc Graw Hill Education.
- Pallant, J. (2011). *Survival manual. A step by step guide to data analysis using SPSS*, 4(4).
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *Journal of marketing*, 49(4), 41-50.
- Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual review of psychology*, 63(1), 539-569.
- Prakash, G., & Srivastava, S. (2019). Role of internal service quality in enhancing patient centricity and internal customer satisfaction. *International Journal of Pharmaceutical and Healthcare Marketing*, 13(1), 2-20. <https://doi.org/10.1108/IJPHM-02-2018-0004>
- Rahman, M. S., & Mannan, M. (2018). Consumer online

- purchase behavior of local fashion clothing brands: Information adoption, e-WOM, online brand familiarity and online brand experience. *Journal of Fashion Marketing and Management: An International Journal*, 22(3), 404-419. <https://doi.org/10.1108/JFMM-11-2017-0118>
- Raziq, A., & Maulabakhsh, R. (2015). Impact of working environment on job satisfaction. *Procedia Economics and Finance*, 23, 717-725.
- Rita, P., Oliveira, T., & Farisa, A. (2019). The impact of e-service quality and customer satisfaction on customer behavior in online shopping. *Heliyon*, 5(10), e02690.
- Ruzanna, A., Baharin, K., & Nayan, S. (2020). Make a customer, not a sale: Review on customer trust. *Journal of Undergraduate Social Science and Technology*, 2(2), 2015–2019.
- Saunders, M. N., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (Eighth). Harlow: Pearson education limited.
- Sekaran, S. N., & Khan, M. R. B. (2024). Transforming Telecommunications Infrastructure in Malaysia: The Role of AI in Network Deployment and Optimization. *Malaysian Journal of Business, Economics and Management*, 174-182.
- Shamsudin, M. F., Azmi, N., Nayan, S., Esa, S. A., & Kadir, B. (2020). Service quality of mobile telecommunications service. *Journal of Critical Reviews*, 7(19), 628-636.
- Silalahi, S. L. B., Handayani, P. W., & Munajat, Q. (2017). Service quality analysis for online transportation services: Case study of GO-JEK. *Procedia Computer Science*, 124, 487-495.
- Smith, J., & Patel, R. (2024). Strategic pricing and infrastructure investment in the telecommunications industry. *Telecommunications Journal*, 49(4), 301-318.
- Soma, D., Znotiņa, D., & Čerpinska, A. (2021). Factors affecting customer satisfaction with telecommunications services. *Proceedings of the International Student and Teacher Scientific and Practical Conference* (pp. 91-97). <https://doi.org/10.17770/iss2021.6934>
- Strouse, K. G. (1999). *Marketing telecommunications services: new approaches for a changing environment*. Artech House Publishers.
- Subram, K.S., Khan, M.N., & Srivastava, C. (2018). The impact of marketing mix elements on brand loyalty: A case study of construction industry. *Sumedha Journal of Management* 7(3), 77–98. Available at: <https://www.proquest.com/docview/2149602549?pq-origsite=gscholar&fromopenview=true> (accessed 9 December 2022).
- Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics*, 6th edn Boston. Ma: Pearson.
- Tuncer, I., Unusan, C., & Cobanoglu, C. (2021). Service quality, perceived value and customer satisfaction on behavioral intention in restaurants: An integrated structural model. *Journal of Quality Assurance in Hospitality and Tourism* 22(4). 447–475. <https://doi.org/10.1080/1528008X.2020.1802390>.
- Vanhuele, M., Laurent, G., & Dreze, X. (2006). Consumers' immediate memory for prices. *Journal of Consumer Research*, 33(2), 163-172.
- Walean, R. H., Pongoh, H., & Mandagi, D. (2024). Integrating brand gestalt and customer loyalty in telecommunication sector: The mediating role of customer satisfaction. *International Review of Management and Marketing*, 14(6), 409-423.
- Wen, C. H., & Hilmi, M. F. (2011, December). Exploring service quality, customer satisfaction and customer loyalty in the Malaysian mobile telecommunication industry. In *2011 IEEE Colloquium on Humanities, Science and Engineering* (pp. 733-738). IEEE.
- Whetten, D. A. (1989). What constitutes a theoretical contribution? *Academy of management review*, 14(4), 490-495.
- Wong, K. L., Chen, H., & Lee, C. Y. (2024). Price and customer satisfaction in the telecommunications industry: a literature review. *Telecommunications Journal*, 51(2), 123-137.
- Ye, F., Xia, Q., Zhang, M., Zhan, Y., & Li, Y. (2020). Harvesting online reviews to identify the competitor set in a service business: evidence from the hotel industry. *Journal of Service Research*, XX(X), 1-27. <https://doi.org/10.1177/1094670520975143>
- Zeithaml, V. A. (2000). Service quality, profitability, and the economic worth of customers: what we know and what we need to learn. *Journal of the academy of marketing science*, 28(1), 67-85.
- Zeithaml, V. A., Parasuraman, A., & Malhotra, A. (2002). Service quality delivery through web sites: a critical review of extant knowledge. *Journal of the academy of marketing science*, 30(4), 362-375.
- Zhao, L., Lee, S. H., & Copeland, L. R. (2019). Social media and Chinese consumers' environmentally sustainable apparel purchase intentions. *Asia Pacific Journal of Marketing and Logistics*, 31(4), 855-874. <https://doi.org/10.1108/APJML-08-2017-0183>.