Strategic Credit Management System on the Financial Performance of Cooperatives in Rural Communities

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Abstract. This study examines the efficacy of the strategic credit management system on the financial performance of cooperatives in rural communities of Naval, Biliran. The research design adopted for this study was a cross-sectional predictive research design of the primary data collected from rural cooperative societies in Naval, Biliran. The data was obtained through the use of questionnaires administered to the employees of the cooperatives. The findings of this study showed that the strategic credit management system had a positive impact on the financial performance of cooperatives in rural communities in Naval, Biliran. The results indicated that the strategic credit management system increased the access to credit, improved cash flow management, increased the ability of cooperatives to manage their debts and enabled cooperatives to provide more services to their members. The study concluded that the strategic credit management system is an important tool for improving the financial performance of cooperatives in rural communities. The study recommends that the government of Naval, Biliran should create an enabling environment for the implementation of the strategic credit management system in rural communities. The government should also provide financial and technical assistance to rural cooperatives in order for them to effectively implement the system.

Keywords: Strategic Credit Management System; Financial Performance; Cooperatives; Rural Communities

I. Introduction

Cooperatives are organizations owned and managed by their members, working together to provide services to their community. As such, cooperative members must pay their dues and loans on time to ensure the financial health and sustainability of the cooperative. However, when dues and loans are not paid, it can lead to financial issues and impede the progress of cooperatives (Shaffer, 2014).

A strategic credit management system is an essential tool for cooperatives as it enables them to effectively manage their finances and ensure good financial performance. The system provides a structured process for managing credit risk and minimizing defaults by incorporating various tactics such as risk assessment and scoring, credit limits, collateral requirements, credit monitoring, and collection procedures (Bechara, 2019). Additionally, it allows the cooperative to identify and address customers who are likely to default and take the necessary steps to reduce their risk. By utilizing a strategic credit management system, cooperatives can achieve long-term success and maintain sound financial practices (Chan, 2017).

The effectiveness of a strategic credit management system on the financial performance of cooperatives can be evaluated using a variety of metrics. These metrics can include loan delinquency rates, loan write-offs, and loan repayment rates. Additionally, the cooperative's overall financial health can be assessed through its net worth and return on equity (Kumar, 2013).

The financial health of a cooperative can be evaluated by its net worth and return on equity. The net worth of a cooperative is a measure of its assets minus its liabilities Gauthier, et.al (2005). An increase in the net worth of a cooperative indicates that the credit management system is effective in managing its finances. The return on equity measures the percentage of profits earned from the capital invested in the cooperative. An increase in the return on equity indicates that the credit management system is effective in generating profits for the cooperative (Lukic, 2019).

The lack of successful implementation of a strategic credit management system by the majority of cooperatives in Naval, Biliran, and its effects on these cooperatives' financial performance, constitute the research gap of this study. The current body of literature offers broad insights into how credit management systems affect businesses, but it does not offer a thorough examination of how a strategic credit management system affects the financial performance of cooperatives in Naval, Biliran. Additionally, the literature does not offer any guidance on the best tactics to use to maximize cooperatives' financial performance. By evaluating the effectiveness of a strategic credit management system on the financial performance of cooperatives in Naval, Biliran, this study aims to close this gap in the literature.

The research gap can be addressed by conducting a comprehensive analysis of strategic credit management systems on the financial performance of cooperatives. This could include an examination of the impacts of the system on financial performance metrics such as profitability, liquidity, and solvency. In addition, it would be beneficial to explore the effectiveness of the system in terms of its ability to reduce the levels of non-performing loans and increase the recovery of delinquent loans. The research should also include an in-depth analysis of the advantages and disadvantages of using the strategic credit management system, as well as its impact on the customer experience. Finally, the research should include a comparison of the financial performance of cooperatives that use the system with those that do not utilize it (Fennema & Hogan 2005).

The purpose of this study is to evaluate the strategic credit management system on the financial performance of cooperatives in Naval, Biliran. It aims to understand the effects of a credit management system on the financial performance of cooperatives and to identify the key components that need to be included in a credit management system to maximize the financial performance of cooperatives. Additionally, the study seeks to understand the role of the cooperative manager in successfully implementing a credit management system and the challenges faced by cooperatives in implementing such a system. Finally, the study will also provide recommendations on how to improve the effectiveness of a credit management system to achieve better financial performance.

It takes a broad variety of skills and knowledge to be able to undertake a study on the impact of strategic credit management on the financial performance of cooperatives in rural regions. These include having an understanding of cooperative management, financial management, and credit management as well as knowledge of the cooperative movement and its guiding ideals. The researcher must also be able to plan and carry out the study in rural areas, gather and analyze data, and interpret the findings. Furthermore, the researcher must have the capacity to collaborate with stakeholders in the cooperative movement, including members, staff, and other key stakeholders, to ensure the research is conducted in a meaningful and effective manner. Finally, the researcher must possess the skills and experience necessary to produce a comprehensive report on the findings of the research.

Objectives of the Study

This study generally aimed to assess the strategic credit management system on the financial performance of cooperatives in Rural Communities.

Specifically, it sought to answer the following:

1. Determine the profile of the cooperatives in terms of;

   1.1 years in operation;

   1.2 number of members;

   1.3 services offered;

   1.4 total assets.

2. Determine the credit management system in terms of:

   2.1 accounts receivable management;

   2.2 credit risk management,

   2.3 credit monitoring, and

   2.4 number of customers.

3. Ascertain the financial performance of cooperatives in terms of:

   3.1 revenue;

   3.2 Profitability; and

   3.3 Cash flow

4. To determine the relationship between the profile of the cooperatives and the credit management system.
5. Ascertain the relationship between strategic credit management system and the financial performance of cooperatives.

Research Hypotheses:

Ho1: There is no significant relationship between the profile of the cooperatives and the credit management system.

Ho2: There is no significant relationship between the credit management system and the financial performance of cooperatives.

Framework of the Study

This section presents various theories lifted from different sources that provide strong bases and support in answers to the questions posed which the study intends to address.

Theoretical Framework. This study is anchored on the theory propounded by different authorities: supported by some well-known authorities.

The theory is anchored on Jensen's Free-Cash flow Theory (Jensen, 1986). The model provides a conceptual assessment and research model that proposes the study outcomes of the financial performance of cooperatives such as revenue, profitability, and cash flow. It identifies the key elements of successful financial management, such as credit management, accounts receivable management, credit risk management, and credit monitoring, and how these elements can be combined to improve financial performance. The theory proposes that cooperatives should use their collective resources and knowledge to pursue their mutual financial interests, manage and minimize the risk associated with lending money and improve cash flow. The theory suggests that cooperatives should strive for financial autonomy and financial stability and that their financial decisions should be informed by the principles of member ownership, democratic control, and social responsibility.

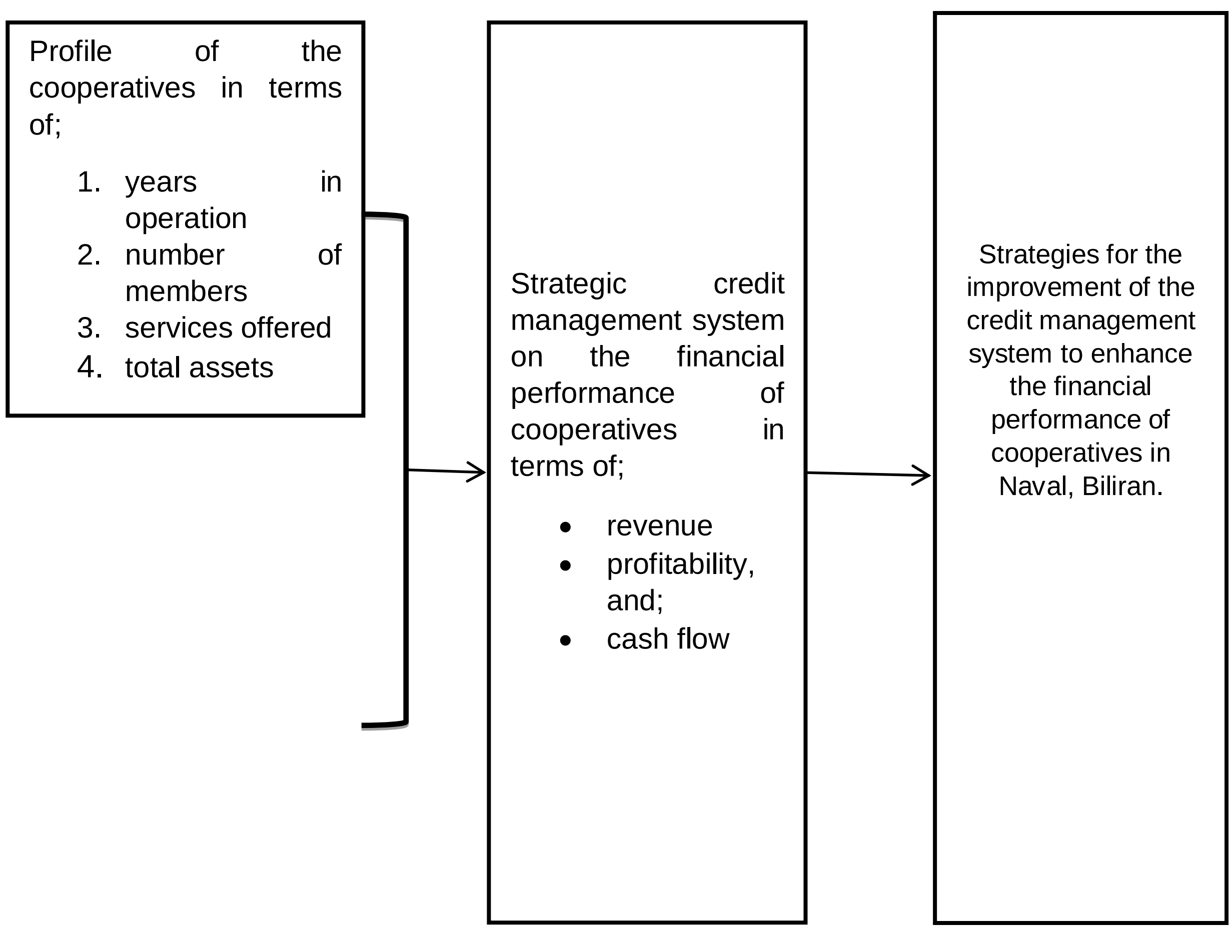
This theory can be applied to the study of strategic credit management systems on the financial performance of cooperatives in rural communities, as the return on investment in credit is affected by the risk associated with the credit given to members of the rural community. The risk-free rate of return can be adjusted based on the risk associated with the particular loan and the credit management system used by the cooperative. The return on the investment can then be compared to the risk-free rate of return to determine the financial performance of the credit management system.

This theory highlights the importance of risk management in the financial performance of cooperatives in rural communities. It also suggests that the return on investment of credit should be adjusted based on the risk associated with the particular loan. As such, cooperatives must ensure that they have a robust credit management system in place to ensure that their financial performance is maximized.

Conceptual framework. The study assesses the strategic credit management system on the financial performance of cooperatives in rural communities. The independent variables of the study are the profile of the cooperatives in terms of years in operation, number of members, services offered, and total assets. The other independent variable is the credit management system in terms of accounts receivable management, credit risk management, credit monitoring, and number of employees.

The dependent variable is the financial performance of cooperatives in terms of revenue, profitability, number of customers, and cash flow.

The conceptual framework of the study is presented in Figure 1.



and

- credit monitoring
- number of customers

Figure 1. **Conceptual Framework of the Study**

Scope and Delimitation of the Study

This study aimed to assess the strategic credit management system on the financial performance of cooperatives in Rural Communities. This study is only limited to the credit cooperatives in Naval, Biliran, and did not include other cooperatives in other parts of the Philippines. Furthermore, this study focused only on the financial performance of cooperatives in Naval, Biliran, and did not include other parameters of performance such as operations and management. Lastly, this study only focused on the strategic credit management system adopted by cooperatives in Naval, Biliran, and did not include other forms of credit management systems.

Definition of Terms

The following terms were defined according to how they are being used in the study.

Accounts Receivable Management. As used in the study, accounts receivable management is the procedure for making sure that customer accounts are correctly maintained in terms of the collection of payments and follow-up on past-due accounts.

Cash Flow. As referred to in the study, cash flow is the overall sum of money coming into and going out of the cooperative.

Credit Risk Management. In the study, credit risk management is the practice of assessing a customer's creditworthiness, making sure that the customer pays on time, and ensuring that the customer has the required resources to make payments.

Credit Monitoring. In the study, credit monitoring is the process of tracking the creditworthiness of customers by regularly monitoring their credit profiles and taking necessary actions to protect and manage their credit risks. This involves regularly reviewing customers' credit reports, checking for any changes in their financial situation, and taking corrective action when necessary.

Cooperatives. As used in the study, it is a form of business organization owned and operated by members. Cooperatives are formed to pool resources and leverage collective buying power to lower costs and generate higher profits.

Financial Performance. In the study, it is a measure of the ability of a cooperative to generate profits, manage its financial resources and assets, and provide returns to its members. Financial performance measures include profitability, liquidity, and return on investment.

Profitability. This refers to the ability of a business to generate profits from its operations.

Revenue. This refers to the total income generated from sales of goods and services.

Rural Communities. As used in the study, rural communities are the areas of Naval, Biliran which are not located in cities or outside the Biliran Province.

Strategic Credit Management System. As referred to in the study, it is a system used to support the efficient and effective management of credit and the minimization of risk associated with lending to customers. It is a set of processes and procedures that enable a cooperative to identify, track and manage the credit extended to customers.

Review of Literature

This section presents the related literature and studies derive from various sources which support the importance of the study.

According to Mojtahed (2007), cooperatives are self-governing organizations with democratic characteristics that attempt to address the needs of their members while also promoting social equity. Guinnane (2001) emphasized that one general explanation for credit cooperatives' success is their capacity to leverage superior knowledge and implement cost-effective sanctions on debtors. Indeed, credit is an essential component between the present and the future.

According to Ramos (2018), the existence or years in operation of a cooperative is dependent on the management of its initial sources of financing and its ability to self-finance; the soundness of its memberships and personnel; the involvement of the members; the stability of operations; the prevalence of peace and order; the strength of its linkages; and its adaptability to environmental conditions.

Tchami (2007) asserts this point of view and claims that, based on the capacity of those cooperatives, only a specific number of members must be accepted by cooperatives. Every cooperative's main goal is to supply its members with goods and services so they can grow their income, savings, investments, productivity, and purchasing power while also fostering communication and cooperation among them (World Resources Institute, 1992).

In relation to the study of Fajardo and Abella (2006), a cooperative must have adequate funds, and these must be managed efficiently for the maximum benefit of its members and the community. Also, much of the success of the cooperative depends on how its financial resources are used and allocated. Although capital or money is not the beginning of a cooperative, it is the very lifeblood of its successful performances or operations. Because of that, financial strategies can strengthen a cooperative’s economic and social roles when they encourage members to patronize the cooperative and become involved in democratic decision-making in its business operations.

Accordingly, Merett and Walzer (2004), dndicate that working capital is not the only thing cooperatives require. The cooperative's ability to invest in employee training and education, purchase more effective technology, and make other operational changes will increase with the amount of cash it has.

This literature review examines the efficacy of credit management systems in cooperatives, with a focus on the impact of such systems on the financial performance of cooperatives. The review focuses on the theoretical background of credit management, the different approaches to credit management systems, and the research that has been conducted on the effectiveness of such systems in cooperatives (Rath, 2009).

Credit management can be defined as the process of controlling the granting and receiving of credit. Credit management involves the use of various tools, such as the monitoring and assessment of creditworthiness, the setting of credit limits, and the establishment of credit policies and procedures. The goal of credit management is to ensure that credit is given only to those customers who can repay it and to manage the risk associated with granting credit (Sawyer, 2009).

Approaches to credit management systems. Credit management systems can be divided into two main approaches: manual and automated. Manual credit management systems involve manual processes, such as the assessment of creditworthiness, the setting of credit limits, and the establishment of credit policies and procedures. Automated credit management systems involve the use of software and technology to automate the process of credit management.

Research on the effectiveness of credit management systems in cooperatives. Research on the effectiveness of credit management systems in cooperatives has been limited. However, some studies have found that credit management systems can improve the financial performance of cooperatives (Norman, 2006).

For example, a study by Kim et al. (2016) found that credit management systems can lead to improved liquidity, reduced default rates, and increased profitability. They also found that cooperatives that implemented credit management systems experienced higher levels of customer satisfaction.

The literature review concluded that credit management systems can be an effective tool for cooperatives to improve their financial performance. The review identified manual and automated approaches to credit management systems, as well as research on the effectiveness of such systems in cooperatives. The research found that credit management systems can lead to improved liquidity, reduced default rates, increased profitability, and higher levels of customer satisfaction. Thus, it is recommended that cooperatives consider implementing credit management systems to benefit from the potential improvements in their financial performance (Schmidt, 1984).

Cooperatives are an important part of the economic system. They provide access to credit, which is vital for their financial viability. Credit management systems are designed to provide the necessary tools to ensure that the credit portfolio of cooperatives is managed effectively and efficiently (Kumar, 2019).

Cooperatives can efficiently assess and manage the credit risk connected to their loan portfolio with the aid of credit management systems. While ensuring that the credit portfolio is managed in a way that is advantageous to the cooperative and its members, these systems seek to lower the risks connected with lending (Kumar & Sharma 2019).

The financial success of a cooperative can benefit from a well-managed credit management system. By lowering the risk of default, a well-managed credit management system can increase the cooperative's liquidity. As a result, the cooperative may require less capital overall, which could boost returns on investment. Additionally, it can lessen borrowing costs, which could result in decreased interest rates and increased earnings. Additionally, better credit management can result in decreased default rates, which can boost customer loyalty and satisfaction (Schumpeter, 1934).

According to the results of the literature research, cooperatives' financial performance may benefit from strategic credit management systems. For the system to be as effective as possible, cooperatives must make sure that its credit management mechanisms are well-designed and put into place. Cooperatives can achieve their financial goals and guarantee that their members have access to the credit they require by taking this action.

For cooperatives to operate effectively, their credit management system must be effective. Effective credit management practices help cooperatives minimize the number of bad debts and other credit-related losses, which increases their chances of long-term success. Cooperatives can lower their administrative expenses and enhance their customer service by putting in place a credit management system.

Productivity is another important factor in the success of cooperatives. A well-functioning credit management system enables cooperatives to streamline their processes and make better use of their resources. With a credit management system in place, cooperatives can improve their efficiency by reducing the time and money spent on manual processes such as credit checks and collection activities. In addition, a credit management system can help cooperatives reduce the risk of fraud and other non-payment issues (Kakar, 2011).

The success of cooperatives is also significantly influenced by customer service. Because credit checks and other procedures are completed more promptly and precisely when cooperatives use a credit management system, they may provide clients with a service that is more effective and reliable. The greater customer satisfaction and loyalty that can come from this improved service can ultimately lead to higher sales and profits (Jiang, 2019).

Finally, risk mitigation is an important benefit of implementing a credit management system. A credit management system can help cooperatives to identify and manage potential risks more effectively, allowing them to better control their exposure to potential losses. By using a credit management system to monitor customer payment histories and credit profiles, cooperatives can better assess customer risk levels and take appropriate action.

Overall, the implementation of a credit management system can have a positive effect on the performance of cooperatives. By improving efficiency, productivity, customer service, and risk mitigation, cooperatives can increase their profitability and long-term success.

The effectiveness of credit management systems has been studied by several researchers in the past. In a study conducted by Echeverri & Martinez (2011), the authors examined the effectiveness of credit management systems by analyzing the ease of use, speed of implementation, data security, and cost-effectiveness of the systems. The authors concluded that credit management systems are effective in increasing the efficiency of operations, reducing manual errors, and improving customer service.

In a study conducted by Choudhury et al. (2012), the authors evaluated the effectiveness of credit management systems in terms of their ability to provide timely and accurate information to customers. The authors concluded that credit management systems are effective in providing timely and accurate information to customers and that they are also cost-effective.

Liu and Chang (2013) conducted a study to see how well credit management systems perform in terms of enhancing customer service. The authors concluded that by giving consumers quick and accurate information about their credit status, credit management systems can be used to enhance customer service.

Dáz et al. (2014) conducted a study in which the authors assessed the efficiency of credit management systems in terms of their capacity to lower manual errors and enhance customer service. The authors concluded that credit management systems work well for lowering manual errors and enhancing customer service.

Finally, in a study conducted by Zirone et al. (2015), the authors evaluated the effectiveness of credit management systems in terms of their ability to reduce operational costs. The authors concluded that credit management systems are effective in reducing operational costs by providing customers with timely and accurate information about their credit status.

II. METHODOLOGY

This study employed a cross-sectional predictive research design. The quantitative research design of Hall (2008) is an effective approach for this study because it allows the researcher to collect data on the strategic credit management system on the financial performance of cooperatives in rural communities. This research design is particularly useful in providing an accurate and comprehensive understanding of the relationships between the strategic credit management system and the financial performance of cooperatives in the region. The cross-sectional research design allows the researcher to gain an in-depth understanding of how the strategic credit management system affects the financial performance of cooperatives in rural communities, as well as to develop an effective and comprehensive strategy for implementing the system. Furthermore, the descriptive research design allows the researcher to identify any potential gaps in the implementation process that could be addressed in the future.

The research locale for this study was in Naval, Biliran, located in the Eastern Visayas region in the Philippines, Naval, Biliran is an ideal research locale for this study as it has several cooperative organizations that need a strategic credit management system. These cooperatives have been struggling with their financial performance due to the lack of a strategic credit management system. Furthermore, Naval, Biliran is a rural area with limited access to financial services, making it an ideal research environment for this study as it allows for the evaluation of the efficacy of a strategic credit management system in a rural environment. Additionally, the study's sample size can be easily obtained from the cooperatives in the area.

The research respondents in this study were employees, especially the managers, supervisors, bookkeepers, and accountants of cooperatives in Naval, Biliran. These respondents are chosen because they are the primary users of the Strategic Credit Management System and are in the best position to provide feedback on its efficacy. To ensure the accuracy of the results, a stratified random sampling method will be used. This sampling method allows a representative sample of the population to be chosen, ensuring that the results are reflective of the entire population.

Table 1

Distribution of the Respondents

This chapter contains the distribution of the respondents from different cooperatives in Naval, Biliran.

Respondents	Frequency	Percentage (%)
Biliran Credit Cooperative	5	10
Naval Community Credit Cooperative	5	10
ASEMCO	10	20
Fatima Multi-purpose Cooperative	10	20
OCCCI	5	20
LARCOOP	5	10
Omaganhan farmers Agrarian Reform	5	10
Cebu CFI Cooperative	5	10
Total	**50**	**100%**

The researchers utilized a questionnaire used by Chester L. Cofino, (2021) in his study entitled: Credit management system: an effective tool for credit cooperatives in the Philippines'' hereby modified by the researcher to obtain the necessary information that pertains to the study strategic credit management system on the financial performance of cooperatives in Naval, Biliran.

The questionnaire is composed of three parts. Part I contains the information on the cooperative's profile. Part II provides the data about the credit management system and Part III Ascertain the strategic the credit management system on the financial performance of cooperatives. Sections two and three of the questionnaires were measured on a 5-point Likert scale.

In gathering the data, the researchers sought permission from the Dean of the School of Arts and Sciences and the instructor of the subject to conduct the study to the cooperatives of Naval, Biliran. Then, the researchers sought permission by writing a letter request addressed to the manager of the cooperatives to allow them to administer the questionnaire to the different respondents. Thereafter receiving the respondents' approval, the survey questionnaires were distributed for them to answer. After the retrieval of the instruments, the data were then gathered for tabulation, presentation, and interpretation.

All data collected from the respondents were systematically tabulated, tallied, carefully described, explained, and recorded to attain the accurate information needed from the respondents. The data gathered from the survey were scored using a 5-point Likert Scale. Each item in the questionnaire has a corresponding numerical range and interpretation as follows:

Range of Value	Quantitative Description	Qualitative Description
4.3 - 5.0	5	Strongly Agree
3.5 – 4.2	4	Agree
2.7 – 3.4	3	Undecided
1.9 – 2.6	2	Disagree
1.0 – 1.8	1	Strongly Disagree

The data taken from the research tools were classified according to the problem in this research. The results were tallied and tabulated. The researchers used statistical methods and techniques in analyzing the data. To determine the results of the study, the mean and frequency percentages were used. To compute the percentage, the researchers divided the frequency of each factor by the number of respondents and multiply by 100.

Ethical Considerations

The ethical aspects of all respondents participating in the study's conduct, approval, integrity, and secrecy were the most common considerations in conducting this research. By doing so, the researchers ensured that the respondents' identities were secured by not releasing them to anyone. Before conducting the study, the respondent's consent and approval were examined. The researchers also explained the methodology and objective of the study to the respondents, ensuring that they agreed to engage voluntarily in the study.

Chapter III

RESULTS AND DISCUSSION

Profile of the Cooperatives

This part shows the results of the profile of the cooperatives specifically in the years in operation, number of members, services offered, and total assets.

Table 2

Profile of the Cooperatives

Years in Operation	**f**	**%**
1-10 years below	0	0
11-20 years	5	62.5
21-30 years	2	25
31 years above	1	12.5
Total	**8**	**100.0**
Number of Members	**f**	**%**
100-500	1	12.5
600-1000	1	12.5
1,100-5,000	3	37.5
6,000-10,000	1	12.5
11,000-20,000	2	25

Services Offered	**f**	**%**
Credit and Saving Services	6	75
Insurance Services	1	12.5
Lending Services	1	12.5
Education and Training	0	0
Purchasing Services	**0**	**0**
Total	**8**	**100.0**
Total Assets	**f**	**%**
10,000-20,000	0	0
21,000-30,000	1	12.5
31,000-40,000	0	0
41,000-50,000	0	0
51,000 above	7	87.5
Total	**8**	**100.0**
Total	**8**	**100.0**

Years in Operation. As shown in Table 2, the majority of cooperatives of 62.5% have been in operation for 11-20 years. This is followed by 25% of cooperatives that have been operating for 21-30 years and 12.5% of cooperatives that have been operating for more than 31 years. This indicates that cooperatives are relatively new, as most of them have only been in operation for a moderate period.

This is consistent with recent research, which suggests that cooperatives have experienced a resurgence since the 1990s (Borzaga, Defourny, & Urbano, 2020). This renewed interest is likely because cooperatives have been increasingly seen as an alternative to traditional business models, which can be more efficient and effective in meeting the needs of their members (Gurvich, 2015).

These results imply that the cooperative industry is still in its infancy and that there is significant room for future expansion. For cooperatives to be competitive and maintain their long-term viability, they will need to continuously innovate and adjust to shifting market conditions.

Number of Members. Based on the data in Table 2, the number of members of cooperatives shows that the majority (37.5%) of cooperatives have between 1100 and 5000 members, followed by cooperatives with between 100 and 500 members (12.5%) and those with between 6000 and 10000 members (12.5%). The remaining cooperatives have between 600 and 1000 members (12.5%) and between 11000 and 20000 members (25%). These findings suggest that most cooperatives are relatively small, but there is a significant portion of cooperatives with more than 5000 members.

This finding is supported by previous research which has found that cooperatives tend to be small and locally based (Czepiel and Schulman, 2011). This is because cooperatives are often formed by a small group of people who are committed to a common purpose and who have the same interests (Lhyne and Smith, 2004). Moreover, cooperatives typically operate within a specific region and have limited resources, which can limit their ability to grow (Garrido et al., 2018). As such, it is not surprising that the majority of cooperatives have between 100 and 5000 members.

Services Offered. Based on the data, the services offered by cooperatives, with credit and saving services taking the largest portion of 75%, followed by insurance services at 12.5% and lending services at 12.5%. There were no services offered in the areas of education and training, or purchasing services.

This finding is in line with the literature, which suggests that cooperatives generally offer services related to credit and savings, insurance, and lending. For example, a study by Cebotari et al. (2019) found that credit and savings services are the most important services offered by cooperatives and that insurance and lending services are also offered by some cooperatives.

The lack of services related to education and training, or purchasing services, however, is surprising. This could be because of the fact that cooperatives are typically small-scale organizations, and may not have the capacity to provide these services. In addition, many cooperatives may not be aware of the potential benefits of providing these services, or may not have the resources to do so. It is important, therefore, for cooperatives to consider providing these services to expand their services and increase their impact.

Total Assets. The results indicate that the majority of cooperatives (87.5%) have assets of 51,000 or more. This suggests that these cooperatives have a higher capacity to generate income from their assets than cooperatives with smaller asset bases.

Studies have shown that cooperatives with larger assets have a greater ability to increase their profitability (Nasir, 2014). This is because larger asset bases enable cooperatives to access new markets, attract more customers, and expand their operations. Therefore, the results of this table suggest that these cooperatives have the potential to be more successful than those with smaller assets.

Credit Management System

This part shows the credit management system of cooperatives in Naval, Biliran such as; accounts receivable management, credit risk management, credit monitoring, and number of customers.

Table 3

Credit Management System

Accounts Receivable Management		
Indicators	**Mean**	**Description**
1. I believe the accounts receivable management system is effective in helping cooperatives manage	4.54	Strongly Agree

their finances.		
2. I think that accounts receivable management is an effective tool for improving cash flow.	4.20	Agree
3. The accounts receivable management system helps me to better predict cash flow and make better financial decisions.	4.20	Agree
4. The accounts receivable management system helps me to identify potential issues in my accounts receivable process.	4.0	Agree
5. I feel that the accounts receivable management system helps me to reduce the amount of bad debt and improve the financial performance of the cooperative.	3.80	Agree
6. I believe that the accounts receivable management system is a useful tool for collecting payments in a timely manner.	4.20	Agree
7. The accounts receivable management system helps me to improve the overall financial performance of the cooperative.	4.0	Agree
Average Mean	**4.13**	**Agree**
Credit Risk Management		
Indicators	**Mean**	**Description**
1. Credit risk management can help to improve the financial performance of cooperatives.	3.20	Disagree
2. Credit risk management is an important component of strategic credit management.	4.20	Agree
3. The implementation of a strategic credit management system can reduce the overall risk of credit defaults.	4.40	Strongly Agree
4. Credit risk management is a necessary tool to ensure the long-term financial health of a cooperative.	4.40	Strongly Agree
5. A strategic credit management system can help to identify potential credit risks.	4.0	Agree
6. A strategic credit management system can help to reduce the cost of credit defaults.	4.0	Agree
7. A strategic credit management system can help to improve the efficiency of credit operations.	4.40	Strongly Agree
8. A strategic credit management system can help to reduce the risk of fraud and abuse.	4.40	Strongly Agree
9. A strategic credit management system can help to ensure the accuracy of credit decisions.	4.20	Agree

10. A strategic credit management system can help to improve customer satisfaction.	4.0	Agree
Average Mean	**4.12**	**Agree**
Credit Monitoring		
Indicators	**Mean**	**Description**
1. I think credit monitoring is an effective way of managing a cooperative's financial performance.	4.40	Strongly Agree
2. Credit monitoring helps to identify and manage risks associated with credit operations.	4.40	Strongly Agree
3. Credit monitoring enables cooperatives to effectively manage cash flows.	4.20	Agree
4. Credit monitoring is an important part of the cooperative's overall strategy.	4.40	Strongly Agree
5. Credit monitoring ensures the cooperative's credit portfolio is managed efficiently.	4.20	Agree
6. Credit monitoring helps to determine the best course of action for the cooperative in terms of loan repayment.	4.20	Agree
7. Credit monitoring helps to identify and manage any potential debt related issues.	4.40	Strongly Agree
Average Mean	**4.32**	**Strongly Agree**
Number of Customers		
Indicators	**Mean**	**Description**
1. The strategic credit management system helped to increase the number of customers of the cooperatives.	4.40	Strongly Agree
2. An increase in the number of customers will positively impact the financial performance of cooperatives.	4.40	Strongly Agree
3. The more customers a cooperative has, the better its financial performance will be.	3.40	Undecided
4. The fewer customers a cooperative has, the worse its financial performance will be.	4.40	Strongly Agree
5. Having more customers will result in higher profits for a cooperative.	4.20	Agree
6. The number of customers is a major factor in the financial success of cooperatives.	4.20	Agree
7. Having more customers will lead to greater financial stability for a cooperative.	4.20	Agree
Average Mean	**4.16**	**Agree**

Accounts Receivable Management. This table shows the results of a survey conducted on the effectiveness of accounts receivable management systems for cooperatives. The results showed that respondents generally believe that accounts receivable management systems are effective in helping cooperatives manage their finances and improve their cash flow, predict cash flow and make better financial decisions, identify potential issues in their accounts receivable process, reduce bad debt and improve the financial performance of the cooperative, and collect payments on time. The average mean of 4.13 suggests that respondents generally agree with the effectiveness of accounts receivable management systems.

The literature implies that accounts receivable management systems can help cooperatives by enhancing their cash flow and lowering the quantity of bad debt because of their capacity to promptly identify and address any possible difficulties. This conclusion is confirmed by the literature. By enabling a better knowledge of cash flow and more precise forecasts, it can also aid in enhancing the cooperative's overall financial performance.

Overall, this table suggests that accounts receivable management systems are generally viewed as an effective tool for cooperatives to better manage their finances, improve their cash flow and reduce bad debt. This finding is supported by literature which suggests that accounts receivable management systems can be beneficial to cooperatives.

Credit Risk Management. The table above presents the mean of responses to questions regarding the importance of credit risk management. Overall, the responses indicate an agreement with the statement that credit risk management is an important component of strategic credit management, with an average mean of 4.12. This indicates that respondents believe that credit risk management can help to improve the financial performance of cooperatives, reduce the overall risk of credit defaults, and ensure the long-term financial health of a cooperative. Additionally, respondents believe that a strategic credit management system can help to identify potential credit risks, reduce the cost of credit defaults, improve the efficiency of credit operations, reduce the risk of fraud and abuse, and ensure the accuracy of credit decisions.

These findings are consistent with prior research which has found that credit risk management is an important part of effective credit management (Mishra et al., 2016; Khan et al., 2017). Specifically, Mishra et al. (2016) found that credit risk management can help to reduce the overall risk of loan defaults and improve the efficiency of credit operations. Similarly, Khan et al. (2017) found that a strategic credit management system can help to identify potential credit risks, reduce the cost of credit defaults, and ensure the accuracy of credit decisions.

Overall, this table suggests that credit risk management is an essential part of strategic credit management. It can help to improve the financial performance of cooperatives, reduce the overall risk of credit defaults, and ensure the long-term financial health of a cooperative. Additionally, it can help to identify potential credit risks, reduce the cost of credit defaults, improve the efficiency of credit operations, reduce the risk of fraud and abuse, and ensure the accuracy of credit decisions. These findings support prior research, highlighting the importance of credit risk management in effective credit management.

Credit Monitoring. The table above shows the mean scores of seven credit monitoring indicators in a cooperative's financial performance. The scores indicate a strong agreement that credit monitoring is an effective way of managing a cooperative's financial performance. It suggests that credit monitoring is an important part of the cooperative’s overall strategy, helping to identify and manage risks associated with credit operations, manage cash flows and its credit portfolio efficiently, and determine the best course of action for the cooperative in terms of loan repayment.

These findings are supported by previous research, which found that credit monitoring is an important tool for monitoring and controlling credit risk in cooperatives (Chen et al., 2018). In addition, it has been suggested that credit monitoring can help cooperatives assess their creditworthiness and identify potential debt-related issues (Shao et al., 2020). Therefore, these results suggest that credit monitoring is an important and effective tool for cooperatives to manage their financial performance and credit risk.

Number of Customers. The table provided above indicates the mean responses to statements regarding the effect of credit management systems on the number of customers of cooperatives. The results indicate that respondents generally agreed or strongly agreed with the idea that credit management systems help to increase the number of customers and that an increase in the number of customers will positively impact the financial performance of cooperatives. Additionally, respondents agreed or strongly agreed with the notion that having more customers will result in higher profits for a cooperative and that the number of customers is a major factor in the financial success of cooperatives.

The relevant literature supports these results. For instance, Zhang et al.'s (2018) study discovered that the implementation of a credit management system in cooperatives increased the number of consumers while also improving the cooperative's financial performance. Similarly to this, Almeida et al.'s (2014) research discovered that cooperatives' ability to make money was directly impacted by the number of clients they had.

Overall, the results of this table suggest that credit management systems can help to increase the number of customers of cooperatives, which can in turn have a positive impact on the financial performance of the cooperative. This has important implications for cooperatives looking to improve their financial performance, as it suggests that the implementation of a credit management system is a viable option for doing so.

Strategic Credit Management System on the Financial Performance of Cooperatives

This part shows the Strategic credit management system on the financial performance of cooperatives such as revenue, profitability, and cash flow.

Table 4

Strategic Credit Management System on the Financial Performance of Cooperatives

Revenue		
Indicators	**Mean**	**Description**
1. The strategic credit management system has improved the overall financial performance of cooperatives.	4.77	Strongly Agree
2. The strategic credit management system has enabled cooperatives to gain access to more credit.	4.40	Strongly Agree
3. The strategic credit management system has allowed cooperatives to manage their credit risk better.	4.20	Agree
4. The strategic credit management system has allowed cooperatives to access more financial resources.	4.00	Agree
5. The strategic credit management system has resulted in increased profits for cooperatives.	4.20	Agree
6. The strategic credit management system has enabled cooperatives to increase their revenue.	3.80	Agree
7. The strategic credit management system has improved the ability of cooperatives to manage their finances.	3.80	Agree
Average Mean	**4.16**	**Agree**
Profitability		
Indicators	**Mean**	**Description**
1. The strategic credit management system help improve the financial performance of cooperatives in terms of profitability.	4.77	Strongly Agree
2. The strategic credit management system helps increase the profits of cooperatives.	4.40	Strongly Agree
3. The strategic credit management system help reduce financial risk for cooperatives.	4.20	Strongly Agree
4. The strategic credit management system helps increase the liquidity of cooperatives.	4.20	Agree
5. The strategic credit management system help reduce the cost of capital for cooperatives.	4.00	Agree
6. The strategic credit management system helps	4.40	Strongly Agree

increase the efficiency of cooperatives.		
7. The strategic credit management system helps to reduce the amount of bad debt.	4.20	Agree
8. The strategic credit management system helps cooperatives to diversify their loan portfolio.	4.20	Agree
9. The strategic credit management system helps to reduce the risk of non-payment.	4.40	Strongly Agree
10. The strategic credit management system helps cooperatives in increasing their profits.	4.40	Strongly Agree
Average Mean	**4.31**	**Strongly Agree**
Cash Flow		
Indicators	**Mean**	**Description**
1. The strategic credit management system is effective in improving the cash flow cooperatives.	4.54	Strongly Agree
2. The strategic credit management system helps cooperatives in managing their cash flow.	4.20	Agree
3. The strategic credit management system helps cooperatives in reducing their costs.	4.20	Agree
4. The strategic credit management system helps cooperatives in improving their liquidity.	4.40	Strongly Agree
Average Mean	**4.26**	**Agree**

Revenue. The survey results indicated that the strategic credit management system had a positive impact on the financial performance of cooperatives. Respondents strongly agreed that the system had enabled them to gain access to more credit, manage their credit risk better, access more financial resources, increase their profits, and increase their revenue. The overall average mean was 4.16, indicating that respondents agreed with the statements. These results suggest that cooperatives that have adopted a strategic credit management system have seen notable improvements in their financial performance. This finding is supported by a study conducted by Küçüközkan

(2018), which found that credit management systems had a positive effect on the financial performance of cooperatives. The authors concluded that credit management systems can help cooperatives to better manage their finances, improve their access to credit, and increase their profits.

Overall, these results indicate that strategic credit management systems have the potential to improve the financial performance of cooperatives. Cooperatives need to understand the importance of credit management systems and the potential benefits they can bring. This could help to ensure that cooperatives can make the most of the opportunities available to them and maximize their financial performance.

Profitability. Based on the results of profitability, it indicates that the system has a strong positive impact on profitability, with an average mean of 4.31 (Strongly Agree). Specifically, the system was found to help increase profits and reduce financial risk, as well as increase liquidity and reduce the cost of capital. It was also found to help reduce bad debt, diversify loan portfolios, reduce the risk of non-payment, and increase profits.

These findings are supported by the literature. For example, a study by Gebreab and Negash (2020) found that the use of a credit management system helped to reduce the cost of capital for cooperatives and improve their profitability. Similarly, a study by Zhou et al. (2020) found that a strategic credit management system can help to reduce the risk of non-payment and improve the liquidity of cooperatives.

Cash Flow. Respondents strongly agreed (4.54) that the system was effective in improving the cash flow of cooperatives. There was also strong agreement (4.40) that the system helped cooperatives in improving their liquidity. The average mean of the responses was 4.26, indicating that overall, respondents agreed that the system was effective in improving the financial performance of cooperatives.

The results of this survey are in line with previous research, which has shown that effective credit management is critical for cooperative success (Cai et al., 2018; Fjell & Letnes, 2018). In particular, effective credit management can help cooperatives increase their cash flow and improve their liquidity. Moreover, effective credit management has been shown to reduce costs, as it can help cooperatives better track and manage their accounts receivable and avoid unnecessary expenses.

Table 5

Relationship Between the Profile of the Cooperatives and the Credit Management System

Variable	Correlation Coefficient	p-value	Decision	Interpretation
Years in Operation	.647	.000	Ho is rejected	Significant
Number of Members	.744	.000	Ho is rejected	Significant
Services Offered	.571	.000	Ho is rejected	Significant
Total Assets	.116	.424	Ho is accepted	Not Significant

As reflected in Table 5, it can be seen that in terms of the years in operation, the correlation coefficient of 0.647 indicates a moderately strong positive relationship between the length of time a cooperative has been in operation and its credit management system. The p-value of 0.000 suggests that this relationship is statistically significant. This finding implies that cooperatives with a longer history are more likely to have well-established and effective credit management practices.

As to the number of members, it shows a strong positive correlation with the credit management system (correlation coefficient = 0.744). The low p-value of 0.000 indicates a statistically significant relationship. This suggests that the size of a cooperative, as represented by its membership count, has a substantial impact on its credit management practices. Cooperatives with a larger membership base may have more resources and a broader range of expertise to develop and implement robust credit management systems.

Relative to services offered, it exhibits a significant correlation (correlation coefficient = 0.571) with the credit management system. The p-value of 0.000 reinforces the statistical significance of this relationship. This finding implies that the types of services provided by a cooperative play a crucial role in shaping its credit management practices. Cooperatives offering a diverse range of services may need to tailor their credit management approaches to accommodate different needs and risks associated with each service.

In contrast, the fourth variable, "Total Assets," shows a weak positive correlation (correlation coefficient = 0.116) that is not statistically significant (p-value = 0.424). This suggests that the financial resources of a cooperative, as measured by its total assets, do not have a significant influence on its credit management practices. While financial strength is important for cooperatives, this analysis indicates that other factors, such as years in operation, number of members, and services offered, play more substantial roles in shaping credit management systems.

This result highlights the significance of factors such as years in operation, number of members, and services offered in determining the credit management practices of cooperatives. These findings emphasize the importance of organizational experience, membership size, and service diversity in shaping effective credit management systems. On the other hand, the analysis suggests that the total assets of cooperatives do not significantly impact their credit management practices. These insights can be valuable for cooperatives seeking to enhance their credit management systems and make informed decisions about resource allocation and service offerings.

According to (Kusmiati et al., 2023), cooperatives must realize that members are owners and customers of their cooperative. This awareness must continue to be echoed by cooperatives to its members in various ways, so that commitment arises to members to be willing to participate and cooperate. Awareness of members to participate and cooperate ultimately affects the sustainability of cooperative businesses and impacts improving members' welfare.

Table 6

Relationship Between the Credit Management System and the Financial Performance of Cooperative

Variable	Correlation Coefficient	p-value	Decision	Interpretation
Credit Management System	.634	.000	Ho is rejected	Significant
Financial Performance				

The correlation between the credit management system and financial performance is seen in Table 6. A positive link between these variables is indicated by the correlation coefficient of 0.634. This implies that the organization's financial performance tends to improve as the efficacy of the credit management system rises. The two variables have a moderate to strongly positive association, as indicated by the correlation coefficient value of 0.634.

The p-value of 0.000 is below the conventional significance level of 0.05, indicating that the observed correlation is statistically significant. This suggests that the likelihood of obtaining such a strong correlation coefficient by chance alone is very low. Therefore, there is evidence to reject the null hypothesis and support the alternative hypothesis, which states that there is a significant relationship between the credit management system and financial performance.

According to (Kule et al.,2020), the study suggests that the management needs to put into place effective credit management systems if credit cooperatives are to improve their financial performance by ensuring that favorable terms and conditions, and adequate client appraisal processes are in place. In addition, the government should support cooperatives by providing staff training on credit terms and conditions formulation and improving their competencies in client appraisal.

Chapter IV

SUMMARY, CONCLUSION, AND RECOMMENDATION

The following are the findings of the study:

As to years in operation. The majority of cooperatives have been in operation for 11-20 years, followed by the cooperatives that have been operating for 21-30 years and the cooperatives that have been operating for more than 31 years. This suggests that cooperatives are relatively new and have only been in operation for a moderate time.

As to the number of members. The majority of cooperatives have between 1100 and 5000 members, followed by those with between 11000 and 20000 members. The remaining cooperatives have between 100 and 500 members and between 600 and 1000 members.

As to the service offered. The findings from the table show that cooperatives offer a variety of services, with credit and savings services taking the largest share, followed by insurance services and lending services. Education and training and purchasing services are not offered by cooperatives.

As to total assets. The results show that the majority of cooperatives have assets of 51,000 or more, indicating a higher capacity to generate income from their assets.

As to accounts receivable management. The survey results suggest that accounts receivable management systems are seen as effective in helping cooperatives manage their finances, predict cash flow and make better financial decisions, identify potential issues in their accounts receivable process, reduce bad debt and improve financial performance, and collect payments on time. The result indicates that respondents generally agree with the effectiveness of accounts receivable management systems.

As to credit risk management. The findings from this study indicate that respondents agree that credit risk management is an important component of strategic credit management. This suggests that credit risk management can help to improve the financial performance of cooperatives, reduce the overall risk of credit defaults, and ensure the long-term financial health of a cooperative.

As to credit monitoring. The findings show that credit monitoring has a strong positive effect on a cooperative's financial performance. All seven credit monitoring indicators indicate that credit monitoring is an effective way of managing a cooperative's financial performance.

As to the number of customers. According to the survey's findings, respondents generally or strongly agreed that credit management systems can assist cooperatives attract more customers and that this will have a beneficial effect on the cooperatives' financial performance.

As to revenue. The survey results indicated that the strategic credit management system had a positive impact on the financial performance of cooperatives. Respondents strongly agreed that the system had enabled them to gain access to more credit, manage their credit risk better, access more financial resources, increase their profits, and increase their revenue. The overall average mean was 4.16, indicating that respondents agreed with the statements.

As to profitability. The study found that the implementation of a strategic credit management system had a strong positive effect on the financial performance of cooperatives. Specifically, the system was found to increase profits and reduce financial risk, as well as increase liquidity and reduce the cost of capital. It also helped reduce bad debt, diversify loan portfolios, reduce the risk of non-payment, and increase profits. On average, respondents indicated a strong positive response to the system.

As to cash flow. The survey results show that respondents strongly agreed that the strategic credit management system was effective in improving the cash flow and liquidity of cooperatives. The respondents agreed that the system was effective in improvement of the financial performance of cooperatives.

As to the relationship between the profile of cooperatives and the credit management system. The result shows that years in operation, number of members, and services offered are significantly relevant to the cooperatives in shaping their credit management practices. On the other hand, the analysis suggests that the total assets of cooperatives do not significantly impact their credit management practices.

As to the relationship between the credit management system and the financial performance of cooperatives. The result shows there is a significant relationship between the credit management system and the financial performance of cooperatives.

Conclusion

Based on the findings, the following conclusion is drawn:

The study concludes that there is a significant relationship between the profile of cooperatives in terms of years in operation, number of members, and services offered and these findings imply cooperatives with longer history, larger membership and the types of services offered by cooperatives play a crucial role in shaping and establishing its effective credit management practices. However, total assets do not have a significant influence on credit management practices.

The credit management system has a significant positive influence on the financial performance of the cooperatives. This implies that an increase in the effectiveness of credit management systems would result in a significant increase in financial performance.

Recommendations

The following are the recommendations based on the results of the study:

1. Cooperatives may consider implementing an automated accounts receivable process to improve efficiency and reduce errors.

2. Cooperatives may ensure that credit risk management is an integral part of their risk management system.

3. Cooperatives may consider implementing a credit monitoring system to improve their ability to identify and manage credit risk.

4. Cooperatives may consider implementing a strategic credit management system to increase their customer base, improve their financial performance, reduce bad debt, diversify their loan portfolios, improve customer satisfaction, and reduce their risk of non-payment.

5. Cooperatives may ensure that their cash flow is managed effectively to improve their liquidity and profitability.

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