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Database Management, Financial Reporting, and Financial Performance in Saccos: A Case of Selected Saccos in Mbarara City

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ABSTRACT

This study examined the relationship between database management, financial reporting, and financial performance among Savings and Credit Cooperative Organizations (SACCOs) in Mbarara City South Division, Uganda. Anchored on a quantitative research design, the study utilized primary data collected through self-administered questionnaires from a sample of 56 SACCOs.

The findings revealed a statistically significant positive relationship between database management and financial performance ($r = 0.281$, $p < .05$), indicating that improvements in data accuracy, security, and real-time accessibility contribute to better financial outcomes.

The study concludes that both effective database management and high- financial reporting are critical drivers of financial performance in SACCOs. It recommends investment in IT infrastructure, staff training, data governance policies, system integration, and regular monitoring to enhance financial sustainability.

Limitations included the study's narrow geographical focus, limited sample size, and use of self-reported data. Future research could expand the scope to other regions and incorporate longitudinal data for deeper insights.

Keywords: Database management, financial reporting, financial performance, SACCOs, Mbarara City, Uganda

Introduction

Savings and Credit Cooperatives (SACCOs) are globally recognized for their critical role in providing accessible credit to low-income households and small businesses (Nyagilo et al., 2018). They support members by offering affordable capital for business initiation and expansion, encouraging savings with interest, creating networking opportunities for business ideas, providing funeral support, and offering training programs (Mayanja, 2016).

In Africa, SACCOs have significantly improved livelihoods by enabling members to cover medical expenses, purchase basic needs, construct housing, pay for education, and access affordable energy solutions such as solar and biogas systems. They also support agricultural initiatives that contribute to rural development (Amfu Report,

2015/16). Given this pivotal role, the financial performance of SACCOs is essential for their sustainability and for the welfare of their members.

Financial performance refers to how effectively an organization utilizes its resources to generate profits and create value for stakeholders (Myers, 2020). It encompasses indicators of financial health, stability, and profitability. In Uganda, SACCOs form a vital part of the financial system; however, concerns about their stability persist. Reports point to declining loan recoveries, shrinking liquidity ratios, and the closure of several SACCOs. Scholars attribute much of this underperformance to weaknesses in financial reporting and related practices (Graham, 2017; Mayanja, 2016; Nyagilo et al., 2018; Ocowun, 2020). With growing reliance on microfinance institutions in the 21st century to meet financial needs and aspirations (Minishi, 2017; Ngugi, 2017), the importance of reliable financial reporting cannot be overstated. Financial reporting conveys both financial and non-financial information to stakeholders, helping them make informed decisions (Akintoye, 2018; Meigns, 2018; Whittington, 2017). It also facilitates performance evaluation, resource allocation, and accountability, making it indispensable for organizational sustainability (Better, 2008; Akintoye, 2017).

Closely linked to financial reporting is database management. Bhojaraju and Koganurmath (2016) define database management as the systematic storage and maintenance of records that enable efficient data retrieval for decision-making. Modern organizations, including SACCOs, increasingly rely on computerized database management systems to enhance efficiency and accuracy in financial operations (Singh, 2017; Kumar, 2016). Databases not only streamline reporting but also support better decision-making and improved financial output (Kule et al., 2022).

In Uganda, government poverty alleviation initiatives and financial inclusion programs have contributed to the growth of SACCOs (Mugenyi, 2017). Mbarara City, one of the country's major urban centers, hosts a significant number of SACCOs. Despite this growth, many SACCOs in the area are struggling financially. Reports from the Micro Support Centre Mbarara Zonal Office (2020–2021) and the Mbarara City Commercial Office (2021) highlight alarming trends: loan portfolio at risk increased from 75% in 2019 to 83% in 2020, loan recovery rates remained at only 44% compared to a benchmark of 90%, and liquidity ratios dropped from 43% to 38% against the recommended 50%. Between 2018 and 2021, more than 18 SACCOs in Mbarara ceased operations (UMSC Annual Reports, 2020).

These challenges point to the urgent need to examine the role of database management and financial reporting in shaping the financial performance of SACCOs. While literature underscores the importance of these two factors, most studies have focused on large financial institutions, leaving a gap in the context of SACCOs in developing countries like Uganda. This study, therefore, sought to bridge this gap by investigating how database management

and financial reporting influence the financial performance of SACCOs in Mbarara City. This paper presents the relationship between Database management and the financial performance of SACCOs in Mbarara City South Division.

Significance of the Study.

The findings from the study shall help the management teams of SACCOs to reassess systems and design appropriate strategies for improving triggers of financial performance.

The study findings shall guide policy makers such as the Government and Donors in designing policies on how to improve performance of SACCOs.

The study findings shall be used by scholars and academicians as a source of reference for further research. The findings of this study shall act as a source of reference in further studies and spark off further research in banking and performance of SACCOs.

Literature Review

Database Management and Financial Performance of SACCOs

Efficient database management is increasingly recognized as a key driver of financial performance among Savings and Credit Cooperative Organizations (SACCOs). Studies have highlighted that well-maintained and organized databases reduce operational costs and enhance the effectiveness of financial management processes (Smith et al., 2015). Tasks such as transaction processing, reporting, and financial analysis become more streamlined, resulting in time and resource savings. High- financial data, ensured through practices such as data cleansing, normalization, and validation, is essential for accurate and reliable decision-making (Jones, 2018).

Furthermore, effective database management contributes to risk mitigation and regulatory compliance. By maintaining comprehensive and up-to-date financial records, SACCOs can monitor internal controls, track financial transactions more effectively, and comply with regulatory frameworks like Sarbanes-Oxley (SOX) and Basel III (Patel et al., 2016). Integration between database systems and financial management software is also vital. Research shows that seamless integration improves operational efficiency and financial outcomes by enhancing data flow, automation, and financial reporting (Brown & Clark, 2017).

The adoption of advanced technologies such as Big Data analytics, cloud computing, and artificial intelligence has transformed database management. These innovations offer improved data processing, real-time insights, and stronger data security (Wang et al., 2020). Additionally, effective database systems support financial performance

measurement by enabling SACCOs to track key performance indicators (KPIs), benchmark against industry standards, and identify areas needing improvement (Chen et al., 2019).

Database management also supports predictive analytics and financial forecasting. By analyzing historical data, SACCOs can develop models to forecast trends in revenue, sales, and market demand, thus making more informed strategic decisions (Kumar & Gupta, 2018). Moreover, customer relationship management is enhanced through the use of customer data stored in databases, allowing SACCOs to personalize services, improve satisfaction, and retain clients (Lee et al., 2020).

Given the growing volume and sensitivity of financial data, ensuring data security and privacy has become a top priority. Research emphasizes the importance of best practices such as encryption, access control, and audit trails to protect financial databases from breaches and comply with regulations like the General Data Protection Regulation (GDPR) and CCPA (Zhang & Li, 2021).

Methodology

The study employed a descriptive cross-sectional research design with a quantitative approach to examine the relationship between database management, financial reporting, and financial performance of SACCOs in Mbarara City South Division. A sample of 56 SACCOs was determined from a target population of 65 registered SACCOs using Krejcie and Morgan's (1970) table. One respondent, either a SACCO manager or loan officer, was purposively selected per institution, given their knowledge of the study variables. Simple random sampling was applied to select the SACCOs from the city's registry.

Primary data were collected through self-administered questionnaires structured on a four-point Likert scale, covering demographic details and the study variables. Secondary data were obtained from UBOS, Bank of Uganda, and city commercial reports to complement the primary data. The variables were measured using established scales: database management (data integrity, security, backup/recovery), financial reporting (accuracy, completeness, timeliness), and financial performance (liquidity, profitability, loan portfolio). Instrument validity was ensured through expert review and pretesting, yielding a content validity index (CVI) above 0.6, while reliability analysis using Cronbach's alpha showed coefficients above 0.7, confirming internal consistency.

Data were processed using the Statistical Package for Social Sciences (SPSS v.20). Descriptive statistics such as frequencies, percentages, means, and standard deviations were computed. Correlation analysis was conducted to examine the relationships among variables, and multiple regression analysis was employed to assess the combined

predictive effect of database management and financial reporting on financial performance. Ethical considerations were strictly observed, including obtaining informed consent, ensuring confidentiality and anonymity, voluntary participation, and adherence to institutional research ethics guidelines.

Results

Response rate

Although the targeted sample size was 56 SACCOS, only 46 responded and returned the questionnaires, which gave a response rate of 82%. The response rate was adequate to provide reliable data and findings since it is above three-quarters (75%) as recommended by Oman (2013).

Demographic and SACCO Characteristics

To present demographic and SACCO characteristics, frequency tabulations were used to indicate variations of respondents based on level of education, marital status, age of respondent, gender, position held, years of employment, years of existence of the SACCO, number of branches, number of meetings held, amount of loan portfolio, number of members, registration status and number of employees. The demographic characteristics were presented based on the responses in Table 1 & 2.

Table 1: Demographic characteristics

Variable	Frequency	Percent
Gender		
Male	25	54.3
Female	21	45.7
Total	*46*	*100*
Age		
18-28yrs	18	39.1
29-39yrs	19	41.3
40-49 yrs	9	19.6
50 yrs+	0	0
Total	*46*	*100*
Marital status		
Single	10	21.7
Married	36	78.3
Total	*46*	*100*
Highest level of education		
Certificate	4	8.7
Diploma	13	28.3
Degree	24	52.2
Masters	4	8.7
Others	1	2.2

Total	*46*	*100*
Position held in your SACCO		
SACCO Manager	21	45.7
Loans manager	25	54.3
Total	*46*	*100*
Time spent working in the SACCO		
Less than 1yr	0	0
1-5yrs	17	37
5-10yrs	15	32.6
10yrs+	14	30.4
Total	*46*	*100*

The demographic characteristics of the respondents showed that the majority were male (54.3%), while females accounted for 45.7%. Most respondents were under the age of 40, with 39.1% aged 18–28 years and 41.3% aged 29–39 years, reflecting Uganda's youthful workforce composition. Additionally, most respondents were married (78.3%), while only 21.7% were single, suggesting stronger representation of more socially and economically stable individuals in SACCO leadership and operations.

Regarding education, the results revealed that over half (52.2%) of the respondents held a degree, followed by diploma holders (28.3%). A smaller proportion possessed a master's degree (8.7%) or certificates (8.7%), while 2.2% fell into other categories. These findings indicate that respondents were generally well-educated and capable of understanding and responding accurately to the survey. In terms of roles, loan managers (54.3%) slightly outnumbered SACCO managers (45.7%), suggesting a balanced representation of both administrative and operational perspectives in the study.

With respect to work experience, 37% of respondents had served in their SACCOs for 1–5 years, 32.6% for 5–10 years, and 30.4% for over 10 years, while none had worked for less than one year. This distribution demonstrates that most respondents had significant professional experience, equipping them with adequate knowledge of database management and financial practices relevant to SACCO performance.

Table 2: SACCO characteristics

Variable	Frequency	%
Registration Status		
Yes	44	95.7
No	2	4.3
Total	**46**	**100**

SACCO's existence in years		
Less than 5 yrs	6	13
5-10 yrs	11	23.9
10-15yrs	21	45.7
15yrs+	8	17.4
Total	**46**	**100**
Meetings are held by the SACCO per month		
Less than 2	12	26.1
2+	34	73.9
Total	**46**	**100**
Branches of the SACCO		
Less than 3	4	8.7
3-5	19	41.3
5+	23	50
Total	**46**	**100**
Members of the SACCO		
Less than 50	3	6.5
50-100	21	45.7
100+	22	47.8
Total	**46**	**100**
How many employees does the SACCO have?		
1-5	0	0
5-10	7	15.2
10-20	24	52.2
20+	15	32.6
Total	**46**	**100**
Source of funding that contributes the largest part towards the SACCO's funding		
Savings	7	15.2
Loans	11	23.9
Micro Finance Support Centre	12	26.1
Donations & Grants	16	34.8
Total	**46**	**100**
Amount of money available to be offered for loan		
Less than shs.100, 000,000	4	8.7
shs.100, 000,000 - shs.600, 000,000	23	50
shs.600, 000,000+	19	41.3
Total	**80**	**100**

The majority of SACCOs in the study were formally registered (95.7%), with only a small proportion unregistered (4.3%). Most had been in existence for over five years, with 45.7% operating for 10–15 years and 17.4% for more than 15 years, indicating institutional maturity. Regular meetings were common, with 73.9% of SACCOs holding at least two meetings per month, demonstrating active governance practices.

Half of the SACCOs had more than five branches (50%), while 41.3% operated three to five branches, showing widespread reach. In terms of membership, 47.8% of SACCOs had more than 100 members and 45.7% had between 50 and 100 members, confirming strong community participation. Staffing levels were also relatively high, with the majority employing 10–20 workers (52.2%) and an additional 32.6% employing more than 20 workers, reflecting organizational capacity to support operations.

Regarding funding, donations and grants formed the largest source for 34.8% of SACCOs, followed by the Microfinance Support Centre (26.1%), loans (23.9%), and member savings (15.2%). Loanable funds varied, with 50% of SACCOs holding between UGX 100 million and UGX 600 million, while 41.3% managed over UGX 600 million. These findings indicate that most SACCOs were well-capitalized and had diverse funding sources to sustain financial activities.

Table 3: Correlation matrix results

Correlation Matrix

Variables	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*
Data backup -1	1											
Data security – 2	.255*	1										
Data integrity – 3	.309**	.567**	1									
Database management -4	.665**	.553**	.915**	1								
Completeness – 5	.271	.924**	.521**	.523**	1							
Accuracy – 6	.074*	.256	.370*	.322*	.204	1						
Timeliness – 7	.251**	.312*	.356*	.386**	.215	.586**	1					
financial Reporting -8	.270**	.689**	.565**	.557**	.661**	.787**	.789**	1				
Loan portfolio – 9	.114**	.313*	.289*	.282	.287	.399**	.501**	527**	1			
Liquidity – 10	.149**	-0.069	.038	.093	-0.052	.355*	.293*	.257	.302*	1		
Profitability – 11	.388**	-0.055	.094	.238	-.201	.302*	.231	.135	.180	.274	1	
Financial performance – 12	.305**	.077	.194	**.281***	.007	.495**	.475**	**.424****	.676**	.768**	.679**	1

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).

Database Management and Financial Performance of SACCOS in Mbarara city south Division Uganda.

There is a weak positive significant relationship between database management and financial performance in Mbarara city south Division Uganda ($r=0.281$, $p<.05$). This implies that any positive change in database management is associated with a positive change in financial performance of Mbarara city south Division Uganda. In addition, all the components of database management which include; data backup, data security and data integrity have a positive significant relationship with financial performance. Furthermore, the measures of financial performance which include; loan portfolio, liquidity and profitability have a positive significant relationship with database management.

Discussion of Results

Database Management and Financial performance of SACCOS in Mbarara city south division, Uganda.

The findings from this study reveal a notable and statistically significant positive relationship between database management practices and financial performance among SACCOs in Mbarara City South Division, Uganda. The Pearson's Linear Correlation coefficient ($r = .281$, $p < .01$) indicates a weak but meaningful positive correlation between these two variables. This suggests that improvements in database management, such as accurate data entry, data security, timely updates, and integration of financial systems, are associated with enhanced financial performance. As SACCOs improve how to manage financial and member data, they are more likely to experience better resource utilization, more accurate financial reporting, and an improved profitability levels.

Research supports the view that effective database management is essential to enhancing the reliability and timeliness of financial information, which in turn strengthens overall financial performance (Zhang & Wang, 2018). High- data management ensures the integrity, accuracy, and completeness of financial records, reducing the risk of errors, fraud, and misstatements. According to MM Hassan et al. (2020), organizations that implement robust database validation and quality control mechanisms are better equipped to generate reliable financial reports, which foster stakeholder trust and contribute to stronger financial outcomes.

Moreover, real-time database systems can support agile decision-making by enabling managers to access current financial data and performance metrics instantly. Delfino and Berrila (2020) found that such systems allow institutions to identify trends, assess risks, and make timely strategic decisions capabilities that are vital for improving financial results and maintaining a competitive edge. The ability to harness

updated financial data not only boosts operational efficiency but also enhances responsiveness to member needs and regulatory requirements.

Additionally, the role of database management in ensuring compliance with financial regulations cannot be understated. Bartolacci et al. (2021) emphasize that proper database systems help institutions comply with standards such as IFRS and local financial reporting guidelines, which strengthens investor confidence and mitigates risks. For SACCOs, compliance with regulatory framework is crucial to sustaining credibility and attracting new members, thereby driving financial growth.

Effective database management also reduces information asymmetry, a key factor in improving financial decision-making and lowering the cost of capital. According to Zhang and Wang (2019), well-maintained financial databases contribute to market efficiency by ensuring that reliable information is readily available to stakeholders. This transparency improves investor confidence and can lead to lower borrowing costs and improved access to external funding.

Furthermore, the long-term financial resilience depends on how well firms manage their financial data. Liu et al. (2021) argue that institutions prioritizing earnings transparency and robust database systems are better prepared to weather financial shocks, adapt to regulatory changes, and ensure continuity in service delivery. For SACCOs in dynamic and resource-constrained environments, such resilience is critical for maintaining membership and expanding services.

Conclusion

The findings of the study revealed a positive and statistically significant relationship between database management and financial performance ($r = .281$, $p < .05$). This correlation, although weak, indicates that improvements in database management practices are associated with better financial outcomes for SACCOs. Furthermore, the regression results confirmed that database management is a significant predictor of financial performance (Beta = 0.388, $p < .01$). Therefore, the study concludes that effective database management contributes positively to the financial performance of SACCOs in Mbarara City South Division.

Recommendations

Since the study established that database management significantly influences financial performance ($\beta = 0.388$, $p < 0.05$), SACCOs should invest in modern database management systems that support real-time

data processing, secure backups, and user-friendly interfaces. Such investments will enhance data accuracy, operational efficiency, and ultimately financial outcomes.

Given the strong role of database management in predicting financial performance, SACCOs should regularly train their staff on proper data entry protocols, database usage, and security measures. Skilled personnel will minimize errors and strengthen data integrity, thereby boosting the quality of financial decisions and performance.

The results highlight the importance of reliable and well-managed data for financial sustainability. SACCOs should therefore implement formal data governance frameworks to ensure accountability, compliance with regulatory standards, and protection of member data. This will reduce risks that could undermine financial performance.

Limitations of the Study

Geographical Scope. The study was limited to SACCOs within the South Division of Mbarara City, which may not fully represent SACCOs in other regions of Uganda with differing technological or operational capacities.

The study used self-administered questionnaires with close ended questions and this likely limited the amount of data to be collected.

The study used samples of 56 SACCOs from Mbarara City, yet Mbarara city has many SACCOs. The results are expected to be different as compared to when the whole population is to be studied.

The study used cross sectional research design which generalizes the data of the sample to the bigger population hence it is likely to have an implication on the findings and conclusion of the study

Self-Reported Data. The reliance on self-reported data from SACCO staff may have introduced response bias, especially on sensitive issues related to financial systems and internal controls.

Authors' abbreviations

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Authors' contributions

The authors of this manuscript made the following contributions to this manuscript: Concept: **KRM**, conceived the concept; Data collection: **KRM**; Data analysis: First draft: **KRM**, **BW**, **BM**. Final revision: **KRM**, **BW**, **BM**. Read and approved final manuscript: **KRM**, **BW**, **BM**.

Competing interests

The authors declare that they have no competing interests.

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