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Original Scientific Article

Drivers of Customer Loyalty in North Macedonia's Mobile Telecommunications Industry

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Abstract: *This paper explores the role of Customer Satisfaction as a key driver of Customer Loyalty in the North Macedonian mobile telecommunications sector. The study employs quantitative research using survey data from 160 users and addresses the research gap by providing data-driven analysis of customer satisfaction factors and their influence on brand loyalty. Generational preferences and the importance of bundled service packages are also analyzed. The results underscore the importance of consistent service delivery, transparent pricing, and responsive support in retaining customers. Findings reveal that Customer Satisfaction is the strongest predictor of Customer Loyalty, followed by Service Quality, employee responsiveness, pricing fairness, and service assortment. Practical recommendations for telecom providers include hybrid customer service models, real-time feedback systems, and personalized engagement. The study offers strategic insights for organizations aiming to build loyalty in increasingly competitive and digitally evolving Telecommunication Industry.*

Keywords: *Service quality, Customer satisfaction, Customer loyalty, Telecommunication industry.*

JEL Classification: M31, L96

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1. INTRODUCTION

In today's increasingly competitive telecommunications environment, customer retention has emerged as a top strategic priority. Customer loyalty is no longer solely influenced by pricing or promotional offers but is deeply connected to the overall quality of service experience. With the rapid evolution of mobile technologies and rising consumer expectations, businesses must continuously assess how their service delivery impacts user perceptions and loyalty. Customers have become more empowered, informed, and demanding, leading organizations to shift their focus from aggressive acquisition strategies toward loyalty-building mechanisms. This paper aims to explore the intricate relationship between satisfaction and loyalty among mobile telecommunications customers in North Macedonia—a transitional economy with an evolving digital landscape. By identifying the core satisfaction drivers such as service quality, employee responsiveness, pricing fairness, network coverage, and bundled offerings, this study provides a targeted view of what motivates consumers to remain loyal in a saturated and price-sensitive market. It's important to note that customer satisfaction can vary among individuals, and different customers may prioritize different factors.

Mobile companies need to continuously adapt, innovate, and improve their products and services to meet the evolving needs and expectations of their customers (Jones & Suh, 2000).

Over the last twenty years, the telecommunications market has experienced significant instability and volatility, leading to several mergers and rebranding efforts. The quality and diversity of services and products are consistently improving, but prices exhibit a trend of monopolistic control. Understanding this dynamic is critical for fostering long-term value creation and positive brand reputation. Satisfaction is not a universal occurrence, and the identical service encounter doesn't yield equal contentment for all. This introduction sets the stage for understanding the importance of customer experience in building brand trust, especially in a regional market where customer expectations are rising amid digital transformation. Having to put into focus the Macedonian market of the telecommunication industry, it's important to add several additional factors that have an impact on the satisfaction level, such as local language support, tailored promotions, and integrated banking partnerships, which can enhance customer satisfaction with telecommunication providers within the country.

Central to this investigation is customer loyalty, which has emerged as a key managerial concern amid hyper-competition in the service industry (Bodet, 2008). With more telecom providers entering the landscape and mobile internet usage growing rapidly, this study is both timely and practically relevant for service providers aiming to maintain market share. Specifically, this research highlights the critical role of customer satisfaction and loyalty in achieving sustainable growth. By delivering empirical evidence on how these variables intersect, the findings offer actionable insights for telecom operators seeking to improve consumer perception, boost retention, and secure long-term profitability. Although customer satisfaction and loyalty have been extensively studied in developed telecommunications markets, empirical evidence from transitional economies such as North Macedonia remains limited.

This paper explores the structure and development of the North Macedonian telecommunication market, one of the smallest in Europe yet marked by strong infrastructure and competitive service offerings. Despite limited population size, the market features a diverse range of providers offering bundled services in mobile, internet, and television. The study focuses on how customer satisfaction — influenced by factors such as service quality, pricing, coverage, local support, and

personalization — plays a crucial role in building customer loyalty. This research aims to analyze how telecom companies in North Macedonia align their strategies to meet evolving customer needs and sustain loyalty in a dynamic, technologically progressive environment. The findings contribute to the existing literature by providing evidence from a small European telecommunications market and offering practical implications for providers operating in similar transitional economies.

2. LITERATURE REVIEW

The relationship between satisfaction and loyalty has been a subject of extensive academic and practical inquiry over the past decades. Customer satisfaction, as defined by Kotler and Keller (2006), is a person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance to expectations. While satisfaction can result from a single interaction, loyalty develops over time through consistent and positive experiences. Oliver (1999) posits that loyalty evolves through cognitive, affective, conative, and behavioral stages, beginning with rational evaluation and culminating in commitment. The SERVQUAL framework introduced by Parasuraman et al. (1988) offers one of the most established models for evaluating service quality through five dimensions: reliability, assurance, responsiveness, empathy, and tangibles. Recent studies also reaffirm these relationships in the telecommunications sector. Abd-Elrahman (2023) examined telecom users during the COVID-19 pandemic and confirmed that service quality directly drives both satisfaction and loyalty. In the telecommunications sector, these translate into coverage consistency, staff professionalism, resolution efficiency, personalization, and the physical interface or devices involved. The performance model revolves around the concept that a customer's assessment of a product or service's actual performance and their anticipations of that performance exert a favorable influence on customer contentment (Spreng & Mackoy, 1996). Research by Zeithaml et al. (1996) emphasized that perceived service quality directly influences both satisfaction and behavioral intentions such as repurchase and word-of-mouth recommendations. The inclusion of the direct influence of perceived performance on satisfaction garners both theoretical and empirical validation, as underscored by Tse and Wilton (1988). In the context of the telecom industry, especially in emerging markets, studies suggest that customer expectations are evolving rapidly with increased digital access and service options. In North Macedonia specifically, empirical evidence underscores that mobile channel engagement, and digital marketing touchpoints have become critical drivers in shaping consumer perceptions and sustaining long-term brand loyalty (Petrovska et al., 2020; Veljanoska & Petrovska, 2018). Consequently, understanding how service quality, pricing, and frontline service interact with customer satisfaction is vital for telecom operators navigating these shifting consumer dynamics. Chaudhuri and Holbrook (2001) highlighted the dual role of satisfaction in forming both attitudinal and behavioral loyalty. Prior studies have highlighted the central role of responsiveness in dynamic service environments like telecom, where failure to address technical or billing issues promptly can lead to immediate customer attrition. Fornell (1992) suggests that customer satisfaction yields significant advantages, notably in terms of fostering loyalty. Loyal customers can establish a consistent and reliable source of future revenue for a company. This, in turn, leads to diminished price sensitivity, since higher satisfaction levels correlate with a greater willingness among customers to invest in the benefits of a product or service and to accept potential price adjustments. Customers who are content are inclined to endorse the company, thereby advancing its image and reputation. In transitional economies, such as those in the Balkans, customer loyalty is often shaped by contextual constraints, such as limited competition, pricing structures, and trust in institutions. Customer expectations represent a norm against which performance is compared, and they take many forms varying from some minimum tolerable level of performance through to some

concept of the ideal or perfect service (Ennew et al., 1993). Thus, while global models serve as a foundation, localized insights are critical for crafting effective loyalty strategies in such contexts. As Jones and Suh (2000) suggest, customer satisfaction in emerging markets like North Macedonia is also heavily influenced by localization—such as the availability of services in the local language, culturally relevant content, and regional promotions. Furthermore, factors such as price fairness, the perceptibility of prices, and the processability of prices may lead to dissatisfaction (Zielke, 2008). Beyond the diverse levels of product pricing, a combination of dimensions related to price awareness has the potential to influence customer satisfaction, as suggested by research from Diller (2000), Matzler and Pramhas (2004), and Matzler et al. (2006). Nawaz and Usman (2011) report that brand loyalty in telecommunications is associated with service quality, satisfaction, trust, and commitment, with service quality identified as an influential factor in their model. They also report indirect positive relationships of service quality and satisfaction with brand loyalty and emphasize customer-retention programs. The higher positive level of WoM (Word of Mouth) indicates a higher level of satisfaction among the telecommunication customers, and eventually the lowered level of negative WoM also indicates a higher degree of customer satisfaction (Ranaweera, 2007).

The Pareto principle (also known as the 80-20 rule) describes the general observation that a relatively small share of causes can account for a large share of consequences (Dunford et al., 2014). In customer management, it can serve as a heuristic for examining whether value or repeat behavior is concentrated among a smaller customer segment; it should not be treated as a fixed empirical rule for loyalty in this sample. Recent studies continue to confirm the importance of customer satisfaction as a driver of loyalty in the telecommunications sector. For example, Suchanek and Bucicova (2025) tested a post-COVID customer satisfaction model in the Slovak mobile telecommunications sector. They reported significant relationships among several customer-experience constructs, including perceived service quality, satisfaction, and loyalty. Similarly, recent research has shown that digital customer experience, omnichannel support, and personalized service increasingly influence customer retention in competitive telecommunications environments (Lemon & Verhoef, 2016; Sherovska & Petrovska, 2021). These findings suggest that customer loyalty is becoming increasingly dependent on overall customer experience rather than pricing alone.

Moreover, network quality in telecom serves as a key determinant of customer experience. Hoa and Ngoc (2015) found that service quality, brand image, and price perception each have a positive impact on customer satisfaction and that customer satisfaction is positively related to customer loyalty in the Vietnamese mobile telecommunications sector. More recently, Suchanek and Bucicova (2025) modeled customer satisfaction in the Slovak mobile telecommunications sector after the COVID-19 pandemic, highlighting the evolving relationships among perceived quality, satisfaction, and loyalty in a European telecommunications context.

Despite these findings, relatively little empirical evidence exists for the Western Balkan telecommunications market, particularly North Macedonia. Therefore, this study aims to address this research gap by empirically investigating the main determinants of customer loyalty.

Based on the reviewed literature, the following hypotheses were formulated:

H1: Service quality has a significant positive impact on customer loyalty.
H2: Employee service has a significant positive impact on customer loyalty.
H3: Price satisfaction has a significant positive impact on customer loyalty.
H4: Customer satisfaction has a significant positive impact on customer loyalty.
H5: Service assortment has a significant positive impact on customer loyalty.

Thereafter, a comprehensive model was developed to map the direct effects of Service Quality, Employee Service, Price Satisfaction, Customer Satisfaction, and Service Assortment on Customer Loyalty, as conceptualized in Figure 1. Because the available analysis is a simultaneous multiple regression, Customer Satisfaction is treated as a direct predictor rather than as a mediator.

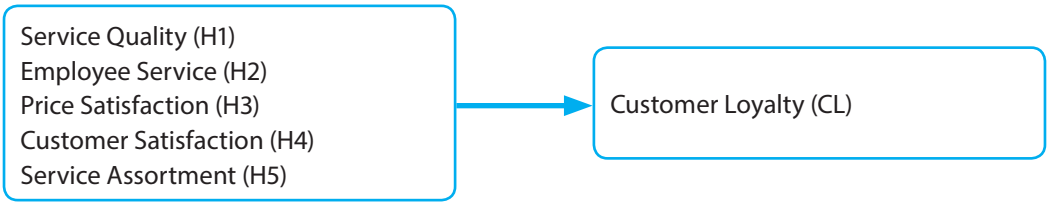

Figure 1: Conceptual Framework of Direct Predictors of Customer Loyalty
Source: Developed by the authors

3. METHODOLOGY

This research employed a descriptive and correlational design based on a structured quantitative survey. The questionnaire was adapted from previously validated customer satisfaction and service quality scales used in telecommunications research. The survey instrument was distributed both physically and digitally, collecting responses from 160 users of mobile telecommunications services across urban and rural areas in North Macedonia. The instrument (Appendix) featured twenty closed-ended items divided into five key categories: general demographics, service quality, pricing fairness, customer service responsiveness, and loyalty intentions, and the last three were open-ended questions. The Likert scale (1 to 5) allowed participants to rate their agreement with statements such as 'I am satisfied with the reliability of my provider's network' and 'I would recommend my provider to others.' The demographic section captured data on age, gender, education, employment status, and residential areas to assess variations across segments. Data analysis was conducted using IBM SPSS 25. Additionally, the final section of the questionnaire incorporated qualitative open-ended questions for respondents to describe service failures, post-sale experiences, and expected operational improvements regarding their telecom operators.

Data collection was conducted between March and April 2025 using both online questionnaires distributed through Google Forms and printed questionnaires distributed in person. Respondents were required to be active users of mobile telecommunication services in North Macedonia.

Descriptive statistics were used to profile the sample, while Pearson correlation and multiple regression tests were applied to examine associations between satisfaction variables and customer loyalty outcomes.

Table 1. Reliability coefficients and correlations among constructs. **p < 0.01

Construct	Items	Cronbach's α	1	2	3	4
1. Service Quality	6	0.892	1	0.73**	0.68**	0.70**
2. Responsiveness	5	0.844	0.73**	1	0.64**	0.68**
3. Price Fairness	4	0.812	0.68**	0.64**	1	0.64**
4. Loyalty	5	0.874	0.70**	0.68**	0.64**	1

Source: Own calculations

Scale reliability was assessed using Cronbach's alpha, with all constructs exceeding the acceptable threshold of 0.7, as shown in Table 1. Measures were also taken to ensure anonymity and

reduce response bias. Sampling was purposive and aimed to cover users from various providers to ensure diversity. Ethical considerations included informed consent, voluntary participation, and data protection in line with GDPR. A pilot test with 15 respondents helped refine ambiguous questions and improve the overall clarity of the instrument. The overall methodological approach is a positivist epistemology, aiming to uncover statistically significant relationships.

Table 2. Multiple Regression Analysis and Model Diagnostics
(Dependent Variable: Customer Loyalty)

Predictor Variables	Unstandardized Coefficients (B)	Standard Error (SE)	Standardized Coefficients (β)	t-value	p-value	Collinearity Diagnostics (VIF)
(Constant)	0.842	0.215	—	3.916	< 0.001	—
Service Quality (Q)	0.312	0.074	**0.346**	4.216	< 0.001	1.425
Employee Service (ES)	0.185	0.062	**0.226**	2.984	0.004	1.612
Price Satisfaction (PS)	0.214	0.068	**0.245**	3.147	0.002	1.554
Service Assortment (SA)	0.248	0.071	**0.284**	3.493	0.001	1.488
Customer Satisfaction (CS)	0.421	0.089	**0.371**	4.730	< 0.001	1.682

Note: Model Diagnostics: $R = 0.645$, $R^2 = 0.416$, Adjusted $R^2 = 0.397$, F-statistic = 21.944 ($df = 5,154$), $p < 0.001$, *Multicollinearity Assessment:* All Variance Inflation Factor (VIF) values are below 2.0 (ranging from 1.425 to 1.682), indicating no multicollinearity issues among the predictor variables.

Source: Own calculations

To evaluate the structural framework, Customer Loyalty (CL) was regressed simultaneously on Service Quality, Employee Service, Price Satisfaction, Service Assortment, and Customer Satisfaction. This specification estimates the direct association of each predictor with Customer Loyalty while holding the other predictors constant; it does not constitute a formal mediation test.

First, multi-collinearity diagnostics were performed; as reported in Table 2, all Variance Inflation Factor (VIF) values range between 1.425 and 1.682, sitting well below the conservative threshold of 2.5, confirming that the data meet all linear assumptions and that the sub-dimensions are distinct asset blocks. Second, the direct effects were evaluated in the simultaneous regression model. Customer Satisfaction had the largest standardized coefficient ($\beta = 0.371$), followed by Service Quality ($\beta = 0.346$); both were positive and statistically significant predictors of Customer Loyalty. Service Assortment (SA) was also positive and statistically significant (B = 0.248, beta = 0.284, p = 0.001). Accordingly, SA is treated as a substantive predictor and is evaluated under H5 rather than as a control variable.

In summary, this study adopted a structured quantitative approach to investigate the relationship between customer satisfaction and loyalty within North Macedonia's telecommunications sector. The reliability and validity of the data collection process were ensured through pilot testing, ethical safeguards, and the use of established analytical techniques. This methodological framework provides a solid foundation for drawing meaningful, data-driven conclusions about consumer behavior in a competitive and evolving market.

4. Results and Discussion

This section presents the empirical findings from quantitative analysis. The analysis takes a two-tiered approach to assess the conceptual framework: first, baseline correlations and general model predictive diagnostics, followed by a detailed hypothesis-driven analysis. Table 2 presents the multiple linear regression coefficients, standard errors, t-values, significance thresholds, and collinearity diagnostics (VIF) used to examine the direct effects within the framework. The overall model is statistically significant, with an adjusted R2 of 0.397; thus, the five predictors account for 39.7% of the variance in Customer Loyalty.

4.1. Hypothesis Testing: Service Quality and Customer Loyalty (H1)

The first hypothesis (H1) affirms a strong positive relationship between perceived service quality (Q) and customer loyalty (CL) in the mobile telecommunications industry. In the simultaneous multiple regression, Service Quality was a positive and statistically significant predictor of Customer Loyalty ($B = 0.312$, $\beta = 0.346$, $t = 4.216$, $p < 0.001$). These findings indicate that service quality is an important predictor of retention. In the context of the North Macedonian market, infrastructure reliability, including call stability and high-speed data coverage, remains an important element of the customer experience. This finding aligns with contemporary literature, such as Abd-Elrahman (2023), who identified service quality as a determinant of customer satisfaction during the COVID-19 period, and is consistent with Suchanek and Bucicova (2025), whose post-COVID Slovak telecommunications model examines perceived service quality as an important component of the customer satisfaction framework. Because the regression coefficient is positive and statistically significant, H1 is supported.

4.2. Hypothesis Testing: Employee Service and Customer Loyalty (H2)

Hypothesis H2 proposed that high-quality Employee Service (ES) significantly fosters stronger brand loyalty among subscribers. The regression model supported this relationship: Employee Service had a positive and statistically significant direct association with Customer Loyalty ($B = 0.185$, $\beta = 0.226$, $t = 2.984$, $p = 0.004$). This result indicates that service delivery, efficient complaint handling, and account management are relevant to customer relationships. Customer feedback also emphasized the importance of being heard and attended to promptly, especially during technical difficulties or contract clarifications. These findings support the practical value of responsive customer support and hybrid service channels. Based on the statistically significant regression result, H2 is supported.

4.3. Hypothesis Testing: Price Satisfaction and Customer Loyalty (H3)

Hypothesis H3 investigates the direct effect of Price Satisfaction (PS) on customer retention. In the simultaneous regression model, Price Satisfaction was positively and statistically significantly associated with Customer Loyalty ($B = 0.214$, $\beta = 0.245$, $t = 3.147$, $p = 0.002$). This result indicates that perceived pricing fairness is a significant predictor of loyalty when the other variables in the model are held constant.

Customer comments further indicated the practical importance of pricing transparency, particularly in relation to roaming charges, overage fees, and changes in promotional packages. Competitive and transparent pricing can therefore contribute to retention alongside the other predictors included in the model. Because the regression coefficient is positive and statistically significant, H3 is supported.

4.4. Hypothesis Testing: Customer Satisfaction and Customer Loyalty (H4)

Hypothesis H4 proposed a direct positive relationship between Overall Customer Satisfaction (CS) and Customer Loyalty (CL). In the simultaneous multiple regression, Customer Satisfaction was a positive and statistically significant predictor of loyalty (B = 0.421, β = 0.371, t = 4.730, p < 0.001), representing the largest standardized coefficient in the model. These results support H4 and indicate that, after accounting for Service Quality, Employee Service, Price Satisfaction, and Service Assortment, higher Customer Satisfaction is associated with higher Customer Loyalty. No indirect effect was estimated; therefore, the present analysis does not test or claim mediation.

4.5. Hypothesis Testing: Service Assortment and Customer Loyalty (H5)

Service Assortment (SA) was positively and significantly associated with Customer Loyalty in the simultaneous regression model (B = 0.248, β = 0.284, t = 3.493, p = 0.001). This finding indicates that customers who value a broader range of service and product options, including bundled offerings, tend to report stronger loyalty intentions when the other predictors are held constant. Therefore, H5 is supported.

4.6. Generational Preferences and Demographic Variations

Demographic patterns in the data provided additional depth to the findings. Users aged 18–34 consistently demonstrated higher satisfaction with mobile applications, self-service portals, and instant chat functions. They valued quick and autonomous problem-solving, often avoiding traditional contact centers altogether. In contrast, respondents over 50 years old favored stable pricing, in-person service, and verbal explanations of contracts or changes. These insights are essential for designing age-sensitive strategies in service personalization. Customer feedback also revealed high appreciation for bundled offers. Consumers preferred receiving mobile, home internet, and digital TV services from a single provider due to ease of billing, cross-platform access, and perceived loyalty rewards. Participants mentioned loyalty discounts, free international minutes, and increased data allowances as meaningful incentives that improved satisfaction.

4.7. Descriptive Insights and Regional Contextualization

Despite overall satisfaction with service quality and bundles, respondents raised critical concerns regarding prolonged resolution times, generic or automated responses to support queries, and occasional discrepancies between advertised packages and final invoices. Moreover, some users reported feeling disengaged post-sale, with no follow-up on satisfaction or service issues unless initiated by the customer. These findings highlight a gap in relationship management post-acquisition and are also consistent with Nawaz and Usman (2011), who reported positive relationships among service quality, satisfaction, and brand loyalty in the telecommunications sector.

5. CONCLUSION AND MANAGERIAL IMPLICATIONS

This study confirms that Customer Satisfaction is the strongest predictor of Customer Loyalty in the regression model (β = 0.371), followed by Service Quality (β = 0.346). While price remains important, the findings highlight that loyalty is also influenced by service quality, employee responsiveness, service assortment, and perceived price fairness. The regression results support H1-H5, including a direct positive relationship between Customer Satisfaction and Customer Loyalty and a significant positive effect of Service Assortment. The study does not infer a mediating role

for Customer Satisfaction because no indirect-effect mediation analysis was conducted. The findings underscore the need for a holistic, end-to-end approach in which service reliability, transparent pricing, responsive support, a relevant assortment of services, and overall satisfaction are prioritized to foster lasting customer relationships.

5.1. Managerial and Practical Implications

From a strategic standpoint, the findings underscore the necessity of investing in service excellence across all customer touchpoints. Telecom operators should invest in real-time feedback loops, CRM-driven personalization, and cross-trained customer service teams to reduce transfer delays and increase first-contact resolution rates. Proactive support strategies, such as notifying customers of potential service issues in advance, also contribute to trust-building. In a comparative context, these results are aligned with regional studies in Southeast Europe, where service quality and personalization are increasingly valued in maturing telecom markets. Unlike more price-sensitive developing markets, the North Macedonian customer base is evolving toward a model where the perceived value, rather than cost alone, determines loyalty. These empirical insights provide valuable guidance to both national and multinational telecom providers. With market saturation increasing and regulatory frameworks tightening, loyalty is no longer an accidental byproduct of limited competition; it must be engineered intentionally.

Customer Satisfaction emerged as the strongest predictor of Customer Loyalty ($\beta = 0.371$), followed by Service Quality ($\beta = 0.346$), while Employee Service, Price Satisfaction, and Service Assortment also had positive and statistically significant effects. Customers value ease, consistency, and personalized incentives—especially when receiving multiple services from a single provider. However, persistent gaps in post-sale engagement, delayed support, and automated responses signal a need for more human-centered service strategies. Across all segments, perceived value—more than cost alone—increasingly determines brand loyalty. As the market matures and competition intensifies, telecom providers must shift from reactive service models to proactive, personalized engagement across all customer touchpoints. In doing so, loyalty can be cultivated deliberately, not left to chance, ensuring long-term competitiveness in an evolving digital landscape. Unlike studies conducted in highly competitive Western European markets, the present study demonstrates that North Macedonian customers continue to place considerable emphasis on pricing fairness alongside service quality.

5.2. Future Research Directions

Emerging trends in mobile telecommunications, such as the rollout of 5G networks and the integration of AI-powered customer service, present significant opportunities for future research. Studies could examine the impact of these technologies on customer satisfaction and loyalty, especially in developing markets like North Macedonia. Moreover, corporate social responsibility (CSR) has become increasingly important in customer decision-making. Future research could explore how CSR initiatives, such as environmental sustainability or community engagement, influence customer perceptions of service providers and their loyalty, also could employ longitudinal research designs and probability sampling techniques.

Future studies should explore satisfaction and loyalty over time and in broader regional contexts, offering deeper insights into strategic decision-making in transitional markets. Future growth depends not on acquisition alone, but on the ability to build lasting relationships. Digital tools, self-service portals, and proactive communication strategies can reinforce loyalty by empowering

customers and reducing friction. Comparative analysis with neighboring countries in the Western Balkans could also reveal region-wide behavioral patterns, aiding in strategic planning for multinational operators. Ultimately, this study contributes to both theory and practice by offering actionable insights on how telecom providers can convert satisfaction into sustainable customer loyalty.

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References

Abd-Elrahman, A.-E. H. (2023). Telecommunications service quality, customer satisfaction and customer loyalty in pandemic times. *Management Research Review, 46*(8), 1112-1131. https://doi.org/10.1108/mrr-08-2021-0595

Bodet, G. (2008). Customer satisfaction and loyalty in service: Two concepts, four constructs, several relationships. *Journal of Retailing and Consumer Services, 15*(3), 156-162. https://doi.org/10.1016/j.jretconser.2007.11.004

Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty. *Journal of Marketing, 65*(2), 81-93. https://doi.org/10.1509/jmkg.65.2.81.18255

Diller, H. (2000). Preiszufriedenheit bei Dienstleistungen: Konzeptionalisierung und explorative empirische Befunde. *Die Betriebswirtschaft*, 60(5), 570-587.

Dunford, R., Su, Q., Tamang, E., & Wintour, A. (2014). The Pareto principle. *The Plymouth Student Scientist*, 7(1), 140-148. https://doi.org/10.24382/swfr-wr17

Ennew, C. T., Reed, G. V., & Binks, M. R. (1993). Importance-performance analysis and the measurement of service quality. *European Journal of Marketing, 27*(2), 59-70. https://doi.org/10.1108/03090569310026402

Fornell, C. (1992). A national customer satisfaction barometer: The Swedish experience. *Journal of Marketing, 56*(1), 6-21. https://doi.org/10.1177/002224299205600103

Hoa, T. K., & Ngoc, L. T. B. (2015). Customer satisfaction and customer loyalty in Vietnamese mobile telecommunication industry. *Hcmcoujs - Economics and Business Administration, 5*(1). https://doi.org/10.46223/hcmcoujs.econ.en.5.1.95.2015

Jones, M. A., & Suh, J. (2000). Transaction-specific satisfaction and overall satisfaction: An empirical analysis. *Journal of Services Marketing, 14*(2), 147-159. https://doi.org/10.1108/08876040010371555

Kotler, P., & Keller, K. L. (2006). *Marketing management (12th ed.)*. Pearson Prentice Hall.

Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of Marketing, 80*(6), 69-96. https://doi.org/10.1509/jm.15.0420

Matzler, K., & Pramhas, N. (2004). Preiszufriedenheit — Prospect Theory oder Kano-Modell? *Kundenorientierte Unternehmensführung*, 181-193. Gabler Verlag. https://doi.org/10.1007/978-3-663-07659-9_9

Matzler, K., Würtele, A., & Renzl, B. (2006). Dimensions of price satisfaction: A study in the retail banking industry. *International Journal of Bank Marketing, 24*(4), 216-231. https://doi.org/10.1108/02652320610671324

Nawaz, N. U. A., & Usman, A. (2011). What makes customers brand loyal: A study on telecommunication sector of Pakistan. *International Journal of Business and Social Science*, *2*(14), 213–221.

Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing, 63*, 33. https://doi.org/10.2307/1252099

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12–40.

Petrovska, I., Veljanoska, I., Efremov, K., & Kovacevski, D. (2020). The impact of mobile marketing in building customer loyalty. *Journal of the Institute of Economics - Skopje*, 22(1-2), 64–75.

Ranaweera, C. (2007). Are satisfied long-term customers more profitable? Evidence from the telecommunication sector. *Journal of Targeting, Measurement and Analysis for Marketing, 15*(2), 113–120. https://doi.org/10.1057/palgrave.jt.5750038

Sherovska, G., & Petrovska, I. (2021). The future of the retail industry by implementing omnichannel marketing strategy in the Republic of North Macedonia. *International Journal of Academic Research in Business and Social Sciences, 11*(8). https://doi.org/10.6007/ijarbss/v11-i8/10450

Spreng, R. A., & Mackoy, R. D. (1996). An empirical examination of a model of perceived service quality and satisfaction. *Journal of Retailing, 72*(2), 201-214. https://doi.org/10.1016/s0022-4359(96)90014-7

Suchanek, P., & Bucicova, N. (2025). The customer satisfaction model in the mobile telecommunications sector after Covid-19 pandemic. *PLOS ONE, 20*(1), e0317093. https://doi.org/10.1371/journal.pone.0317093

Tse, D. K., & Wilton, P. C. (1988). Models of consumer satisfaction formation: An extension. *Journal of Marketing Research, 25*(2), 204. https://doi.org/10.2307/3172652

Veljanoska, I., & Petrovska, I. (2018). Reshaping customer loyalty through mobile marketing. *Proceedings of the 6th International Conference on Contemporary Marketing Issues (ICCMI)*, 126–132. ISBN: 978-960-287-158-4.

Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing, 60*(2), 31-46. https://doi.org/10.1177/002224299606000203

Zielke, S. (2008). Exploring asymmetric effects in the formation of retail price satisfaction. *Journal of Retailing and Consumer Services, 15*(5), 335-347. https://doi.org/10.1016/j.jretconser.2007.08.005

APPENDIX

Survey Questionnaire – *Customer Satisfaction and Loyalty in the Mobile Telecommunication Industry*

Dear Respondent, the purpose of this questionnaire is to measure and analyze customer satisfaction levels and brand loyalty towards mobile telecommunication providers in the Republic of North Macedonia. Your responses are strictly confidential and will be utilized solely for academic research purposes. Thank you for your time and contribution

Section A: Demographic Information

Please select the option that best describes you.

1. Please choose your age category
- Less than 18
- 19-25
- 26-35
- 36-45
- 45-55
- 56-65
- More than 65

2. Select your Gender
- Male
- Female

3. What is your current occupation?

_____

4. In which category does your monthly income belong?
- Less - minimal income in MKD 20.200
- 20.200 - 30.000 MKD
- 30.000 - 40.000 MKD
- 40.000 - 50.000 MKD
- 50.000 - 60.000 MKD
- Above 60.000 MKD

Section B: Baseline Usage Profiles

Please provide information regarding your baseline usage behavior.

5. Who is your current primary mobile telecommunication service provider?
- T - Mobile (Македонски телеком)
- A1
- M Tel
- Neotel
- Telekabel
- Lyka Mobile

6. For how long do you use the services from your current service provider?

_____

7. Type of customer category
- Prepaid
- Postpaid

8. Have you ever noticed your average monthly mobile usage in minutes?
(How long are you on the phone while speaking)

_____

9. Also, average monthly data usage (in GB)?

_____

Section C: Core Construct Evaluation Scales

10. Please rate your overall satisfaction with your telecommunication service provider
(From 1 to 5 - where 1 represents Very Dissatisfied and 5 represents Very Satisfied)

11. How satisfied are you with your network coverage?
(From 1 to 5 - where 1 represents Very Dissatisfied and 5 represents Very Satisfied)

12. How satisfied are you with the call quality? (Clarity, connection, etc.)
(From 1 to 5 - where 1 represents Very Dissatisfied and 5 represents Very Satisfied)

13. How satisfied are you with the data services? (Internet speed, reliability, etc.)
(From 1 to 5 - where 1 represents Very Dissatisfied and 5 represents Very Satisfied)

14. How satisfied are you with the customer service (response time, problem resolution, etc.) provided by your telecom service provider?
(from 1 to 5 - where 1 represents Very Dissatisfied and 5 represents Very Satisfied)

15. How satisfied are you with the pricing and value for money offered by your mobile service provider?
(From 1 to 5 - where 1 represents Very Dissatisfied and 5 represents Very Satisfied)

16. How satisfied are you with the range of mobile devices offered by your mobile service provider?
(From 1 to 5 - where 1 represents Very Dissatisfied and 5 represents Very Satisfied)

Section D: Brand Loyalty & Switching Intentions

17. Would you recommend your telecommunication provider to other customers?
- *Yes
- *No
- *Maybe

18. On a scale of 1-5, how likely are you to switch to another telecommunication provider in the near future?

19. What are the main reasons you choose to remain loyal to your current mobile service provider?

- Network coverage
- Pricing and value for money
- Variety of products and service options
- Customer care
- Overall service quality
- *Other

20. What factors would make you consider switching to a different mobile service provider?

- Network coverage
- Service reliability
- Customer service quality
- Pricing and affordability
- Exclusive offers and promotions
- Mobile device offerings and availability

21. Have you had any negative experiences with your current mobile service provider that made you consider switching?

_____
_____
_____

22. Are there any additional feedback or suggestions you would like to provide regarding your experience with your current mobile service provider?

_____
_____
_____

23. Thank you for your time. You can add suggestions for improvement of the overall satisfaction below.

_____
_____
_____
_____
_____
_____
_____