CREDIT SCORING ON CUSTOMER ACQUISITION, RETENTION, AND SEGMENTATION STRATEGIES FOR IMPROVED METRICS IN FIXED-WIRED TELECOMMUNICATION INDUSTRY IN THE PROVINCE OF LAGUNA

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ABSTRACT

This study attempted to determine the credit scoring on customer acquisition, retention, and segmentation strategies for improved metrics in the fixed-wired telecommunication industry in the province of Laguna. The goal of this study is to identify the correlation among credit scoring, customer acquisition, customer retention and segmentation strategies. This study utilized a descriptive-correlational research design with the help of a survey questionnaire. The actual respondents were forty-one (41) selected employees from fifty (50) telecommunication companies in Laguna or the retrieval rate was 91%. The results showed that the credit scoring encourages customers to maintain a good financial history to qualify for services, ensures the company acquires reliable and long-term customers and credit scoring to evaluate potential customers. Telecommunication companies that are generally effective in retaining their customers suggest that their strategies and policies, such as competitive pricing, quality service delivery, or tailored retention programs, are successful in fostering customer loyalty and maintaining long-term relationships. The geographic factors such as urban and rural areas influence the company's marketing and service delivery strategies; service offerings are segmented based on the income levels of its customers and customer feedback to refine its segmentation strategies and improve services. The more the fixed-wired telecommunication industries in the province of Laguna exhibit the credit score on customer retention, the higher the level of retention and the more effective the segmentation strategies. Moreover, the credit scoring on customer acquisition statistically and significantly predicts the segmentation strategies of selected fixed-wired telecommunication industries in the province of Laguna. Hence, there is a need to propose an action plan to improve the credit scoring on customer acquisition, retention, and segmentation strategies of selected fixed-wired telecommunication industries in the province of Laguna.

Keywords: Fixed-Wired Telecommunications, Customer Acquisition, Customer Retention, Segmentation Strategies

INTRODUCTION

The internet and telecommunications are the foundations of the digital transformation of businesses, enterprises, organizations, governments, and institutions in the twenty-first century, which lead to growth, process improvement, and sustainability (Saikat & Sinha, 2022) and ranks as the third-largest industry in the world (CIO Views, 2024). Customer relationship management, or CRM, is one of the most crucial business methods and systems that allow organizations to focus on their clients to meet their needs better, increase client satisfaction, improve client care, and ultimately boost client loyalty and retention (Almarshad et al. (2020), Goyal and Kar (2020), Markov, Seleznyova & Lapshin (2022)). When it comes to a borrower's ability to obtain credit, credit scores are crucial. These could change how credit is used and repaid, as well as the terms of loans (Chatterjee et al., 2023). When a business is aware of its credit risks, it should treat them as an essential component of its operations (Poot, 2020). Before establishing a financial relationship with a customer, many businesses use consumer data to identify and evaluate any potential risks that the customer may pose (Cooper and Getter, 2019). A person's credit score can be impacted by a number of factors, including their credit history, credit utilization, repayment history, loan guarantors, and settlement cycles (Umesh, 2020).

The success of a business in the marketplace can be determined by different factors like customer retention, customer acquisition and even customer segmentation. Building enduring relationships with customers is more successful than attempting to bring in new ones, Mustafa Sook and Abdul Razak (2021). Moreover, Wu et al., (2021) mentioned that the two aspects of customer analysis that the telco industry should take into consideration are churn prediction and customer segmentation. Customer segmentation and customer churn prediction are frequently handled together for increased management effectiveness. (Moro, Zhang, and Ramos, 2022). To provide the consumer with an accurate offer, these businesses utilize customer segmentation (Aljnidi, Alkhayrat, & Aljoumaa, 2020).

Many studies about the telecommunication industry were based on literature and theories, however, there are limited studies when it comes to investigating the effectiveness of credit scoring for customer acquisition and retention strategies in the Laguna fixed-wired telecommunication industry. Thus, this study determined the impact of credit scoring on customer acquisition, retention, and segmentation strategies for improved metrics in the fixed-wired telecommunication industry in the province of Laguna. Specifically, the goal of this study was to identify how credit scores affect the acquisition rates, churn rates, and business performance metrics in the fixed-wired telecommunication industry in the province of Laguna. Furthermore, the study identified the relationship between credit scores and other variables (e.g., acquisition rates and churn rates). Moreover, this study segmented customers based on credit score categories and compared their acquisition, retention, and performance using analysis of variances. Additionally, a model to predict the impact of credit scores, along with other factors, on customer acquisition, retention, and business performance metrics in the fixed-wired telecommunication industry in the province of Laguna was developed.

METHODS

This study utilized a descriptive-correlational research design that emphasized the significance of relationships credit scoring on customer acquisition, retention, and segmentation strategies in the fixed-wired telecommunications in the province of Laguna, which served as the independent and dependent variables of the study respectively. The primary source of data for this study is the employees of selected fixed-wired telecommunication companies in the province of Laguna. This study focused on a total population of 50 telecommunication employees operating in the province of Laguna. To determine an appropriate sample size for the study, the Raosoft sample size calculator was utilized. The computation was based on a confidence level of 95% and a margin of error of 5%, which are standard parameters for ensuring statistical reliability and accuracy in research. From the identified sample, 41 employees successfully participated in the study, achieving a high retrieval rate of 91%. Employees from key departments such as Credit and Collection, Account Administration, Sales, and Marketing were chosen, as these areas are directly involved in implementing and evaluating credit scoring systems, as well as customer acquisition, retention, and segmentation strategies. A four-point (4-point) Likert scale questionnaire was used to ensure ease and convenience in answering the questions. The instrument will be divided into three (3) parts: Part 1 focused on the credit scoring on customer acquisition, Part 2 covered the level of retention and Part 3 dealt with the segmentation strategies of the selected telecommunication industries in the province of Laguna. To assess the consistency of each item in the tool, a reliability test using Cronbach's Alpha will be conducted. Result of Reliability test using Cronbach Alpha test were for credit scoring: 0.899, for retention: 0.939, and for segmentation strategies: 0.912. The questionnaires were sent to the respondents online using Google Forms and through face-to-face surveys. Weighted Mean was used to get the mean scores of the respondents on their responses to each of the items in the survey questionnaire related to credit scoring on customer acquisition, level of retention, and segmentation strategies of selected fixed-wired telecommunication industry in the province of Laguna. Pearson r was used to determine the relationship between the credit scoring on customer acquisition, level of retention, and segmentation strategies of selected fixed-wired telecommunication industry in the province of Laguna. Multiple regression analysis was also used to assess the strength and direction of the relationship between credit scoring on customer acquisition, segmentation strategies and level of customer retention of selected fixed-wired telecommunication industries in the province of Laguna.

RESULTS AND DISCUSSIONS

Table 1
Credit Scoring on the Level of Customer Acquisition of Selected Fixed-wired Telecommunication Industries in the Province of Laguna

Indicator	Weighted Mean	Verbal Interpretation	Rank
1. The company utilizes credit scoring to evaluate potential customers before approving subscriptions.	3.10	Agree (High)	3
2. Credit scoring effectively reduces the risk of non-payment among newly acquired customers.	3.02	Agree (High)	4
3. The use of credit scoring simplifies the customer onboarding process.	2.78	Agree (High)	10
4. The company explains the purpose of credit scoring to potential customers during the application process.	2.95	Agree (High)	6
5. The implementation of credit scoring has positively impacted on the company's customer acquisition rate.	2.98	Agree (High)	5
6. Credit scoring criteria used by the company are fair and transparent to customers.	2.93	Agree (High)	7.5
7. Customers with low credit scores are often offered alternative payment plans or options.	2.90	Agree (High)	9
8. Credit scoring encourages customers to maintain a good financial history to qualify for services.	3.15	Agree (High)	1
9. Using credit scoring ensures the company acquires reliable and long-term customers.	3.12	Agree (High)	2

10. The reliance on credit scoring may discourage some customers from applying for the company's services.	2.93	Agree (High)	7.5
Average	**2.99**	**Agree**	

As presented in Table 1, the credit scoring on customer acquisition of selected fixed-wired telecommunication industries in the province of Laguna was "agree" with an average weighted mean of 2.99. This means that according to the employees, credit scoring encourages customers to maintain a good financial history to qualify for services, ensures the company acquires reliable and long-term customers and credit scoring to evaluate potential customers.

The study aligns with USAGov's (2024), Cooper and Gettter (2019) and Chatterjee et al. (2023) findings, which emphasize that credit scores are numerical measures that lenders use to assess a borrower's credit behavior and likelihood of repaying loans on time. A high credit score can lower insurance costs, make renting easier, and increase the likelihood that a loan will be approved. People can take action to strengthen their financial situation if they are aware of the factors that affect credit scores and how they are determined. Moreover, the studies of Markov, Seleznyova & Lapshin (2022), Wandmacher et al. (2024), Poot (2020), Umesh (2020), Salama (2023), Moghaddam and Razavizadeh (2024), showed that to assess a person's creditworthiness, credit scoring considers both their likelihood of default and their capacity to make payments. Telecommunications companies, insurance companies, financial institutions, and other businesses use it to determine a customer's eligibility for products like credit cards and loans.

Table 2
The Level of Customer Retention in Selected Fixed-wired Telecommunication Industries in the Province of Laguna

Indicator	Weighted Mean	Verbal Interpretation	Rank
1. I am satisfied with the overall quality of services provided by the telecommunication company.	3.00	High (Agree)	3
2. The company's customer support responds quickly and effectively to my concerns.	2.78	High (Agree)	9
3. The pricing of the company's services is reasonable and competitive.	2.83	High (Agree)	6
4. I find the company's promotional offers and loyalty programs beneficial.	2.80	High (Agree)	7
5. The reliability of the network connection meets my expectations.	2.93	High (Agree)	4.5
6. I would recommend this telecommunication company to others.	3.12	High (Agree)	1
7. The billing process is clear, accurate, and easy to understand.	2.93	High (Agree)	4.5
8. The company frequently updates me about service improvements and changes.	2.78	High (Agree)	9
9. I feel valued as a customer by the telecommunication company.	2.78	High (Agree)	9

10. I intend to continue using the services of this telecommunication company in the future.	3.10	High (Agree)	2
Average	**2.90**	**High (Agree)**	

As presented in Table 2, the level of customer retention in selected fixed-wired telecommunication industries in the province of Laguna was “high” with an average weighted mean of 2.90. This means that the companies are generally effective in retaining their customers, suggesting that their strategies and policies are successful in fostering customer loyalty and maintaining long-term relationships.

According to research by Gabhane, Suriya, and Kishor (2022), Dahal (2021), Almohaimmeed (2019), Wu et al. (2021), Vestergaard (2022), Dahal (2021), and Rivera (2021), industries rely significantly on consumer engagement to function. Given that the industry's products and services are intangible, and its customers are very demanding, telecommunications companies should take into account and make an effort to understand the shifting needs and desires of their customers. This understanding can be applied in the form of usage, acquisition, up-sell, and cross-sell components. Furthermore, the willingness to maintain a long-term business-to-business relationship is primarily determined by relationship values, according to Lindström & Blom's (2024) thesis. Relationship development has an impact on important components like commitment, trust, communication, transparency, and customer satisfaction.

Table 3
Segmentation Strategies of the Selected Fixed-wired Telecommunication Industries in the Province of Laguna

Indicator	Weighted Mean	Verbal Interpretation	Rank
1. The company effectively identifies and understands the diverse needs of its residential customers.	2.76	Agree	8
2. Segmentation strategies are tailored to address the specific requirements of business clients in the province of Laguna.	2.93	Agree	4
3. Geographic factors such as urban and rural areas influence the company’s marketing and service delivery strategies.	3.12	Agree	1
4. The company’s service offerings are segmented based on the income levels of its customers.	3.02	Agree	2.5
5. The company uses customer feedback to refine its segmentation strategies and improve services.	2.90	Agree	5.5
6. There is a clear distinction between the marketing approaches for small enterprises and large corporations.	2.90	Agree	5.5
7. The company provides specialized packages or plans for senior citizens or other specific demographic groups.	2.44	Disagree	10
8. Segmentation strategies prioritize the affordability and accessibility of services for underserved communities	2.68	Agree	9
9. The company’s promotional activities are customized to target different customer segments	3.02	Agree	2.5

effectively.			
10. Customer satisfaction surveys reveal that segmentation strategies align well with the expectations of various market segments.	2.85	Agree	7
Average	**2.86**	**Agree**	

As presented in Table 3, segmentation strategies in selected fixed-wired telecommunication industries in the province of Laguna were agreed with an average weighted mean of 2.86. This means that geographic factors such as urban and rural areas influence the company's marketing and service delivery strategies, service offerings are segmented based on the income levels of its customers and customer feedback to refine its segmentation strategies and improve services.

According to Memon (2023) and Ahelegbey & Giudici (2023), digitization, globalization, urbanization, and automation are all factors that are contributing to the continuous transformation of the retail industry, which supports Items 3 and 4. Global competition, new consumer behaviors, and business models all contribute to the development of a new and more open retail environment. Additionally, Johansson & Wikström (2021), Kimura (2022), Adner et al. (2019), and Santoro et al. (2019) shared that information, and understanding can support decisions gathered about users, which can also help the business become more data-driven. Kalam (2020) supported items 9 and 2, which involve selecting the appropriate market niche and weighing a company's resources and capabilities against the appeal of various markets.

Table 4
Relationship between Credit Scoring on Customer Acquisition and the Level of Customer Retention of Selected Fixed-wired Telecommunication Industries in the Province of Laguna

	Pearson r value	p-value	Interpretation
Credit Scoring on Customer Acquisition and the Level of Retention of Selected Fixed-wired Telecommunication Industries in the Province of Laguna	0.851** High correlation	0.000	Significant
**Significant @0.01			

As presented in Table 4, the relationship of credit scoring on customer acquisition and the level of retention of selected fixed-wired telecommunication industries in the province of Laguna are significantly correlated with each other. The Pearson correlation coefficient, 0.851, indicates a highly positive correlation, suggesting that changes in the impact of credit scoring on customer acquisition tend to be accompanied by changes in the level of retention. The p-value, 0.000, which is lower than the significance level of 0.05, suggests that there is a statistically significant strong positive correlation between the two variables. This means that the more the fixed-wired telecommunication industries in the province of Laguna utilized the credit score on customer retention, the higher the level of customer retention. Businesses use consumer data to check for the possibility that their customers will engage in expensive behaviors. Before establishing a financial relationship with a customer, many businesses use consumer data to identify and evaluate any potential risks that the customer may pose (Cooper and Getter, 2019). Given the increasing significance of customer behavior in the business market, telecom operators are now concentrating on churn and highly loyal customers in addition to customer profitability to grow their market share, according to

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Wassouf et al. (2020). Two factors that the telco industry should consider when analyzing its customers are churn prediction and customer segmentation. These days, the telecom sector does not place as much emphasis on bringing in new customers as it does on keeping hold of its current client base. Additionally, customer segmentation divides customers into distinct groups according to a variety of criteria, such as customer value and behavior. If properly identified, this can assist telecom firms in offering unique and customized goods and services through marketing that will address the demands and consumption patterns of the client. (Wu and others, 2021). Telecom operators must consider how network performance affects user experience (Vestergaard, 2022). The most crucial element in the telecom sector's success is customer satisfaction (Goyal and Kar, 2020). Goyal and Kar's (2020) statistical analysis indicate that customer satisfaction in the telecommunications sector is significantly influenced by network quality, service interaction quality, and customer support. Furthermore, these service providers also employ highly skilled and committed staff to meet the needs of their customers and respond to their inquiries and concerns (CIO Views, 2024).

Table 5
Relationship between Credit Scoring on Customer Acquisition and the Segmentation Strategies of Selected Fixed-wired Telecommunication Industries in the Province of Laguna

	Pearson r value	p-value	Interpretation
Credit Scoring on Customer Acquisition and Segmentation Strategies of Selected Fixed-wired Telecommunication Industries in the Province of Laguna	0.856** High correlation	0.000	Significant
**Significant @0.01			

As presented in Table 5, the relationship between credit scoring on customer acquisition and segmentation strategies of selected fixed-wired telecommunication industries in the province of Laguna shows a high correlation. The Pearson correlation coefficient, 0.856, indicates a highly positive correlation, suggesting that changes in credit scoring on customer acquisition tend to be accompanied by changes in segmentation strategies. The p-value, 0.000, which is lower than the significance level of 0.05, suggests that there is a statistically significant strong positive correlation between the two variables. This means that the more fixed-wired telecommunication industries in the province of Laguna utilized the credit score on customer retention, the better is the segmentation strategies.

Customer segmentation and customer churn prediction are frequently used in tandem to increase management effectiveness. (Moro, Zhang, and Ramos, 2022). Due to the intense competition among telecommunications operators and the high rate of customer attrition, telecommunications companies seek to increase customer loyalty. These businesses employ customer segmentation, which divides their clientele into groups according to their demographics (gender and age range) or usage perspectives (purchasing habits, usage trends, and areas of interest) that define the client and allow them to receive an accurate offer, to address the customer loyalty based on the study of Alkhayrat, Aljnidi, and Aljoumaa (2020).

Table 6
Relationship between the Level of Customer Retention and Segmentation Strategies of Selected Fixed-wired Telecommunication Industries in the Province of Laguna

	Pearson r value	p-value	Interpretation
The Level of Retention and Segmentation Strategies of Selected Fixed-wired Telecommunication Industries in the Province of Laguna	0.747** Moderate correlation	0.000	Significant
**Significant @0.01			

As presented in Table 6, the relationship between the level of retention and segmentation strategies of selected fixed-wired telecommunication industries in the province of Laguna shows a moderate correlation. The Pearson correlation coefficient, 0.747, indicates a moderate positive correlation, suggesting that changes in credit scoring on customer acquisition tend to be accompanied by changes in segmentation strategies. The p-value, 0.000, which is lower than the significance level of 0.05, suggests that there is a statistically significant strong positive correlation between the two variables. This means that the higher the level of customer retention, the better is the segmentation strategies of selected fixed-wired telecommunication industries in the province of Laguna.

To understand consumer behavior and develop targeted marketing strategies—both of which are essential in today's diverse digital market—Kalaitzidou's 2021 study highlighted the significance of customer segmentation by loyalty. Businesses can now customize their strategies and gain the trust of their clientele thanks to the study's identification of profiles like bargain hunters and loyal customers. More successful retention strategies may result from a hybrid approach that forecasts churn and segments customers (Pejić Bach, Pivar, and Jaković, 2021).

Table 7
Regression Analysis between the Credit Scoring on Customer Acquisition and Level of Customer Retention of Selected Fixed-wired Telecommunication Industries in the Province of Laguna (Dependent Variables: Segmentation Strategies and Level of Retention)

Predictor	Dependent Variable	R^2	F	p-value	β	t	p-value
Credit scoring on customer acquisition	Segmentation strategies	0.734	52.559	0.000	0.832	5.032	**0.000***
Level of Customer retention					0.062	0.403	0.689
Credit scoring on customer acquisition	Level of Retention	0.062	0.403	0.689	0.062	0.403	**0.689**
Level of customer retention					0.062	0.403	0.689
*Significant @ 0.01							

R^2 = 0.734: Credit scoring accounts for 73.4% of the variance in segmentation strategies, indicating a strong predictive impact. F = 52.559, p-value = 0.000: The overall model is statistically significant at the 0.01 level, showing that credit scoring is a meaningful predictor of segmentation strategies. β = 0.832, t = 5.032, p-value = 0.000: The standardized regression coefficient (β) indicates a strong positive effect of credit scoring on segmentation strategies.

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The result is statistically significant, meaning that as credit scoring improves, segmentation strategies are likely to improve as well.

$R^2 = 0.062$: Credit scoring accounts for only 6.2% of the variance in the level of retention, indicating a very weak predictive impact. $F = 0.403$, p-value = 0.689: The overall model is not statistically significant, suggesting that credit scoring is not a meaningful predictor of the level of retention. $\beta = 0.062$, $t = 0.403$, p-value = 0.689: The regression coefficient indicates a negligible positive effect of credit scoring on retention. The result is not statistically significant, indicating no meaningful relationship between credit scoring and the level of retention.

In summary, credit scoring strongly and significantly predicts segmentation strategies while credit scoring does not significantly predict the level of retention. These findings suggest that while credit scoring is useful for shaping segmentation strategies, it may not directly influence customer retention levels in the studied context. This could imply that other factors besides credit scoring play a more critical role in retaining customers.

CONCLUSIONS AND RECOMMENDATIONS

Based on the findings, several conclusions were drawn. Credit scoring encourages customers to maintain a good financial history to qualify for services, ensures the company acquires reliable and long-term customers and credit scoring to evaluate potential customers. Telecommunication companies that are generally effective in retaining their customers suggest that their strategies and policies, such as competitive pricing, quality service delivery, or tailored retention programs, are successful in fostering customer loyalty and maintaining long-term relationships. The geographic factors such as urban and rural areas influence the company's marketing and service delivery strategies; service offerings are segmented based on the income levels of its customers and customer feedback to refine its segmentation strategies and improve services. The more the fixed-wired telecommunication industries in the province of Laguna exhibit the credit score on customer retention, the higher the level of retention and the more effective the segmentation strategies. Moreover, the credit scoring on customer acquisition statistically and significantly predicts the segmentation strategies of selected fixed-wired telecommunication industries in the province of Laguna. Hence, there is a need to propose an action plan to improve the credit scoring on customer acquisition, retention, and segmentation strategies of selected fixed-wired telecommunication industries in the province of Laguna.

Several recommendations are proposed. The company can use real-time credit checks during initial enrollment to speed up the process and give immediate feedback to enhance customer acquisition through credit scoring. The marketing team of the telecommunications companies may increase customer loyalty by informing and engaging customers with emails, SMS, and app notifications about service updates and changes. Telecommunications companies should concentrate on providing customized plans with flexible payment options to make services more accessible and affordable, particularly for communities with limited resources. Telecommunications companies in Laguna should improve customer retention by making credit score information more visible and accessible to their customers. Consumers' credit scoring is significant since it affects their ability to obtain better financial services and goods. The sales team of the company should concentrate on increasing customer retention. Future researchers may build upon the scope of this study by incorporating additional predictor variables for the success of fixed-wired telecommunication industries or opt to conduct qualitative research to verify findings on a broader scale in the Philippine set-up.

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