Measurement of the Quality of Service of the members of the Savings and Credit Cooperatives of Segment 1 of Ecuador

Darwin L. Pico Gordon

ACACFESA SAS, darwin.pico@acacfesa.com

The purpose of this research is to determine the relationship between the main dimensions that comprise the quality of services in savings and credit cooperatives in Segment 1 Zone 3 of Ecuador (Empathy, Purpose, Security, Responsiveness, Tangibility) as well as member satisfaction. For the study, a methodology with a qualitative-quantitative approach was implemented, using the Servperf model as a study instrument to establish the dimensions of isolables as those that make up the quality of service and customer satisfaction. Once the model was established, the survey technique was implemented to measure each of the items. For the analysis of the results, factor analysis is implemented in the exploratory phase and structural equations in the confirmatory phase. It is concluded that there is a positive relationship between the dimensions of the quality of the service offered by Savings and Credit Cooperatives.

Keywords: Quality of Service, Servperf Model, Satisfaction, Savings and Credit Cooperatives.

1. Introduction

Savings and Credit Cooperatives contribute in a decisive way to the economic development of the country, since they are linked to popular and solidarity economy organizations, their primary characteristic is community support and the objectives of covering and guaranteeing the needs of members and members. Its activities are indispensable within the national financial sector and in the national economy in general, since with the loans provided to the members it contributes to local and regional economic development. In terms of financial or assets, the popular and solidarity economy takes 25% of the total of them, These financial actors can ensure a competitive and balanced banking system with the participation and inclusion of people, but above all they can generate a profound macroeconomic impact, balancing the market, as long as they work in solidarity under network systems. (Caivinagua, 2015)(Aguilera, 2015)

Referring to this point, Savings and Credit Cooperatives have been growing and at the same

time becoming more competitive in the market, causing each of them to increase their portfolio of products and services, in order to increase the portfolio of members. This has generated a gap in the market, creating that the products and services they provide are not enough to capture the need for it.

Therefore, Savings and Credit Cooperatives currently seek to have a quality in the service that at the same time causes the satisfaction of the customer to their needs, the quality generates that companies have a continuous improvement through the evolution of the activities that each department with the aim of capturing the acceptance of the member.

In Savings and Credit Cooperatives, there is a challenge in guaranteeing the services they provide through good quality, achieving a competitive advantage that is at the same time distinctive for entering competitive markets. Therefore, it is a fundamental tool for the survival of the environment that exists today.

In which, the Savings and Credit Cooperatives that object to the measurement, definition and scope of quality help to meet the expectations of customers, they must be internal or external, allowing to create competitive advantages in the sector allowing to improve results. (Lema, Cuenca, & Cordonva, 2020)

To define the quality of services in Savings and Credit Cooperatives, they are determined from the deficiencies of the same, in which it is determined through the perspective of the customers, analyzing the current situation creating priorities to develop the improvement of the quality of services.

Continuous improvement processes are an effective strategy in the search for positive changes that contribute to economic savings for institutions and their stakeholders, likewise, products or services with quality failures increase costs and the need to change the mentality and attitude in the management of human talent for daily activities arises.

The Servperf model focuses exclusively on perception as an approximation index in customer satisfaction, conceptualized as "the level of a person's mood that results from comparing the perceived performance of a product or service with their expectations".(Kotler & G., 2007, pág. 52)

Another model used to measure the quality of service is the SERVQUAL, an input that contains questions aimed at weighing quality, which was designed and validated by Zeithaml, Parasuraman and Berry in 1992. Its application is possible in samples that weigh a total quality rating that denotes the divergence between the customer's expectations and their perceptions based on the service purchased. (Luna & Villava, 2018)

To understand this model, it must be understood that when talking about quality, it refers to the ability of a company to meet the demands with excellence, this without depending on the size or nature of the company that provides the service. (Diago, 2018)

On the other hand, the client's expectations are all those appreciations of the desire that something happens for the benefit of the subjects towards a particular result, it even refers to each of the possibilities that the client estimates that they raise, so it is annexed to the singularity of the particular as well as to the prediction. (Estrada, Restrepo, & Restrepo, 2016)

In addition, customer perception refers to the interpretation of the value appreciated by the *Nanotechnology Perceptions* Vol. 20 No. S6 (2024)

user according to the understanding they make from their emotional and psychological field in relation to the good and/or brand of a certain service. According to Correa, this perception occurs in four stages of benefit: 1) of the product, 3) of the service, 3) of the staff and 4) of purchase. (Saura, Berenguer, & Gonzales, 2017) (2014)

With the sharing of these key concepts, it is recognized that the SERVQUAL model focused on service quality, operates in 5 dimensions that users frequently use to conceive of an organization that provides services, these are: reliability, responsibility, security, empathy and tangible (everything perceptible). (Luna & Villava, 2018)

Thus, the measurement of quality is carried out by contrasting the expectations versus the perceptions of the customers through a questionnaire of 21 questions, where the expectations and perceptions are divided into the dimensions described above, each with a quantitative scale that begins at 1 (lowest expectation/perception) and culminates at 5 (highest expectation/perception). (González, 2015)

Due to its wide use in quality of service research, for this article we also consider the Servperf model for the measurement of the Quality of Service of the members of the Savings and Credit Cooperatives of Segment 1 Zone 3 of Ecuador.

2. Methodology

For this research, we worked under the propositional critical paradigm based on a mixed approach since with the qualitative approach a global vision of the quality of service in the financial institutions under study was reached, in a complementary way, with the quantitative approach the parameters that impact when delivering a quality service were defined. which are corrected with the information collected through the application of surveys. In this way, both productivity and the performance of a quality service in the COACs of Segment 1, Zone 3 of Ecuador are increased.

Likewise, fieldwork was carried out in order to collect data through the application of a questionnaire to internal and external users of the COACs in question, this was key in the measurement of the quality of the service. Bibliographic research of prominent authors and previous projects was also used. With this, it was possible to increase knowledge, deepen or contrast the concepts, approaches and theories immersed in this phenomenon.

With regard to the types of research, the descriptive was used to specify the qualities of both the population analyzed and the problem, and also the exploratory in order to identify and address the unknown events that are closely linked to the problem where the researcher is part of the reality of the COAC of Segment 1. Zone 3.

The population under study was made up of 15120 customers and partners of these financial houses. As its size is quite large, the sample was calculated through the formula for finite populations, the result of which was 375 people. Due to the fact that there are 5 Segment 1 COACs, the sample is distributed in a stratified manner as follows: 38 partners and clients from San Francisco Limitada, 131 from Oscus, 131 from the Ambato Chamber of Commerce, 37 from Mushuc Runa and 37 from El Sagrario.

As study variables, the following are identified: Servperf model as independent and quality of *Nanotechnology Perceptions* Vol. 20 No. S6 (2024)

service as dependent. Thus, we proceeded with the development of the technique and instrument (structured survey-questionnaire with a Likert scale with a rating: 1) totally agree, 2) disagree, 3) do not agree or disagree, 4) agree and 5) strongly agree), whose analysis and processing of information began with the review and coding of the findings. then they were divided to present them on tables for the purpose of studying and interpreting them.

3. Results

The results of the survey on quality of service in the COACs of Zone 1, Segment 1 analyzed are described below:

Table 1. Gender

Gender	Frequency	Valid
		percentage
Male	182	48,5%
Female	193	51,5%
Total	375	100%

The prevalence of one gender is not appreciated, so the partners of the COACs analyzed share similar conditions in the gender with a minimum percentage divergence.

Table 2. Age

Table 2. Age			
Age	Frequency	Valid	
		percentage	
18 to 25 years old	47	12,5%	
25 and 35 years old	98	26,1%	
35 and 45 years old	96	25,6%	
45 and 55 years old	84	22,4%	
Over 55 years old	50	13,3%	
Total	375	100%	

It can be seen that about three-quarters of the respondents are in an average age range of 25 and 55 years, while the complementary part is made up of young people, adolescents and the elderly.

Table 3. Time to be part of the COAC

ruble 3. Time to be purt of the COTIC			
Time	Frequency	Valid	
Less than 1 year	63	percentage 16,8%	
2 to 5 years	135	36%	
6 to 10 years	101	26,9%	
More than 10 years	76	20,3%	
Total	375	100%	

It is evident that most of the respondents have remained as a partner/client of the COACs for a considerable period of between 2 and 5 years, while very few have not yet completed a year as members of these financial houses.

Table 4. COAC's most chosen service

Service	Frequency	Valid
		percentage
Fixed term	75	20%
Face-to-face transactions	175	46,7%
Account Opening	20	5,3%
Debit Card	20	5,3%
Credit Application	85	22,7%
Total	375	100%

It is understood that the service with the highest demand is the transaction at the counter, where the deposit of cash, withdrawals, checks and payments in the COACs is carried out. This is followed by the fixed-term deposit and credit application.

Table 5. COACs' concern about the financial needs of members

	11110111011011011	, or memoria
Service	Frequency	Valid
		percentage
Strongly disagree	9	2,4%
Disagree	19	5,1%
Neither agree nor disagree	63	16,8%
I agree	138	36,8%
Totally agree	146	38,9%
Total	375	100%

It can be seen that the COACs are interested in and concerned about the financial demands of members and customers.

Table 6. Perception of the human team versus personalized attention

rable 6: refeeption of the naman team	i versus person	unzea attention
Service	Frequency	Valid
		percentage
Strongly disagree	6	1,6%
Disagree	14	3,7%
Neither agree nor disagree	51	13,6%
I agree	132	35,2%
Totally agree	172	45,9%
Total	375	100%

Clients indicate the existence of personalized attention in the COACs since they have been concerned about their interests, although only 1.6% differ with this criterion.

Table 7. Perception of hours of operation

Service	Frequency	Valid
		percentage
Strongly disagree	8	2,1%
Disagree	8	2,1%
Neither agree nor disagree	29	7,7,%
I agree	116	30,9%
Totally agree	214	57,1%

Nanotechnology Perceptions Vol. 20 No. S6 (2024)

Total	375	100%

Partners and clients are in full agreement with the hours of operation delivered by the COACs in each of their agencies.

Table 8. Staff friendliness

Frequency	Valid
4	percentage 1,1%
12	3,2%
30	8%
132	35,2%
197	52,5%
375	100%
	4 12 30 132 197

There is a high degree of approval appreciated by the respondents regarding the kindness of the staff operating in the COACs, but a minimal percentage differs from this situation.

Table 9. They deliver what they promise

Twele year life y well tell to	mar the promis	
Service	Frequency	Valid
		percentage
Strongly disagree	9	2,4%
Disagree	9	2,4%
Neither agree nor disagree	56	14,9%
I agree	144	38,4%
Totally agree	157	41,9%
Total	375	100%

There is a high degree of approval that the respondents appreciate about the seriousness with which the COACs respond to their promises, despite the fact that a precarious percentage does not agree.

Table 10. Timely attention to solve problems

rable 10. Timely attention	to sorte proore	21115
Service	Frequency	Valid
		percentage
Strongly disagree	13	3,5%
Disagree	12	3,2%
Neither agree nor disagree	60	16%
I agree	141	37,6%
Totally agree	149	39,7%
Total	375	100%

It is identified that there is a high and positive level of perception about the attention offered in the COACs when it comes to solving the inconveniences of the members.

Table 11. Service efficiency

Service	Frequency	Valid
		percentage
Strongly disagree	9	2,4%
Disagree	12	3,2%
Neither agree nor disagree	39	10,4%
I agree	143	38,1%
Totally agree	172	45,9%
Total	375	100%

The service provided by the COACs is efficient, according to the opinion of the majority of respondents.

Table 12. Confidence issued by staff

Service	Frequency	Valid
Strongly disagree	7	percentage 1,9%
Disagree	14	3,7%
Neither agree nor disagree	39	10,4%
I agree	131	34,9%
Totally agree	184	49,1%
Total	375	100%

There is total agreement among the respondents on the confidence that the staff has in the development of their activities in the COACs under study.

Table 13. Trained and knowledgeable staff

Service	Frequency	Valid
Strongly disagree	7	percentage 1,9%
Disagree	9	2,4%
Neither agree nor disagree	48	12,8%
I agree	139	37,1%
Totally agree	172	45,9%
Total	375	100%

A large part of the respondents consider that the personnel working in the COACs analyzed are fully informed and trained about their functions in the entity.

Table 14. Service agility

Tuble 14. Bet vice againty						
Service	Frequency	Valid				
		percentage				
Strongly disagree	6	1,6%				
Disagree	7	1,9%				
Neither agree nor disagree	57	15,2%				
I agree	122	32,5%				
Totally agree	183	48,8%				
Total	375	100%				

Nanotechnology Perceptions Vol. 20 No. S6 (2024)

The approval of the partners and clients of the COACs in question in the agility with which they deliver their services is appreciated.

Table 15. Adequate infrastructure

Service	Fraguency	Valid
Service	Frequency	percentage
G. 1 1	4	1 0
Strongly disagree	4	1,1%
Disagree	12	3,2%
Neither agree nor disagree	18	4,8%
I agree	111	29,6%
Totally agree	230	61,3%
Total	375	100%

The wide acceptance of the COAC facilities evaluated by the respondents is evident.

Table 16. Staff appearance

Tuble 10. Stall a	ppearance	
Service	Frequency	Valid
		percentage
Strongly disagree	3	0,8%
Disagree	9	2,4%
Neither agree nor disagree	19	5,1%
I agree	92	24,5%
Totally agree	252	67,2%
Total	375	100%

The approval of the respondents on the appearance of the work team that works in the COAs under study is appreciated.

Quality of service

Table 17. Results by dimension

Table 17. Results by difficultion			
Service	Frequency		
Empathy	4,25%		
Reliability	4,11%		
Safety	4,29%		
Responsiveness	4,2%		
Tangibility	4,46%		

It can be seen that there is quality in the service of the COACs since each dimension reached a value close to 5.

Table 18. Expectations versus perceptions

	Tuble 10. Emperations versus perceptions							
Indicators	Empathy	Reliability	Safety	Responsiveness	Tangibility			
Expectations	5	5	5	5	5			
Perceptions	4,25	4,11	4,29	4,2	4,46			
Difference	0,75	0,89	0,71	0,8	0,54			
Global average	4,262							

It is evident that each service quality index is favorable, which denotes a perception close to *Nanotechnology Perceptions* Vol. 20 No. S6 (2024)

the customer's expectations, however, the dimension with the highest quality in the service is tangibility.

Table 19. Table of communalities

Communalities					
Variables	Initial	Extraction			
E1	1,000	,992			
E2	1,000	,690			
E3	1,000	,700			
E4	1,000	,690			
F1	1,000	,502			
F2	1,000	,708			
F3	1,000	,620			
F4	1,000	,485			
S1	1,000	,599			
S2	1,000	,500			
S3	1,000	,520			
R1	1,000	,472			
R2	1,000	,432			
T1	1,000	,685			
S2	1,000	,573			
S3	1,000	,715			
S4	1,000	,536			
Extraction mechanism: principal component analysis					

Source: SPSS

As can be seen, the first component has 0.992, the highest value of factor load that indicates that it is the main factor when it comes to meeting the financial demands of the COACs' customers. On the other hand, the R2 community has the lowest factorial load, which denotes that the COAC work team does not provide immediate attention when the client demands it.

Table 20. Applied variance

	Tuble 20. rippined variance								
Total varia	Total variance explained								
Compon	Auto initia	al values		Load Remo	oval Addition	ns Squared	Rotation	additions o	f squared
ent							loads		
		İ	l		İ	İ		İ	
		4)	pa		0	pa		4)	pa
		Variance	cumulated		Variance	umulated		Variance	% Accumulated
		ria	mu		ria	nu		ria	nw
	tal	Va	Ē	tal	Va	CG.	tal	Va	cnı
	Total	%	% Ac	Total	%	% Ac	Total	%	% Ac
1	8,103	47,662	47,662	8,103	47,662	47,662	3,814	22,433	22,433
2	1,237	7,275	54,937	1,237	7,275	54,937	3,534	20,787	43,220
3	1,080	6,354	61,291	1,080	6,354	61,291	3,072	10,071	61,291
4	,916	5,386	66,677	ĺ	ĺ	,	,	ĺ	,

Nanotechnology Perceptions Vol. 20 No. S6 (2024)

5	,751	4,420	71,097				
6	,683	4,018	75,115				
7	,587	3,451	78,566				
8	,568	3,340	81,906				
9	,523	3,074	84,980				
10	,458	2,692	87,672				
11	,443	2,609	90,280				
12	,403	2,372	92,652				
13	,380	2,235	94,887				
14	,326	1,917	96,804				
15	,286	1,683	98,487				
16	,256	1,508	99,995				
17	,001	,005	100,000				
Extraction	mechanism	n: principal o	component ana	llysis			

Source: SPSS

It can be seen that from the third component an eigenvalue of less than 1 is reached, although the component still retains a high value. The percentage even increases to 61.29% of accumulated explained variance. It is estimated that this value is high enough to consider that 3 factors denote sufficiency.

Table 21. Component matrix

Table 21. Component matrix					
Component matrix					
	E1	T1	F2		
E1	,847	-,458	-,253		
E2	,706	-,402	-,172		
E3	,682	-,261	-,409		
E4	,682	-,474	-,035		
F1	,585	-,260	,304		
F2	,737	-,033	,404		
F3	,696	,003	,369		
F4	,591	,069	,361		
S1	,746	,206	-,016		
S2	,696	,117	,032		
S3	,700	,171	,031		
R1	,635	,072	,251		
R2	,630	,082	,171		
T1	,665	,414	-,265		
S2	,685	,273	-,171		
S3	,745	,288	-,277		
S4	,662	,269	-,161		
Extraction mechanism: principal component analysis					
a. 3 Components Extracted					

Source: SPSS

The latent correlation between each main component extracted is appreciated. When determining the first component, it is understood that the concern of the COACs towards their users is annexed to all the factors, whose maximum correlation is 0.844, and the minimum of 0.585.

The second component is made up of a quartet of factors, where the highest correlation is 0.414 on adequate infrastructure and personnel with good presence with 0.288. The last component has 4 factors, of which the correlation stands out in problem solving with 0.404 and service efficiency with 0.369.

Table 21. Rotated Component Matrix

Table 21. Rotated Component Matrix					
Component	Component matrix				
	E1	T1	F2		
E1	,332	,305	,888		
E2	,247	,286	,740		
E3	,428	,078	,715		
E4	,125	,383	,726		
F1	,057	,596	,379		
F2	,256	,762	,248		
F3	,269	,709	,213		
F4	,252	,639	,112		
S1	,602	,424	,239		
S2	,491	,436	,261		
S3	,530	,436	,223		
R1	,329	,577	,177		
R2	,367	,508	,198		
T1	,797	,172	,139		
S2	,676	,262	,218		
S3	,769	,212	,281		
S4	,654	,257	,205		
Extraction mechanism: principal component analysis.					
Rotation mechanism: Varimax with Kaiser normalization.					

Source: SPSS

The results are classified in the matrix of rotated components, where the dimensions in relation to the impact points of appreciated quality, in this way the behavior of each variable and its nexus in relation to the quality evidenced by the users of the COACs of Segment 1, Zone 3 were identified.

4. Conclusions

When using the Servperf model to evaluate the quality of service of Savings and Credit Cooperatives (COAC) of Segment 1, Zone 3, it is seen that the quality of service has become a key point in these financial institutions over the years, which has been highlighted and transformed throughout the world. This has also prompted the search for more mechanisms that streamline and grant the weighting of member/customer satisfaction to support the rise of these companies.

In addition, for the weighting and measurement of quality terms, several models and scales have been formulated and used to help weigh and contrast their value in order to optimize users' expectations about the service delivered and the appraisals of its performance and qualities.

References

- 1. Aguilera, F. (2015). The impact of the international financial and economic crisis on Ecuador's banks. National Publishing Corporation. doi:https://repositorio.uasb.edu.ec/bitstream/10644/4690/1/SM178-Aguilera-El%20impacto.pdf
- 2. Caivinagua, X. (June 28, 2015). Leaders. Obtained from Leaders: https://www.revistalideres.ec/lideres/economia-popular-cooperativa-gana-participacion.html
- 3. Correa, A. (2014). Proposal for the application of the SERVQUAL scale in the health sector of Medellín. CES Public Health Journal.
- 4. Diago, F. (2018). Formative research: Customer service fundamentals. Point of view, 6.
- 5. Estrada, S., Restrepo, C., & Restrepo, C. (2016). Strategic approach to customer service. Scientia et Technicav.
- 6. González, R. (2015). Evaluation of the quality of service perceived in banks through the Servqual scale. Neogranadina's Science and Engineering.
- 7. Kotler, P., & G., A. (2007). Marketing. Version for Latin America. Mexico: D.F.: Pearson Education.
- 8. Lema, A., Cuenca, D., & Cordonva, B. (2020). Quality and customer service in a savings and credit cooperative in the canton of Riobamba. Digital Journal of Science, Technology and Innovation, 7(4), 476-487. doi:file:///C:/Users/User/Downloads/Dialnet-CalidadYServicioAlClienteEnUnaCooperativaDeAhorroY-8298186% 20(1).pdf
- 9. Luna, A., & Villava, L. (2018). The quality of services in the savings and credit union through the Servqual model. Retrieved from Universidad Técnica de Ambato: https://repositorio.uta.edu.ec/bitstream/123456789/27979/1/696%20MKT.pdf
- 10. Saura, G., Berenguer, C., & Gonzales, M. (2017). Service quality research. Mexico. doi:Blasco