

Exploring of Service Quality, Customer Satisfaction, Price and word-of-mouth on Yogyakarta Health Clubs

Tomoliyus^{a,*}, Dian Metasari Nursanti^b, Japhet Ndayisenga^c

^{a*,b} Yogyakarta State University, Faculty of Sport Sciences, Yogyakarta, Indonesia,
omoliyus@uny.ac.id, mettadian070@gmail.com

^cInstitute of Physical Education and Sports, University of Burundi, Boulevard Mwezi Gisabo,
Bujumbura, Burundi, ndayisengajaphet@gmail.com

Abstract

With the high evolution of the world which increasing day by day, it is very important to take precautions or evaluative measures to fight against companies' competition which increases rapidly and continuously. The purpose of this study (1) to test the impact of mouth 'word and price on the service quality, customer satisfaction in Health Clubs in Klaten and Yogyakarta, (2) to give sports management guide to the companies, (3) to evaluate the behavior of party complaints third in the fitness club. This research is an exploration study with a quantitative approach. The research samples were 181 subjects from 10 Yogyakarta fitness clubs taken by random sampling. Technique collection data by using a developed questionnaire. Data analysis using structural equation modeling (SEM) to test similarity and relationships between all variables. The result from this study showed that service quality is assessed through staff, program, facilities, exercise room, and equipment. Loyalty and satisfaction were significantly influenced by Behavior; broadcasting news through mouth has increased customers in the fitness club; Price has significant effect on the customers satisfaction. The result showed again that CR value of 1.96 and a P value below 0.05 which indicates that there is a positive relationship between the variables. In Conclusion the company's service quality, customer satisfaction and loyalty are very important to increase the profits that the company always maintains good relations with customers. Companies that have a focus on the customer program expect customers to be loyal to the company.

Keywords: health club, service quality, word-of-mouth, satisfaction, loyalty

1. Introduction

Nowadays where technology growth is changing more rapidly in the whole world, it is necessary to properly maintain any service skills and increase customer flow. Therefore three points are very important to be known: (1) service quality, (2) satisfaction, (3) price and management in Sports health clubs. Outstanding management in a company such as a sports and health club is one of the biggest and beneficial social events. The increasing of competitiveness in all services has made customers more demanding with service quality and less tolerant of poor service provision nowadays. The survival and success of an organization requests highly competitive service sector [1]

Service quality has been recognized as one of the main factors affecting customers and leads to organizational profitability in the business. Service quality is determined by the customer's expectations or desires and their perceptions [2]. On research showed that consumers form expectations based on past experience, about complaints by word of mouth and marketing communication efforts made by companies.

The most desirable service aspects are: modern facilities, employee attitudes and skills, membership offers and price packages, programs, hours of operation, security of personal items and consistent service provisions [3]. Customer assessment of product service quality provided. Satisfaction is seen as a cumulative evaluation of purchasing and consumption experiences [4]. Meeting customer expectations and satisfying their needs are important elements in an organization's efforts to retain customers and gain a competitive advantage

over competitors [5]. Recognition of a positive relationship between satisfaction, retention and repurchase intentions emphasizes the importance of identifying and explaining the conditions in which satisfaction is developed [6]

Loyalty is recognized as an important strategy for the success of any organization. Loyalty as "a firm commitment to repurchase or a product or service that is consistently favored in the future, resulting in repeated purchases of the same brand, regardless of situational influence and marketing efforts potentially causing a shift in behavior [7]. The most common steps related to attitude loyalty are word-of-mouth generation.

Consumer reactions are classified to dissatisfaction as exit, vote or loyalty. So, when a customer experiences a dissatisfaction situation, the answer can be: switch to a new service provider (exit), try to resolve the problem by complaining (voice) or stay with the same provider hoping things will be improved. Price as the amount of value exchanged by consumers for the benefit of owning and using a product or service that enables a company to get a reasonable profit by being paid for the value of the customer it creates [8]. Price is the determination of prices is a critical decision that supports the success of a company [9].

Based on the existing research related to service quality, customer satisfaction, word-of-mouth and Health Club Price. In the Yogyakarta fitness health club; the fitness and health clubs have been no studies on the company management. Own company in Yogyakarta do not yet know whether the customers are satisfied or not, the current situation fitness services in Yogyakarta still unknown in its important points and weak points. To know the current situation in Yogyakarta fitness Health club a research will be conduct on:

Exploring of Service Quality, Customer Satisfaction, Price and word-of-mouth on Yogyakarta Health Clubs.

2. Materials and Methods

This research is an exploration study with a quantitative approach. The research samples were 181 subjects from 10 Yogyakarta fitness clubs taken by random sampling. Data collecting technique using a developed questionnaire to assess valid and reliable. Questionnaire validity and reliability is very important to reduce measurement errors, which is the difference between respondent attributes and their survey responses [10]. While validity means that the measurement of what someone claims, its reliability is related to size consistency. In this study, the difficulty of developing a valid and reliable questionnaire was overcome by switching to a previously tested and validated scale. The model was tested using a questionnaire.

The items used to measure each construct were adopted from existing research to ensure content validity, although some were adapted to better suit the health club context. Service quality and dimensions are evaluated using SQAS [11-12] SQAS is based on six dimensions: staff, programs, changing rooms, physical facilities, training facilities and child care. Of the six initial dimensions proposed in the SQAS, child care was dropped, because the service was not provided by the health club where the study was conducted. The SQAS scale was tested with positive results in the healthcare industry [13]

Analysis of the data used to prove the hypothesis is the calculation of the Structural Equation Model (SEM) with AMOS 23. The sequence of steps for the analysis includes:

Step 1: Model Development Based on Theory

The development of models in this study is based on the concept of data analysis. In general the model consists of exogenous variables namely Word of Mouth (WOM) and Price (P). The endogenous variables in this study are Service Quality (SQ), Satisfaction (S) and Loyalty Behavior (LB).

Steps 2 & 3: Arrange Structural Pathways and Equations

The next step is to arrange causality relationships with a path diagram and arrange structural equations. There are 2 things that need to be done, namely structuring the structural model by connecting between endogenous and exogenous latent constructs and determining the model that is connecting endogenous and exogenous latent constructs with indicator variables.

Step 4: Select the Type of Input Matrix and Estimated Proposed Model

The structural equation model is different from other multivariate analysis techniques. SEM only uses input data in the form of variance or covariance matrices or correlation metrics. The estimated model used is the maximum likelihood (ML) estimate.

To find out the relationship between variables and indicators, the researcher will mention the next hypothesis: To determine the relationship between variables and Indicators the research would mention the following hypothesis:

Exploring of Service Quality, Customer Satisfaction, Price and word-of-mouth on Yogyakarta Health Clubs

H1: Word of Mouth was positive significant effect on Service Quality

H2: Price has an impact on Customer Satisfaction

H3: Service Quality has a positive effect on the Customer Satisfaction.

H4: Customer Satisfaction was strongly significant on the Behavior Loyalty.

H5: Service Quality was highly influenced the Customer Behavior Loyalty.

3. Result

Based on the below diagram1 the researchers will seek to ensure that the data were normality distributed. The normality assumption has been tested and data can be further processed for SEM modeling. In multivariate normality test is to observe the value of Critical Ratio (CR) if the data from CR value is between the range of ± 2.58 , then the research data can be considered normal.

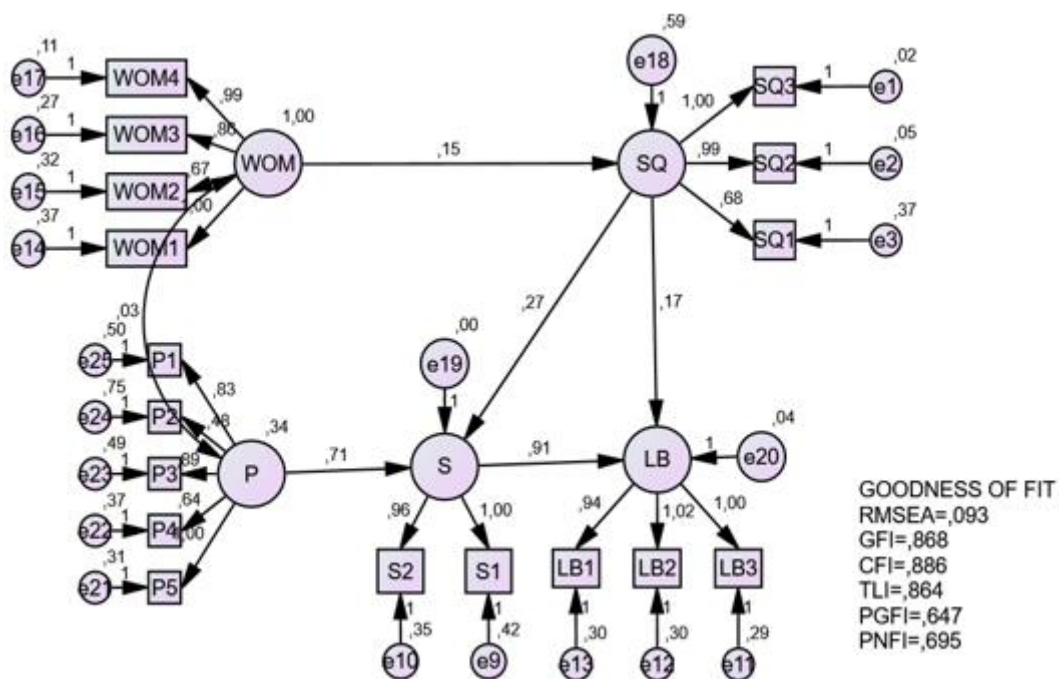


Diagram 1. The Research Structural Equation Modeling

Table 1. Test of Normality

variable	min	max	skew	cr	kurtosis	cr
	2,000	5,000	-1.002	-5.489	,552	1.512
P2	2,000	5,000	-1.053	-5.766	,427	1,169
P3	2,000	5,000	-1.048	-5.739	,451	1,234
P4	2,000	5,000	-,794	-4.349	,547	1,497
P5	2,000	5,000	-,795	-4.356	,027	,073
WOM4	1,000	5,000	-,486	-2.659	,431	1.179
WOM3	1,000	5,000	-,333	-1.824	,134	,367
WOM2	2,000	5,000	-,130	-,710	-,533	-1.460
WOM1	1,000	5,000	-,642	-3.514	,899	2,463
LB1	2,000	5,000	-,845	-4.628	,432	1,182
LB2	2,000	5,000	-,722	-3.957	-,129	-,352
LB3	2,000	5,000	-,795	-4.353	,045	,123
S2	2,000	5,000	-,774	-4.242	,232	,634
S1	2,000	5,000	-1.060	-5.808	,595	1,628
SQ1	2,000	5,000	-,795	-4.356	,027	,073
SQ2	2,000	5,000	-,798	-4.372	,207	,566
SQ3	2,000	5,000	-,767	-4.200	,242	662
multivariate					5.530	1,459

In the above table1, normality test results showed the following value 1,459 cr in multivariate this value is already included among the range of ± 2.58 and research data can be considered normal. Therefore, the data in this study can be analyzed using Structural Equation Modeling (SEM).

3.1. Outliers

Outliers are observations or data that have unique characteristics that look different from the observations of others, and appear in the form of extreme value, either for a variable or variables combination. The outliers can be evaluated using multivariate outliers based on Mahalanobis Distance.

Test Mahalanobis Distance is calculated using the chi-square value padad degree of freedom for 17 indicators at the level of $p < 0.001$ by using the formula $X^2 (17; 0.001) = 33.408$. The results of multivariate analysis showed that there is not outliers.

3.2. Confirmatory analysis

Confirmatory analysis was used to test the concept that was built by using several measurable indicators. In a confirmatory analysis are first seen loading factor as the value of each indicator. Loading factor can be used to measure the construct validity of a questionnaire which is said to be valid if the question is able to express something that is measured. The minimum number of loading factor is ideally $\geq 0,7$. whether a value which still below under 0,5 then it will be removed from the analysis [14].

Further confirmatory testing the suitability of the model was tested using Goodness of Fit Index. GOFI criteria (Goodness of Fit Index) in three types of criteria: absolute fit indices, incremental fit indices and parsimony fit indices. The three types of GOFI were constituted by 25 criteria, in the analysis of SEM-Amos does not require that all the criteria only from 4-5 are enough as long as the criteria represented the three types of criteria GOFI [15].

In this study were taken two criteria of each type of GOFI namely CMINDF and represent absolute fit indices GFI, CFI and TLI represents the incremental fit indices then PGFI and PNFI represent parsimony fit indices.

Table 2. Value Loading Factors

factors			estimate
SQ3	<---	SQ	,974
SQ2	<---	SQ	,961
SQ1	<---	SQ	,665
P5	<---	P	,752
P4	<---	P	,514
P3	<---	P	,585
P2	<---	P	,308
P1	<---	P	,549
S1	<---	S	,663
S2	<---	S	,684
LB3	<---	LB	,760
LB2	<---	LB	,776
LB1	<---	LB	,745
WOM1	<---	WOM	,666
WOM2	<---	WOM	,654
WOM3	<---	WOM	,784
WOM4	<---	WOM	,929

Exploring of Service Quality, Customer Satisfaction, Price and word-of-mouth on Yogyakarta Health Clubs

Table 2 showed that Loading factor was found that all of the indicator value have reached a loading factor of 0.5 except P2 so that P2 indicator should be discarded. After the P2 indicator discharged then all the indicators in this study were valid. Furthermore, the goodness of fit test confirmatory analysis with the following results

Table 3. Analysis of Confirmatory Test GOF

Fit Index	Goodness of Fit	Criteria	Cut-off value	Information
Absolute Fit	RMSEA	$\leq 0:08$	0042	Fit
	GFI	≥ 0.90	.920	Fit
Incremental Fit	TLI	≥ 0.90	0978	Fit
	CFI	≥ 0.90	0973	Fit
parsimony Fit	PGFI	≥ 0.60	0655	Fit
	PNFI	≥ 0.60	0734	Fit

Table3 showed that all goodness of fit criteria have been met, so it can be concluded that the model in this study had been fit.

Table 4. Test of Reliability

Indicator	Loading standards	standard Loading ²	measurement Error	CR	VE
SQ3	,974	.607	.393	0.8	0.6
SQ2	,961	0.496	0.504		
SQ1	,665	0.498	0.502		
P5	,752	0.687	0.313	0.8	0.7
P4	,514	.584	0.416		
P3	,585	0.588	0.412		
P1	,549	0.615	0.385		
S1	,663	0.581	.419	0.9	0.5
S2	,684	.619	.381	0.7	0.6
LB3	,760	.590	.410		
LB2	,776	0.411	.589		
LB1	,745	0.661	0.339		
WOM1	,666	0.585	.415	0.8	0.5
WOM2	,654	0.648	.352		
WOM3	,784	0.386	.614		
WOM4	,929	0.411	.589		

The table 4 showed that the reliability coefficients ranged was from 0-1, so the higher coefficient (close to 1), the more reliable measures. The Reliability construct was good if the value of the construct reliability > 0.7 and extracted its variance value > 0.5 (Yamin & Kurniawan, 2009). From the results of the calculation of the obtained results as Table 5

the result from table 5 showed that the reliability of the construct of all the variables was already met with value $\geq 0,7$. For extracted variance the value is above 0.5. It can be concluded that the questionnaire used for this study stated reliable.

Step 5 Hypothesis

Subsequent analysis is the Structural Equation Model (SEM) as a full model to test hypotheses developed in this study. The test result regression weight in this study is shown in table 5:

Table 5. Regression Test Results Weight

			estimate	SE	CR	P	Label
SQ	<---	WOM	,123	,060	2,052	,040	
S	<---	P	,738	,113	6.511	***	

S	<---	SQ	,255	,053	4,860	***	
LB	<---	S	,705	,121	5,810	***	
LB	<---	SQ	,298	,059	5,059	***	

The table 5 showed how hypothesis is accepted or rejected. Based on t the value of Critical Ratio (CR) and the probability (P) of the data processing the test showed that the value of CR is above 1.96 and a probability value (P) was below 0.05 / 5% then the research hypothesis proposed is accepted. In detail, the research hypothesis testing are discussed in stages according to the hypothesis that has been proposed. In this study, the hypothesis proposed five further deliberations would be described as following:

Based on the processing of the data in Table 5, noted that the value of CR was 2,052 and P value was 0.040. These results suggest that CR value above 1.96 and a P value below 0.05. Therefore it can be concluded that WOM has significant effect on Service Quality in another side the more customers broadcasted the good news or information about the service quality of Yogyakarta fitness club the more clients increased . So H1 in this study was accepted.

Based on the processing of the data in Table 5, The CR was 6.511 and P value was 0.000. These results indicate that the CR value is negative and the P value below 0.05. Therefore it can be concluded that Price has a strongly influence on the Customer Satisfaction, the ticket of fitness was very affordable for all the reason why there is no bad complains about the ticket price. The price is a strong tool which measure the degree of feeling of satisfaction of customer according to the product provided. So H2 in this study was accepted.

Based on the processing of the data in Table 5, it is noted that the value of CR was 4,860 P value of 0.000. These results suggest that above CR value of 1.96 and P value below 0.05. This result means that the service quality which was carried out on the staff, program, service facilities, good organization made customers to be interested with the Yogyakarta fitness center. Therefore it can be concluded that the Service Quality has significant effect on Customer Satisfaction. H3 so that in this study has been accepted

Based on the processing of the data in Table 5, the value of CR was 5.810 with P value 0.000. These results suggest that above CR value of 1.96 and P value below 0.05. The satisfaction acts as a key differentiator that enables the holder business to attract new customers in competitive business markets. Not only is it a leading indicator used to measure customer loyalty and retention, it enables businesses to identify unhappy customers, reduce customer losses and negative word of mouth whilst increasing revenue. Therefore it can be concluded that the Customer Satisfaction has a high impact on the Behaviour Loyalty. H4 is accepted.

Based on the processing of the data in Table5. With CR = 5, 059 and P value of 0.000. These results suggest that CR above 1.96 and P value below 0.05. Service quality in the fitness center becomes one of the most important factors for gaining a sustainable competitive advantage and customers' confidence in the highly competitive marketplace, and therefore service quality can give the fitness center club a great chance to create competitive differentiation. Therefore it can be concluded that the Service Quality has significant effect on Behaviour.b H5 in this has been accepted.

4. Discussion

The results found above indicate that word of mouth has a positive effect on service quality. A company also needs a network cable to advertise its services so that buyers or consumers can be interested. The more word of mouth towards something sweeter the more something or object of interest by the buyer. The public satisfaction with the quality of dental and oral health services is a comparison between perceptions of services received with expectations before getting service [16]. If expectations are fulfilled, it means that the service has provided an extraordinary quality and will also lead to high satisfaction. The level of patient satisfaction is one indicator in assessing the success of dental and oral hospitals in providing quality health services [17]. The assessment aspects of the level of satisfaction are assessed based on five dimensions of service quality, namely assurance, empathy, reliability, responsiveness, physical appearance [18]

Around the world there is higher competition, the reason why the price must be adjusted to the degree that can be achieved by buyers. In this study, price is an important thing that has increased customer fitness in Yogyakarta compared to fitness in the vicinity. People from afar can come to train in Yogyakarta fitness because the quality of service, price, facilities, training tools, comfort, air in the workspace, information, toilets, hydrography, health tools all increase community interest in Fitness Yogyakarta.

One of the secrets of business success is to determine the selling price of your product correctly. Determining the exact selling price of your product can increase the number of sales of your product, creating a foundation on which your business will succeed [19]. Strategies for determining the wrong product sale price will create problems that your business may not be able to overcome going forward. Determining the

Exploring of Service Quality, Customer Satisfaction, Price and word-of-mouth on Yogyakarta Health Clubs

selling price of your product accurately is crucial at every point in the economic cycle, but many businesses mistakenly assume that pricing below the actual price of their product is a good thing [20].

This study showed that all customers were very satisfied with the services in Yogyakarta fitness as a result of exceptional service. In the Yogyakarta fitness the staff, programs, working hours and facilities of the employees are very satisfying to customers. The good things that have been conveyed have passed by word of mouth customer. In the business world, it is not only the product / service that is noticed. In terms of business quality of service must also be considered. Because service quality is a way to retain customers. With quality, the company must meet customer expectations and satisfy customer needs [21].

In fitness Yogyakarta loyalty is defined as customer satisfaction that comes from facilities, low prices, programs and hours of work, exceptional fitness equipment, training rooms that are immediately lit, room temperature, drinks and coaching from staff. In this very competitive business condition, where the level of competition is high with the diversity of products and services that are so diverse, then customer satisfaction and loyalty becomes a very important thing [22]. At the company customer satisfaction and loyalty become very important to increase profits so the company always maintains a good relationship with customers. Companies that have a customer focus program expect customers to be loyal to the company.

5. Conclusion

The company is also very concerned to frequently measure customer satisfaction by measuring the variables that affect customer satisfaction: products, equipment, facilities, hours of work, coaching, prices and others. The program is a big picture of customer focus regarding customer satisfaction and loyalty. Proactive programs provide high quality products or services besides communication is very important for all companies.

Customers want to communicate directly with the company, and also customers ask to be heard. Through customer communication channels, companies can get direct feedback from customers, this feedback is important and accurate. Channels of customer communication can be done through customer surveys both at the time of the transaction and periodically. This customer communication channel can also be used to measure customer satisfaction and loyalty.

Acknowledgements

The researcher is grateful for all subjects who gave their concentration to participate in this study. The researcher would like to thank the management of Fitness Yogyakarta for allowing this study to be carried out in their place.

References

- [1] J. Ndayisenga and Tomoliyus, "The perception of international students on the facility and sport tourism event management," *Sport Mont*, vol. 17, no. 2, 2019.
- [2] P. L. Huang, B. C. Y. Lee, and C. C. Chen, "The influence of service quality on customer satisfaction and loyalty in B2B technology service industry," *Total Qual. Manag. Bus. Excell.*, vol. 30, no. 13–14, pp. 1449–1465, 2019.
- [3] F. M. Díaz-Pérez, M. Bethencourt-Cejas, and M. C. Morillo-Moreno, "Quality, Satisfaction and Industrial Disputes in the Tourist Accommodation Services of the State of Mérida, Venezuela," *Technol. Invest.*, vol. 04, no. 02, pp. 123–130, 2013.
- [4] N. H. Minh, N. Thu Ha, P. Chi Anh, and Y. Matsui, "Service quality and customer satisfaction: A case study of hotel industry in Vietnam," *Asian Soc. Sci.*, vol. 11, no. 10, pp. 73–85, 2015.
- [5] J. Ndayisenga and Tomoliyus, "Effect of service quality and rates on satisfaction and loyalty of customer behavior at fitness," *Int. J. Hum. Mov. Sport. Sci.*, vol. 7, no. 2, pp. 25–32, 2019.
- [6] R. Felix, "Service Quality and Customer Satisfaction in Selected Banks in Rwanda," *J. Bus. Financ. Aff.*, vol. 06, no. 01, pp. 1–11, 2017.
- [7] P. Rita, T. Oliveira, and A. Farisa, "The impact of e-service quality and customer satisfaction on customer behavior in online shopping," *Heliyon*, vol. 5, no. 10, p. e02690, 2019.
- [8] B. Hermawan, S. Basalamah, A. Djamereng, and A. Plyriadi, "Effect of Service Quality and Price Perception on Corporate Image, Customer Satisfaction and Customer Loyalty among Mobile Telecommunication Services Provider," *IRA-International J. Manag. Soc. Sci. (ISSN 2455-2267)*, vol. 8, no. 1, p. 62, 2017.

- [9] D. Yulisetiari and Y. A. Prahasta, "The effect of price, service quality, customer value, and brand image on customers satisfaction of telkomsel cellular operators in east Java Indonesia," *Int. J. Sci. Technol. Res.*, vol. 8, no. 3, pp. 5–9, 2019.
- [10] N. Frank and W. B. Groves, "Organizational Perversion," *Humanity Soc.*, vol. 11, no. 3, pp. 315–334, 1987.
- [11] T. K. Behren, S. B. Hawkins, and K. Mary, "Measurement in Physical Education and Exercise Science Relationship Between Objectively Measured Steps and Time Spent in Physical Activity Among Free-Living College Students," no. February 2014, pp. 37–41, 2009.
- [12] Jensen, B. E. (2005). Service Quality Assessment Scale (SQAS): An Instrument for Evaluating Service Quality of Health-Fitness Clubs. *Measurement in Physical Education and Exercise Science*, 9(2), 79–111. doi:10.1207/s15327841mpee0902_2
- [13] J. E. Morais, A. J. Silva, D. A. Marinho, V. P. Lopes, and T. M. Barbosa, "Determinant factors of long-term performance development in young swimmers," *Int. J. Sports Physiol. Perform.*, vol. 12, no. 2, pp. 198–205, 2017.
- [14] W. M. O'Fallon, W. W. Cooley, and P. R. Lohnes, "Multivariate Data Analysis," *Technometrics*, vol. 15, no. 3, p. 648, 1973.
- [15] J. F. Hair, M. Sarstedt, L. Hopkins, and V. G. Kuppelwieser, "Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research," *Eur. Bus. Rev.*, vol. 26, no. 2, pp. 106–121, 2014.
- [16] H. Gil-Gómez, R. Oltra-Badenes, and W. Adarme-Jaimes, "Service quality management based on the application of the ITIL standard," *Dyna*, vol. 81, no. 186, p. 51, 2014.
- [17] K. Kowalik and D. Klimecka-Tatar, "The process approach to service quality management," *Prod. Eng. Arch.*, vol. 18, no. 18, pp. 31–34, 2018.
- [18] S. Lagrosen and Y. Lagrosen, "Management of service quality – differences in values, practices and outcomes," *Manag. Serv. Qual. An Int. J.*, vol. 13, no. 5, pp. 370–381, 2003.
- [19] Albari and I. Safitri, "The influence of product price on consumers' purchasing decisions," *Rev. Integr. Bus. Econ. Res.*, vol. 7, no. 2, pp. 328–337, 2018.
- [20] J. Dela Novixoxo, P. F. Kumi, L. Anning, and S. Darko, "The Influence of Price on Customer Loyalty in the Retail Industry," *Sch. Bull.*, no. December, pp. 860–873, 2018.
- [21] J. Ndayisenga and Tomoliyus, "The perception of international students on the facility and sport tourism event management," *Sport Mont*, vol. 17, no. 2, pp. 53–58, 2019.
- [22] W. L. Wanyanga, "the Influence of Price on Customer Satisfaction Among Mobile Phone Users in Westlands , Nairobi," 2011