

Determinants of Users' Satisfaction with Ethio-Telecom's Wireless Internet Service in Hawassa, Ethiopia

Desalew Demissie

Research Scholar
Institute of Management and Research
Department of Operations Management
Parul University, Waghodia,
Vadodara Gujarat, India
Corresponding author
Email: desugood2004@gmail.com

Jayprakash Lamoria

Associate Professor
Institute of Management and Research
Parul University, Waghodia,
Vadodara Gujarat, India
Email: jayprakash.lamoria@paruluniversity.ac.in

Abstract

Despite the increasing reliance on wireless internet, even in residential areas, Ethio-Telecom's services in Hawassa City failed to meet user expectations, leading to widespread dissatisfaction. Therefore, this research explores the factors influencing internet users' satisfaction with Ethio-Telecom's wireless internet service in Hawassa City. The study adopted an explanatory research design and a quantitative approach, surveying a systematically sampled 354 internet service users using a self-administered questionnaire. Ordered logistic regression analysis, conducted with SPSS version 26, revealed key determinants of customer satisfaction. The findings indicate that demographic factors including sex, age, and education, and service-related factors including tangibility, assurance, reliability, and empathy statistically influence Ethio Telecom's wireless internet users' satisfaction level. Specifically, females reported higher satisfaction than males, and older individuals were generally more satisfied than younger ones. Conversely, higher education levels correlated with lower satisfaction. Furthermore, empathy had the most significant impact on satisfaction, followed by responsiveness, assurance, tangibility, and reliability. Consequently, the study recommends that Ethio-Telecom proactively enhance service quality through targeted strategies to increase customer satisfaction and meet the varied expectations of internet service users in the region.

Keywords: Internet service, Satisfaction level, Service Quality, Ethio-Telecom, Hawassa

Introduction

It is impossible to dispute the significance of information and communication technology (ICT) in the modern world. It has completely changed how we interact, collaborate, and obtain information. The availability of the internet has further amplified the impact of ICT. The internet has become a critical enabling technology in the networked society, facilitating the delivery of education, health, and telecommunications services at low cost and to a broader population (Dwivedi & Khan, 2007). Efficient and effective resource management through Information and Communication Technology (ICT) has been

demonstrated to positively impact national economies and enhance the quality of life for citizens (International Telecommunication Union, 2009).

However, internet adoption is still in its early stages in many developing countries, including Ethiopia. According to Internet World Stats (2019), Africa's 28.3% of the population has internet access in 2019, which has seen significant growth from 15.6% in 2012. In Ethiopia, internet users are still limited, with historical data indicating limited access to the internet. In 2009, less than one percent of Ethiopians had access to the internet. With a reported 360,000 internet users (World Bank, 2009). Although the introduction of wireless internet in 2009 produced a significant rise in internet subscribers, as many people who use the internet in Ethiopia remained a some of the lowest globally, reaching only 960,331 users in 2012 (EthioTelecom, 2013).

Understanding customer satisfaction with internet service providers is crucial for the growth and sustainability of the digital economy in Ethiopia. It is crucial for companies to carefully observe their customers, comprehend their desires, and strive to meet or surpass their expectations. The key to future success and survival lies in customer satisfaction, as emphasized by Ali et al. (2016). Agyapong (2011) highlights that challenges related to quality, efficiency, productivity, growth, and survival are significant for all organizations. However, there is dissatisfaction among customers, especially with Ethio-telecom's internet services (Kalkidan, 2017; Anteneh, 2022; Genet, 2022). Hence, the objective of this research is to pinpoint the factors that play a role in determining the satisfaction level of users of wireless internet services provided by Ethio-Telecom at the Hawassa Branch.

Literature Review

Customer Satisfaction

Researchers have traditionally paid close attention to the study of contentment. The various definitions of it that can be found in the literature suggest that it is a subjective notion. In marketing theory and practice, customer satisfaction is central to the concept. These days, a lot of businesses aim for total customer satisfaction (TCS).

Although there are several definitions, Douglas and John's (2008) commonly recognized definition defines ensuring contentment of clients as evaluating customers' expectations against their impressions concerning real service interactions.

Oliver (1981) presented an alternative viewpoint in terms of contentedness, characterizing it as an assessment of products or services that offer a satisfactory degree of fulfillment associated with consumption, encompassing levels of both over and under-fulfillment. In 1992, Cronin and Taylor performed an empirical study that demonstrated the significant influence of service excellence on the contentment of consumers. Furthermore, recursive structural model-based research by González and Brea (2005) and Ekinçi (2004) have experimentally confirmed the relationship between customer happiness and service quality.

According to Kotler (2002), customer satisfaction denotes the level of comfort that buyers have when comparing their expectations with the performance or results that a company's products or services really produce. To put it simply, a firm achieves customer satisfaction when it meets or exceeds the expectations of its clients. An organization needs to be able to meet the expectations of its consumers to increase earnings and market share. It will be more likely to retain current clients and attract new ones if it does this. Businesses need to focus on meeting or exceeding consumers' standards and expectations when manufacturing goods and services if they want to achieve customer happiness. In the end, a key element of every successful company plan is client happiness.

Empirical Literature

The research carried out by Nibret (2022) examines how service quality affects customer happiness within the banking sector, specifically focusing on the Tesso Branch of the Commercial Bank of Ethiopia. The study examined six factors including reliability, assurance, responsiveness, tangibles, empathy, and trust to assess their influence on customer satisfaction. Using SERVQUAL and WEBQUAL models, the research employed a descriptive design, utilizing questionnaires for data collection. Sample respondents, comprising current and savings account

holders, were selected via the Yamane formula. Data analysis involved both descriptive and inferential statistics. The study's findings showed a positive correlation between reliability, assurance, responsiveness, empathy, and tangibles with the satisfaction of customers, while a negative relationship was found between trust and customer satisfaction. The study recommended that the bank focus on improving aspects associated with these variables to enhance overall customer satisfaction.

Supriyanto et al. (2021) conducted a study investigating the impacts of ensuring the level of service and happiness of our clients on the loyalty of bank customers in Indonesia. The research aimed to evaluate the influence of service excellence and satisfaction of customers on customer loyalty, as well as to conclude the simultaneous customer loyalty as a function of service excellence and happiness. Employing a survey research design, the study utilized path analysis and One-Way Analysis of Variance for data analysis. The findings indicated that service quality did not experience a notable direct effect on customer loyalty, but it did exhibit a significant impact on customer satisfaction, subsequently influencing customer loyalty. In this way, we learn that service quality influences customer satisfaction in a roundabout through its impact on customer satisfaction. The study suggests further research to delve into the relationships between the variables within this model.

Academic library patrons at the University Sultan ZainalAbidin (UniSZA) were the focus of research by Afthanorhan et al. (2019), who looked at how service quality affected patron happiness. In order to measure the gap between what customers anticipate and what they get in six areas of service quality—general services, search for materials, library collection, personnel, and environment—the study used the LibQual model. The study used covariance-based structural equation modeling and importance-performance analysis to analyze data from a questionnaire survey that was dispersed to 170 samples using simple random sampling. Library environment and general service were shown to have high relevance and strong performance indices, indicating that service quality significantly impacts customer happiness.

Tigist (2019) conducted a study exploring the connection between service excellence and dimensions and customer satisfaction through the application of the SERVQUAL model. Utilizing a mixed methods research approach, data were gathered from 304 respondents. The results unveiled noteworthy growth within the Commercial Bank of Ethiopia, evident in increased branch numbers, expanded customer base, augmented capital and reserves, and higher pre-tax profits. Advances in service delivery and technology were identified as contributors to heightened customer satisfaction. Nevertheless, customer dissatisfaction arose from the scarcity of foreign currency, particularly affecting businesspeople and contributing to inflation in Ethiopia. The survey found that clients were satisfied with all aspects of service quality except empathy, highlighting a service quality gap that affects the relationship between the bank and its customers. Analytical results showed a favorable and statistically significant relationship between service quality metrics and customer happiness, with service quality explaining 88.6% of the variation in customer happiness.

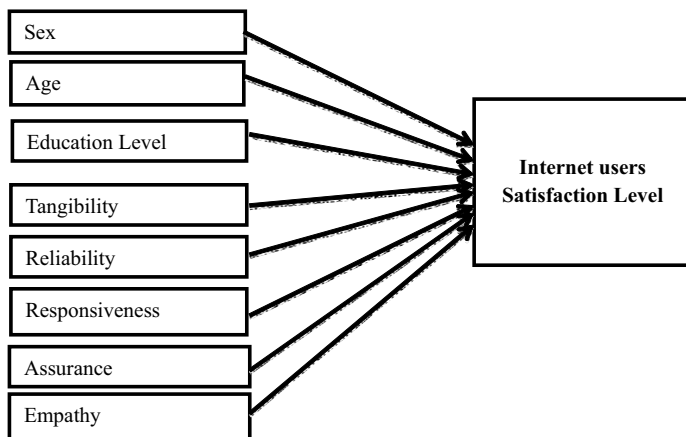
Gong and Yi (2018) conducted a comprehensive cross-national examination spanning five Asian countries, aiming to validate one that measures the quality of services provided and assess the comparability of scores across these nations. The study revealed a significant correlation between overall service quality and customer satisfaction, with implications for customer loyalty and happiness universally. Notably, the structural paths identified in the study were deemed valid across all five countries investigated. The findings in China, Hong Kong, and South Korea were particularly remarkable, highlighting the pivotal role of customer income in amplifying the effect of high-quality service on client happiness through the intermediary satisfaction of customers. This nuanced thought of the intricate relationships among service quality, loyalty, customer satisfaction, and happiness offers valuable insights for businesses operating in diverse Asian markets.

Conceptual Framework

The conceptual framework of the study focuses on determining the variables affecting wireless internet

customers' satisfaction. Consequently, the accompanying diagram is crafted to illustrate the interplay between the dependent and independent variables, as outlined by various scholars in the preceding literature review.

Figure : Study's Conceptual Framework



*Source: Adapted from Isaac et al.(2018),
Junoh & Yaacob (2011), and Goyal & Kar (2019)*

Hypothesis:

H₀: There is no significant relationship between the determinants and internet users' satisfaction level with Ethio-Telecom's internet service in Hawassa, Ethiopia.

H₁: There is a significant relationship between the determinants and internet users' satisfaction level with Ethio-Telecom's internet service in Hawassa, Ethiopia.

Research Methodology

The study was conducted at the Hawassa City Administration, which is located around 275 kilometers to the south of Addis Ababa. The city, which occupies 157.25 square kilometers, is divided into eight Sub-Cities. Utilizing a quantitative research technique to measure and understand numerical data, the study utilized an explanatory research design. Using a self-administered questionnaire, primary data were collected from Ethio Telecom's wireless internet users in Hawassa. Thirty-seven people who used Ethio-telecom's internet service in HawassaCity made up the study's target demographic.

Yamane's (1967) well-known method was used to calculate the study's representative sample size. In statistical research, this formula is frequently used to determine the

ideal sample size for a particular population, accounting for both the size of the population and the required degree of precision. The sample size that was calculated when the Yamane formula was used was 354, with a five percent error margin defined. The systematic random sample approach was used to choose each research participant individually. Using this procedure, each nth person from the population list is selected; the ratio of the population size to the sample size is denoted by "n". By using this method, sampling bias is reduced and the sample's representativeness to the population is guaranteed.

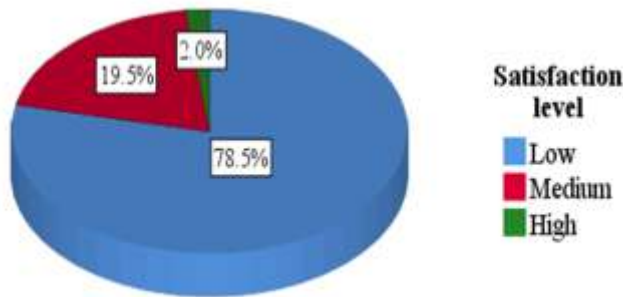
The main instrument for gathering data for the study was a questionnaire survey with both closed- and open-ended questions. The survey consisted of Polls using Likert scales with a five-point rating system to collect reliable and relevant data from the selected sample respondents. The questionnaire was created in English and then translated into Amharic, the local language, to improve accessibility and comprehension. This action was done to make sure the responders could easily grasp and comprehend the questions. The researcher and several enumerators who had received specialized training oversaw the data-gathering procedure.

The data collected from the questionnaire was coded, entered, modified, and analyzed using SPSS software version 26. The analytical technique used was ordered logistic regression.

Result and Discussion

This chapter unfolds the findings derived from the data collected, offering a comprehensive exploration of key variables and their interconnections. Through a meticulous examination of statistical results, this chapter aims to unveil insights into the phenomena under investigation. The presentation of results is followed by an in-depth discussion that delves into the implications, significance, and potential explanations of the observed patterns. By synthesizing empirical evidence with existing literature, this chapter endeavors to contribute to the broader understanding of the research topic. The integration of results and discussion fosters a deeper comprehension of the underlying factors and their broader implications.

Figure 2: Wireless Internet Users Satisfaction Level



The survey on customer satisfaction with Ethio-Telecom's internet service in Hawassa City reveals a predominant

dissatisfaction among respondents, with 78.5% expressing a low satisfaction level. A smaller but noteworthy 19.5% reported a medium satisfaction level, indicating a moderate degree of contentment. Conversely, only 2.0% of respondents indicated a high satisfaction level, suggesting a minimal proportion of customers in Hawassa City are highly satisfied with the provided internet service. These findings underscore a considerable need for improvement in the quality and delivery of Ethio-Telecom's internet services in the surveyed area, with the majority of customers expressing dissatisfaction or moderate satisfaction.

Table 1: Socio-demographic Characteristics of Respondents (n= 354)

Variables	Category	Frequency	Percentage
Sex	Male	231	65.3
	Female	123	34.7
Age	22-29	136	38.4
	30-37	163	46.0
	38-45	41	11.6
	46-53	14	4.0
	54-61	0	0.0
Education level	Diploma	109	30.8
	Degree	135	38.1
	Masters	68	19.2
	PhD	42	11.9

The findings presented in Table 1 underscore distinct patterns in the demographic composition of internet users. The notable gender skew, with 65.3% of respondents being male and 34.7% female, implies a significant male predominance among internet users. In terms of age distribution, a substantial 46.0% of respondents fall within the 30-37 age range, indicating a core demographic for internet usage. The 22-29 age groups closely follow, comprising 38.4%, suggesting a concentration of younger users. Conversely, the 38-45 and 46-53 age groups represent 11.6% and 4.0%, respectively, indicating a lower representation of older individuals in internet usage. This underscores the prominence of internet use among those

aged between 22 and 37. Examining education levels further reveals a majority holding a degree (38.1%), followed by diploma holders (30.8%). Moreover, there is a noteworthy presence of individuals with Master's (19.2%) and PhD (11.9%) qualifications, indicating a diverse educational background among internet users. In summary, the majority of internet users are male, aged between 22-37, and possess at least a degree, providing valuable insights for tailoring internet services and content to the predominant characteristics of this user demographic.

Table 2: Descriptive Summary of Service Quality Measurements

Variables	Mean	SD
Tangibility	2.43	0.713
Reliability	2.34	0.464
Responsiveness	2.46	0.591
Assurance	2.00	0.594
Empathy	2.50	0.544

Table 2 presents the descriptive summary of service quality measurements, disclosing key statistics such as mean values and standard deviations (SD) for various variables. The tangibility aspect, reflecting physical appearance, shows a mean of 2.43 with an SD of 0.713, suggesting a moderate perception with some variability among respondents. Reliability, denoting consistency, has a mean of 2.34 and an SD of 0.464, indicating a slightly lower mean with a more consistent agreement. Responsiveness, reflecting promptness, has a mean of 2.46 and an SD of 0.591, suggesting a moderately positive perception with moderate variability. Assurance, representing competence, exhibits a mean of 2.00 and an SD of 0.594, indicating a

neutral perception with some variability. Empathy, reflecting understanding and care, shows a mean of 2.50 and an SD of 0.544, indicating a relatively higher positive evaluation with moderate variability.

In summary, the analysis emphasizes a comprehensive assessment of service quality concerning the internet service provided by Ethio-Telecom, revealing an overall average value below 2.6. Aligned with the criteria established by Al-Sayaad et al. (2006), the mean value falls beneath the 2.6 threshold, indicating a level of disagreement. This suggests that the sampled respondents expressed unhappiness with the internet services offered by Ethio-Telecom.

Table 3: Results of Ordered Regression Analysis on Determinants of Satisfaction

Variables	Estimate	Std. Error	Wald	df	Sig.	Odds Ratio
Sex	0.849	.416	4.167	1	.041	2.337
Age	0.102	.035	8.724	1	.003	1.107
Education level	-0.635	.259	6.036	1	.014	0.529
Tangibility	1.091	.323	11.402	1	.001	2.974
Reliability	1.522	.486	9.816	1	.002	4.581
Responsiveness	2.414	.459	27.619	1	.000	11.18
Assurance	1.882	.354	28.327	1	.000	6.567
Empathy	3.717	.583	40.654	1	.000	41.14
Chi-square	225.59					
Df	8					
p-value	0.000					
Pseudo R ²	0.683					

Dependent Variable: Wireless Internet Users' Satisfaction Level

The ordered regression analysis (Table 3) reveals key factors influencing participant satisfaction, with gender playing a notable role. Females showed significantly higher satisfaction with internet services ($\beta = 0.849$, $p < 0.05$),

being 2.337 times more likely to report greater satisfaction than males. This contrasts with mixed findings in existing literature, some studies suggest males are more satisfied in certain contexts (Shava, 2021), while others find no gender

differences (Manandhar et al., 2024). The higher female satisfaction here may stem from differing expectations or evaluation criteria (Fauza et al., 2022), though inconsistencies across studies (Opusunju et al., 2024) highlight the need for further research on how service type and cultural context shape these trends.

The analysis reveals that age positively influences satisfaction ($\beta = 0.102, p < 0.01$), with each year increasing the odds of higher satisfaction by 1.107 times. This challenges assumptions about older users and technology, as they report greater satisfaction despite typically lower adoption rates. While some studies (e.g., Shava, 2021) found no age effect, this trend may reflect older users' lower expectations or different usage patterns. However, digital divide research suggests this could stem from selection bias, only tech-savvy seniors remain active users. Additionally, service quality studies (Opusunju et al., 2024) note peak satisfaction among 51–60-year-olds, while younger users prioritize different features, highlighting the need for deeper research on how generational habits shape satisfaction.

The study reveals that higher education levels correlate with lower satisfaction ($\beta = -0.635, p < 0.05$), with each educational step reducing the odds of satisfaction by 47.1% (OR = 0.529). This suggests that more educated users may have stricter expectations or greater awareness of service shortcomings, a pattern supported by research showing that technical literacy enables users to detect deficiencies. While some studies found education insignificant in satisfaction models (Shava, 2021), this negative relationship aligns with digital inequality theories where educated users demand better performance and features. Healthcare research (Zarei et al., 2012) further supports this, as education often raises expectations beyond what services deliver. Thus, the findings highlight how education shapes discernment, creating a "satisfaction penalty" when providers fall short of sophisticated users' standards.

The study found that Tangibility significantly boosts customer satisfaction ($\beta = 1.091, p < 0.01$), with each unit increase nearly tripling the odds of higher satisfaction (OR = 2.974). This underscores the surprising yet critical role of physical elements, such as infrastructure visibility, service

center quality, and documentation in shaping perceptions of digital services. While internet services are intangible by nature, tangible attributes act as key quality signals, aligning with SERVQUAL research (Marpaung&Kusumah, 2022) and studies showing their strong influence on satisfaction (Al-Mutairi et al., 2024). However, poorly managed tangibility can widen expectation gaps (Sakinah, 2024), making it a double-edged sword for providers. These findings suggest telecom companies should strategically optimize tangible aspects to enhance satisfaction while mitigating risks from unmet expectations.

Reliability emerges as the strongest predictor of customer satisfaction ($\beta = 1.522, p < 0.01$), with each unit increasing, multiply the odds of satisfaction by 4.581 times. This confirms reliability, manifested through stable connectivity, consistent speeds, and accurate billing, as the foundation of successful Internet service delivery. While universally recognized as critical across industries (Shava, 2021), its impact is particularly pronounced in telecom, where performance shortfalls disproportionately damage satisfaction (Sakinah, 2024). The findings reveal a strategic paradox: though reliability investments yield substantial satisfaction gains, they also raise expectations, requiring providers like Ethio-telecom to balance improvements with sustainable performance standards to avoid future expectation gaps.

Responsiveness drives customer satisfaction more powerfully than any other factor ($\beta = 2.414, p < 0.001$), with each improvement multiplying satisfaction odds by 11.18 times. This staggering impact highlights how crucial rapid issue resolution and adaptive service are for internet providers like Ethio-telecom. While traditionally seen as secondary to reliability in telecom studies (Shava, 2021), our findings reveal responsiveness as the dominant satisfaction driver in digital services - likely because today's users demand instant solutions to connectivity problems and quick customer support (Moksin et al., 2024). However, this comes with major challenges: when responsiveness falters, it creates the largest expectation gaps (Sakinah, 2024), meaning providers must consistently invest in support systems and staff training to maintain

these critical response times. Essentially, while excellent responsiveness creates loyal customers, mediocre responsiveness risks significant dissatisfaction in our always-online world.

Assurance emerges as a critical driver of customer satisfaction ($\beta = 1.882$, $p < 0.001$), with each unit improvement multiplying satisfaction odds by 6.567 times. This powerful effect underscores how essential trust, security, and professional service are for internet providers like Ethio-telecom. The findings reveal assurance plays a dual role: while existing customers value it alongside reliability, potential customers prioritize it even more heavily when choosing providers (Sakinah, 2024). In digital services, assurance manifests through data security, knowledgeable staff, and courteous service - all vital for maintaining customer confidence in an era of cyber threats. However, the research shows assurance failures create particularly severe damage to customer relationships, suggesting providers must maintain consistent excellence across all trust-building dimensions. These results position assurance not just as a satisfaction factor, but as a fundamental requirement for competing in today's digital marketplace.

The findings demonstrate that empathy exerts an unparalleled influence on customer satisfaction ($\beta = 3.717$, $p < 0.001$), with an extraordinary odds ratio of 41.14, dwarfing the effects of other SERVQUAL dimensions like reliability (OR=4.58) and tangibility (OR=2.97). This revelation fundamentally challenges traditional telecom service paradigms by showing that relational factors (personalized attention, need anticipation) outweigh pure technical performance in driving satisfaction, corroborating banking sector findings where empathy showed the strongest satisfaction correlation (Shava, 2021; Al-Mutairi et al., 2024). The staggering effect size suggests customers increasingly value humanized digital experiences, creating both an implementation challenge, given empathy's historical underperformance in service evaluations, and a transformative opportunity for providers to gain a competitive advantage by systematically embedding empathy across all touchpoints while maintaining technical standards (Zarei et al., 2012).

Conclusion and Recommendations

The use of the internet and ICT has become a vital part of daily life and has been used in a number of disciplines to enhance services. The importance of the internet cannot be overstated, as it has the potential to boost the economy of countries and improve the lives of their citizens. However, in developing countries such as Ethiopia, deployment is still in its early stages. High-quality services are a must for every organization to grow and prosper. Customer satisfaction is the key to achieving this. The regression analysis results show that factors such as age, education level, tangibility, reliability, responsiveness, assurance, empathy, and sex significantly affect the level of satisfaction of wireless internet service users. These findings have important implications for companies like Ethio-Telecom, which must focus on offering their clients excellent service to win their loyalty and happiness.

Therefore, it is recommended that telecommunication should focus on improving these factors to enhance internet users' satisfaction. The company should consider investing in training programs for employees to improve their skills in empathy and responsiveness, as these two factors were discovered to have the most influence on internet users' satisfaction. Additionally, the company should prioritize the development of tangible and reliable products/services and ensure that their assurance level is high to satisfy their customers. Finally, it is recommended that future studies examine other potential factors that may impact internet users' satisfaction, such as price, brand image, and marketing strategies.

Limitations

The study's primary limitations include its restricted geographical focus on Hawassa City, which may limit the generalizability of findings to other regions. Furthermore, the study excluded critical factors like pricing, network coverage, and data speed, which could significantly influence satisfaction. Despite these limitations, the research offers valuable insights into key determinants of user satisfaction, such as empathy and responsiveness. These insights provide a foundation for Ethio-Telecom to enhance service quality and for future studies to expand the scope and incorporate additional variables for deeper analysis.

Reference

- Afthanorhan, A., Awang, Z., Rashid, N., Foziah, H., & Ghazali, P. (2019). Assessing the effects of service quality on customer satisfaction. *Management Science Letters*, 9(1), 13-24.
- Agyapong, GKQ. (2011). The effect of service quality on customer satisfaction in utility industry: A case of Vodafone. *International Journal of Business and Management*, 6(5), 203-210.
- Ali, F., Zhou, Y., Hussain, K., Kumat, P., Neethiahnanthan, N., & Ragavan, A. (2016). Quality assurance in education. *Quality Assurance in Education*, 24(1), 7-94.
- Al-Mutairi, A., Naser, K., Simintiras, A., & Fayez, F. (2024). The relationship between customer satisfaction and service quality of the Kuwait Airways (KU). *Journal of Ecohumanism*, 3(8). <https://doi.org/10.62754/joe.v3i8.5831>
- Anteneh, A. (2022). Influence of Services Provided by Ethio-Telecom on Internet Users' Satisfaction: Evidence from Fixed Broadband Internet Service in Hawassa City, Ethiopia. (Master's thesis). Hawassa University.
- Cronin, J., & Taylor, SA. (1992). measuring service quality: A re-examination and extension. *Journal of Marketing*, (56), 55-68.
- Dwivedi, Y. K., & Khan, K. K. (2007). Factors affecting consumers' behavioral intention to adopt broadband in Pakistan. Emerald Group Publishing Limited, (1), 3.
- Ekinci, Y. (2004). An Investigation of the Determinants of Customers Satisfaction: Tourism Analysis, 8 (2), 197-203.
- Fabian, D. R. B., Cator, M. E., Gervacio, R. M. B., Palaña, A. A. R., Ranera, J. M. P., & Salvador, B. (2024). Service quality and customer satisfaction towards Rhett's printing service in Bagtas, Tanza Cavite: Basis for service enhancement plan. *International Journal of Research in Education Humanities and Commerce*, 5(1). <https://doi.org/10.37602/ijrehc.2024.5120>
- Fauza, G., Nurasyiah, A., Kawiji, A., Setyaningrum, N., Ariviani, Padmaningrum, D., & Prasetyo, H. (2022). Investigating the customer satisfaction on food quality, service and environment facility of Restaurant X using food hygiene perspectives. *Proceedings of the International Conference on Industrial Engineering and Operations Management*. <https://doi.org/10.46254/au01.20220507>
- Genet, G.T (2022). The Assessment of Internet Service Distribution in Ethiopia. *IJO-International Journal of Business Management* (ISSN 2811-2504), 5(05), 09-18.
- Ghimire, S. R., & Agarwal, N. (2024). Service quality variables and customer satisfaction at a Nepalese commercial bank. *NPRC Journal of Multidisciplinary Research*, 1(2). <https://doi.org/10.3126/nprcjmr.v1i2.69293>
- Gong, T., & Yi, Y. (2018). The effect of service quality on customer satisfaction, loyalty, and happiness in five Asian countries. *Psychology & Marketing*, 35(6), 427-442.
- Goyal, K., & Kar, A. K. (2019). Determinants of customer satisfaction in telecommunication. In *Proceedings of ICETIT 2019: Emerging Trends in Information Technology* (pp. 754-761). Cham: Springer International Publishing.
- International Telecommunication Union (ITU). (2009) ICT Infrastructure, Access Indicators in Ethiopia. Retrieved from www.itu.int/md/dologin_md.asp?lang=es&id=D06-DAP2B.1
- Isaac, O., Abdullah, Z., Ramayah, T., & Mutahar, A. M. (2018). Factors determining user satisfaction of internet usage among public sector employees in Yemen. *International Journal of Technological Learning, Innovation and Development*, 10(1), 37-68.
- Junoh, A. S., & Yaacob, M. R. (2011). Determinants of customer satisfaction towards broadband services in Malaysia. *International Journal of Business, Humanities and Technology*, 1(2), 123.
- Kalkidan, N. (2017). An Assessment of Service Quality Level and Customer Satisfaction with Broadband Internet: The Case of Ethio Telecom Enterprise Key Account Customers. (Master's thesis). St. Mary's University.

- Kotler, P., Armstrong, G., Saunders, J., & Wong, V. (2002). *Principle of Marketing* (3rd ed.). Prentice Hall: Europe.
- Manandhar, R. B., Karki, T., Manandhar, E., & Khadka, K. (2024). Examining the impact of quality service on customer satisfaction in the emerging landscape of online clothing retail in Nepal. *International Research Journal of MMC*, 5(1). <https://doi.org/10.3126/irjmmc.v5i1.62893>
- Marpaung, M. M., & Kusumah, L. H. (2022). Systematic literature review: Identification of service attributes SERVQUAL that affect customer satisfaction in distribution companies. *Proceedings of the International Conference on Industrial Engineering and Operations Management*. <https://doi.org/10.46254/ap03.20220267>
- Moxsin, H., Hudi, Z. H., & Malek, M. A. (2024). Wallet go digital: Exploring service quality and customer satisfaction in e-wallet apps. *International Journal of Academic Research in Business and Social Sciences*, 14(12). <https://doi.org/10.6007/IJARBS/v14-i12/23771>
- Nerisafitra, P., Susanti, M. D. E., Alit, R., & Prapanca, A. (2024). How to find gap analysis in undergraduate user satisfaction through a tracer study. *Applied Technology and Computing Science Journal*, 6(2). <https://doi.org/10.33086/atcsj.v6i2.5374>
- Nibret Didamo. (2022). The effect of service equality on Customer Satisfaction in the case of commercial bank of Ethiopia, Tesso Branch (Unpublished master's thesis). Hawassa University, Ethiopia.
- Oliver, R. L. (1981). Measurement and Evaluation of Satisfaction Process in Retail Setting. *Journal of Retailing*, 57(3), 18-48.
- Opusunju, O. C., Azubuike, E. J., & Johnson, J. (2024). Enhancing employee responsiveness to non-communicable diet-related diseases and customer satisfaction in Port Harcourt quick services restaurants. *Annals of Innovation in Medicine*, 2(4). <https://doi.org/10.59652/aim.v2i4.348>
- Reddy, N., Ramaprasad, M. V., M. J., & Bung, P. (2024). Evaluating the impact of e-service quality attributes on customer satisfaction and purchase intentions for electronic gadgets and home appliances, India. *Journal of Ecohumanism*, 3(8). <https://doi.org/10.62754/joe.v3i8.4910>
- Sakinah, N. N., Achmadi, F., & Septiari, R. (2024). Analysis of service quality improvement using service quality (SERVQUAL) and importance performance analysis (IPA) methods (Case study at PDAM Banggai Regency). *International Journal of Innovative Research in Multidisciplinary Education*, 3(9). <https://doi.org/10.58806/ijirme.2024.v3i9n05>
- Shava, H. (2021). The relationship between service quality and customer satisfaction in the South African mobile network telecommunications industry. *Journal of International Students*, 14(2). <https://doi.org/10.14254/2071-8330.2021/14-2/5>
- Shebaib, S. F., & Hussein, S. A. (2024). The impact and importance of e-marketing on the quality of service provided to customers (A study on telecommunications companies providing mobile services in the State of Kuwait). *Journal of Social Sciences and Technology*, 2024. <https://doi.org/10.21608/jsst.2024.287976.1796>
- Supriyanto, A., Wiyono, B. B., & Burhanuddin, B. (2021). Effects of service quality and customer satisfaction on loyalty of bank customers. *Cogent Business & Management*, 8(1), 1937847.
- Tigist Kebede. (2019). Service Quality and Its Impact on Customer Satisfaction: The Case of Commercial Bank of Ethiopia (CBE) (Unpublished masters' thesis). (Unpublished master's thesis). St. Mary's University, Ethiopia.
- World bank. (2009). Information and Communications for Development: Extending Reach and Increasing Impact. Retrieved from: <https://documents1.worldbank.org>
- Zarei, E., Arab, M., Froushani, A. R., Rashidian, A., & Ghazi-Tabatabaei, M. (2012). Service quality of private hospitals: The Iranian patients' perspective. *BMC Health Services Research*, 12(1), 31. <https://doi.org/10.1186/1472-6963-12-31>