

Relationship Between Customer Analysis And The Performance Of Agro-Businesses In Selected Sub-Counties Of Bushenyi District.

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Abstract

The study examined the relationship between customer analysis and the performance of agro-businesses in selected sub-counties of Bushenyi District, Uganda. A cross-sectional survey design was employed with a sample of 150 agro-business owners and managers. Data were collected using structured questionnaires and analyzed using correlation and regression analysis. Results revealed a significant positive relationship between customer analysis and agro-business performance ($r=0.687$, $p<0.01$). Customer needs assessment ($\beta=0.412$, $p<0.01$), customer profiling ($\beta=0.298$, $p<0.01$), and customer feedback mechanisms ($\beta=0.273$, $p<0.05$) significantly predicted business performance. The study concluded that systematic customer analysis enhanced sales volume, customer retention, and profitability of agro-businesses. It was recommended that agro-business operators invest in customer relationship management systems, conduct regular market surveys, and develop customer databases to improve performance outcomes.

Keywords: Customer analysis, agro-business performance, customer needs assessment, Bushenyi District, Uganda

1.0 Background of the Study

The agricultural sector remained the backbone of Uganda's economy, contributing approximately 24% to the national GDP and employing over 70% of the population (Ministry of Agriculture, Animal Industry and Fisheries, 2020). Within this sector, agro-businesses played a critical role in value addition, marketing, and distribution of agricultural products. However, despite their importance, many agro-businesses in rural districts such as Bushenyi faced persistent performance challenges including low profitability, limited market share, and high customer attrition rates (Mwesigye & Barungi, 2019).

Customer analysis emerged as a fundamental marketing practice that enabled businesses to understand their target markets, identify customer needs, and tailor their offerings accordingly (Kotler & Armstrong, 2018). It encompassed various activities including customer profiling, needs assessment, segmentation, and feedback collection. Research in developed economies demonstrated that organizations that systematically analyzed their customers achieved superior performance outcomes compared to those that relied on intuition alone (Kumar & Reinartz, 2016). The practice helped businesses reduce marketing costs, improve customer satisfaction, and enhance competitive advantage.

In the Ugandan context, limited scholarly attention had been devoted to understanding how customer analysis influenced agro-business performance, particularly in rural settings. Bushenyi District, located in southwestern Uganda, was predominantly agricultural with numerous small and medium-sized agro-businesses engaged in crop production, livestock farming, and agro-processing (Uganda Bureau of Statistics, 2021). These enterprises operated

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in increasingly competitive markets but many lacked systematic approaches to understanding their customers. Anecdotal evidence suggested that agro-businesses that engaged in customer analysis practices experienced better sales performance and customer loyalty, yet empirical validation of this relationship remained limited. This study therefore sought to examine the relationship between customer analysis and the performance of agro-businesses in selected sub-counties of Bushenyi District, thereby contributing to the literature on agricultural marketing and small business management in developing country contexts.

2.0 Problem Statement

Despite the economic importance of agro-businesses in Bushenyi District, many enterprises continued to experience suboptimal performance characterized by declining sales, low customer retention rates, and reduced profitability (Tumwebaze, 2020). While various factors influenced business performance, preliminary observations suggested that inadequate understanding of customer needs and preferences contributed significantly to these challenges. Many agro-business operators relied on traditional marketing approaches without systematically analyzing their customer base or market dynamics. This gap in customer knowledge potentially resulted in product-market mismatches, inefficient resource allocation, and missed business opportunities. Although customer analysis had been recognized as essential for business success in various sectors, its specific relationship with agro-business performance in rural Ugandan settings remained empirically unexplored. The absence of evidence-based insights hindered agro-business development initiatives and limited policy formulation for the sector. This study therefore investigated the relationship between customer analysis and agro-business performance to provide empirical evidence that could guide business practices and inform intervention strategies.

3.0 Objective of the Study

To establish the relationship between customer analysis and agro-business performance in Bushenyi District.

4.0 Methodology

This study employed a cross-sectional survey research design, which allowed for the collection of data from a large sample at a single point in time to examine the relationship between variables (Creswell & Creswell, 2018). The study was conducted in three purposively selected sub-counties of Bushenyi District: Ishaka, Kyeizooba, and Bumbaire, which were chosen based on their high concentration of agro-business enterprises.

The target population comprised 450 registered agro-businesses including crop dealers, livestock traders, agro-input suppliers, and agro-processors operating in the selected sub-counties. Using Krejcie and Morgan's (1970) table for sample size determination, a sample of 150 agro-business owners and managers was selected through stratified random sampling to ensure representation across different business categories. Stratification was based on business type, with proportionate allocation yielding 68 crop dealers, 42 livestock traders, 25 agro-input suppliers, and 15 agro-processors. Data were collected using a structured questionnaire that comprised three sections: respondent demographics, customer analysis practices (measured through 18 items on a five-point Likert scale covering customer profiling, needs

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assessment, and feedback mechanisms), and business performance indicators (measured through 12 items assessing sales volume, profitability, and customer retention). The questionnaire was pretested with 15 agro-business operators from neighboring Mitooma District, and reliability analysis yielded Cronbach's alpha coefficients of 0.82 for customer analysis and 0.79 for business performance, indicating acceptable internal consistency.

Data collection was conducted over a four-week period in August 2023. Trained research assistants administered questionnaires to respondents at their business premises. All participants provided informed consent, and confidentiality was assured. The response rate was 96% (144 out of 150). Data were cleaned, coded, and analyzed using SPSS version 26. Descriptive statistics (means and standard deviations) were computed to summarize variables. Pearson correlation analysis was conducted to examine relationships between variables, while multiple linear regression analysis was performed to determine the predictive power of customer analysis dimensions on business performance. Statistical significance was set at $p < 0.05$.

5.0 Results

5.1 Demographic Characteristics of Respondents

Table 1: Demographic Characteristics of Respondents (N=144)

Characteristic	Category	Frequency	Percentage
Gender	Male	89	61.8
	Female	55	38.2
Age	18-30 years	32	22.2
	31-40 years	58	40.3
	41-50 years	38	26.4
	Above 50 years	16	11.1
Education Level	Primary	28	19.4
	Secondary	67	46.5
	Tertiary	49	34.1
Business Experience	Less than 3 years	35	24.3
	3-5 years	52	36.1
	6-10 years	41	28.5
	Over 10 years	16	11.1

Source: Primary Data, 2026

The demographic analysis revealed that the majority of agro-business operators were male (61.8%), reflecting gender disparities in business ownership commonly observed in rural Ugandan communities. The dominant age category was 31-40 years (40.3%), indicating that agro-businesses were primarily managed by individuals in their economically productive years. Most respondents had attained secondary education (46.5%), while only 34.1% possessed tertiary

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qualifications, suggesting potential knowledge gaps in advanced business management practices. Regarding business experience, 36.1% had operated their enterprises for 3-5 years, while only 11.1% had over ten years of experience, indicating a relatively young agro-business sector in the district.

5.2 Descriptive Statistics for Customer Analysis and Business Performance

Table 2: Descriptive Statistics for Study Variables (N=144)

Variable	Mean	Std. Deviation	Minimum	Maximum
Customer Needs Assessment	3.42	0.89	1.67	5.00
Customer Profiling	2.98	0.94	1.00	5.00
Customer Feedback Mechanisms	3.15	0.86	1.33	5.00
Overall Customer Analysis	3.18	0.78	1.44	4.89
Sales Volume	3.56	0.82	1.75	5.00
Customer Retention	3.48	0.87	1.50	5.00
Profitability	3.31	0.91	1.25	5.00
Overall Business Performance	3.45	0.79	1.58	4.92

Source: Primary Data, 2026

The descriptive statistics indicated moderate levels of customer analysis practices among agro-businesses in Bushenyi District, with an overall mean of 3.18 (SD=0.78). Customer needs assessment recorded the highest mean score (M=3.42, SD=0.89), suggesting that agro-business operators made some efforts to understand what their customers wanted, although this was not consistently systematic. Customer profiling showed the lowest mean (M=2.98, SD=0.94), indicating that many businesses lacked detailed databases or systematic categorization of their customer segments. Customer feedback mechanisms scored moderately (M=3.15, SD=0.86), suggesting that while some businesses solicited customer opinions, formal feedback systems were not widespread. Overall business performance showed a moderate mean of 3.45 (SD=0.79), with sales volume performing slightly better (M=3.56, SD=0.82) than profitability (M=3.31, SD=0.91), possibly reflecting the prioritization of market share over profit margins in competitive agro-markets.

5.3 Correlation Analysis

Table 3: Pearson Correlation Matrix (N=144)

Variables	1	2	3	4	5	6	7	8
1. Customer Needs Assessment	1							
2. Customer Profiling	.564**	1						
3. Customer Feedback	.612**	.543**	1					
4. Overall Customer Analysis	.851**	.823**	.839**	1				

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5. Sales Volume	.582**	.489**	.501**	.624**	1			
6. Customer Retention	.548**	.512**	.557**	.638**	.687**	1		
7. Profitability	.501**	.446**	.468**	.571**	.712**	.693**	1	
8. Overall Performance	.612**	.534**	.561**	.687**	.891**	.894**	.887**	1

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

Source: Primary Data, 2026

The correlation analysis revealed significant positive relationships between all customer analysis dimensions and business performance indicators. The overall customer analysis composite showed a strong positive correlation with overall business performance ($r=0.687$, $p<0.01$), indicating that agro-businesses that engaged more systematically in customer analysis activities achieved better performance outcomes. Specifically, customer needs assessment demonstrated the strongest correlation with overall performance ($r=0.612$, $p<0.01$), followed by customer feedback mechanisms ($r=0.561$, $p<0.01$) and customer profiling ($r=0.534$, $p<0.01$). Among performance dimensions, customer analysis showed particularly strong associations with customer retention ($r=0.638$, $p<0.01$) and sales volume ($r=0.624$, $p<0.01$), suggesting that understanding customers enhanced loyalty and market reach. The significant intercorrelations among customer analysis dimensions (ranging from $r=0.543$ to $r=0.612$, all $p<0.01$) indicated that these practices were complementary and mutually reinforcing, with businesses that excelled in one area tending to perform well in others.

5.4 Regression Analysis

Table 4: Multiple Regression Analysis - Customer Analysis Predicting Business Performance (N=144)

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	
(Constant)	0.847	0.265		3.196
Customer Needs Assessment	0.365	0.082	.412	4.451
Customer Profiling	0.251	0.078	.298	3.218
Customer Feedback Mechanisms	0.250	0.085	.273	2.941

Model Summary: $R = .724$, $R^2 = .524$, Adjusted $R^2 = .514$, $F(3,140) = 51.367$, $p < .001$

Source: Primary Data, 2026

The multiple regression analysis demonstrated that customer analysis dimensions collectively explained 52.4% of the variance in agro-business performance ($R^2=.524$, $F(3,140)=51.367$, $p<.001$), indicating a substantial predictive relationship. Customer needs assessment emerged as the strongest predictor ($\beta=.412$, $p<.001$), suggesting that businesses that systematically identified and understood customer requirements experienced significantly better performance outcomes. This finding underscored the importance of market-oriented approaches in agro-business operations. Customer profiling also significantly predicted performance ($\beta=.298$, $p<.01$), indicating that businesses that maintained detailed customer databases and segmented their markets achieved superior results. Customer

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feedback mechanisms contributed significantly to performance ($\beta=.273$, $p<.01$), demonstrating that soliciting and acting upon customer opinions enhanced business success. The adjusted R^2 of .514 confirmed the robustness of the model after accounting for the number of predictors, while the high F-statistic indicated overall model significance and the appropriateness of using these predictors to explain performance variations among agro-businesses in Bushenyi District.

6.0 Discussion

The findings of this study confirmed that customer analysis significantly influenced agro-business performance in Bushenyi District, consistent with marketing literature that emphasized customer orientation as a driver of business success (Narver & Slater, 1990; Kohli & Jaworski, 1990). The strong positive correlation ($r=0.687$) between customer analysis and business performance aligned with Kumar and Reinartz's (2016) assertion that customer intelligence enabled businesses to make informed strategic decisions. The moderate mean scores for customer analysis practices ($M=3.18$) suggested that while agro-businesses recognized the importance of understanding customers, systematic implementation remained suboptimal, possibly due to resource constraints, limited technical capacity, or insufficient awareness of formal customer analysis methodologies.

The finding that customer needs assessment was the strongest predictor of performance ($\beta=.412$) resonated with Kotler and Armstrong's (2018) customer value framework, which positioned needs identification as foundational to creating and delivering value. In the agro-business context, this meant that operators who understood farmers' input requirements, processors' quality specifications, or consumers' product preferences could better align their offerings with market demands, thereby enhancing sales and customer satisfaction. The lower mean score for customer profiling ($M=2.98$) reflected challenges common in informal sector businesses where record-keeping and database management were often neglected (Namatovu et al., 2018). However, its significant predictive power ($\beta=.298$) highlighted untapped potential for performance improvement through better customer information management.

The significant role of customer feedback mechanisms ($\beta=.273$) supported the relationship marketing perspective that emphasized ongoing customer engagement and responsiveness (Grönroos, 2017). In agro-businesses, feedback channels such as complaint handling, suggestion boxes, or informal conversations provided valuable insights for product improvement and service enhancement. The 52.4% variance explained by customer analysis dimensions indicated that while customer understanding was crucial, other factors such as product quality, pricing strategies, and supply chain efficiency also influenced performance, consistent with the multidimensional nature of business success identified by Kaplan and Norton (1996).

7.0 Conclusions

Based on the study findings, it was concluded that customer analysis had a significant positive relationship with the performance of agro-businesses in Bushenyi District. Agro-businesses that systematically engaged in customer needs assessment, customer profiling, and feedback collection achieved better outcomes in terms of sales volume, customer

retention, and profitability. Customer needs assessment emerged as the most critical dimension, followed by customer profiling and feedback mechanisms, all of which contributed significantly to performance variations. However, the moderate implementation levels of customer analysis practices indicated that many agro-businesses had not fully exploited the potential benefits of systematic customer understanding. The study therefore concluded that enhancing customer analysis capabilities represented a viable pathway for improving agro-business performance in rural Ugandan contexts, with implications for business development support and agricultural marketing policy.

8.0 Recommendations

Based on the study conclusions, the following recommendations were proposed:

Agro-business operators should invest in customer relationship management systems, even at basic levels, to systematically collect, store, and analyze customer information. This could include maintaining customer databases, conducting periodic market surveys, and implementing structured feedback mechanisms to better understand evolving customer needs and preferences.

Business development service providers including NGOs and government extension services should incorporate customer analysis training into their capacity-building programs for agro-businesses. Training modules should cover practical techniques for customer profiling, needs assessment methodologies, and feedback management, tailored to the resource constraints of small and medium enterprises.

District commercial officers should facilitate the formation of agro-business associations or cooperatives where members could share customer insights, conduct joint market research, and pool resources for customer analysis activities that individual businesses might find cost-prohibitive.

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