

Strategic Role of CRM Service Delivery Management in Enhancing Competitiveness of Private Universities in Kenya

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Abstract

This study evaluated the strategic role of Customer Relationship Management (CRM) service delivery management in enhancing the competitiveness of private universities in Kenya. Specifically, it examined the effects of administrative responsiveness, communication, customer service management, student support management, and complaint handling on institutional competitiveness. The study was anchored on CRM Theory, Relationship Marketing Theory, and the SERVQUAL model. A mixed methods approach using a convergent parallel design was adopted, integrating quantitative and qualitative data. The target population comprised 36 private universities, with a sample of 204 respondents drawn from 17 institutions using stratified and purposive sampling techniques. Data were collected through questionnaires, interviews, and focus group discussions. Quantitative data were analysed using descriptive and inferential statistics, while qualitative data were analysed thematically. The findings revealed that all CRM service delivery dimensions significantly influence competitiveness, jointly explaining 60 per cent of the variance. Thematic analysis revealed that communication and access to career services emerged as the most influential factors. The study concludes that CRM service delivery management is a critical strategic driver of competitiveness in private universities, supported by institutional alignment, resource readiness, and staff commitment. It affirms the applicability of CRM Theory, SERVQUAL, and Relationship Marketing Theory in the higher education context. The study recommends adopting integrated, student-centred CRM systems, supported by technological interoperability, to enhance service quality, stakeholder engagement, and long-term institutional competitiveness.

Key terms: Competitiveness, CRM customer service management, CRM service management, customer relationship management (CRM), student support management.

INTRODUCTION

CRM service delivery management refers to the structured coordination of institutional processes, technologies, and stakeholder interactions aimed at improving service quality, engagement, and long-term relationships within organisations (Gil-Gomez et al., 2020). In higher education, CRM systems support the management of the entire student lifecycle—from recruitment to alumni engagement—through integrated communication, feedback mechanisms, and personalised service delivery (Kaur & Singh, 2021). This alignment of institutional processes with stakeholder needs enhances service responsiveness, operational efficiency, and student satisfaction, which are key determinants of institutional competitiveness (Soltani, 2018).

Globally, universities are increasingly adopting CRM as a strategic tool for enhancing student engagement, retention, and institutional performance. The integration of digital technologies such as automation, analytics, and multichannel communication has enabled institutions to deliver timely, personalised, and data-driven services (Zawacki-Richter et al., 2019). Evidence shows that effective CRM implementation improves competitiveness by strengthening relationships, enhancing service quality, and fostering student loyalty (Gil-Gomez et al., 2020). However, its effectiveness varies across institutional contexts, particularly in resource-constrained environments.

In Africa, CRM adoption in higher education remains uneven. While some institutions are leveraging CRM systems to improve communication and service delivery, many still face challenges such as inadequate infrastructure, limited technical capacity, and weak institutional alignment (Khan et al., 2022; Nathalie, 2022). These challenges limit the ability of CRM to fully enhance institutional competitiveness.

In Kenya, the higher education sector is increasingly competitive due to rising enrollment, expansion of private universities, and heightened expectations for service quality (Government of Kenya, Ministry of Education, 2024). Private universities are under pressure to improve administrative responsiveness, communication, customer service, student support, and complaint handling through CRM systems (Nguyen, 2012). However, existing studies have largely

focused on CRM adoption and general performance outcomes, with limited emphasis on CRM service delivery management as a multidimensional construct and its direct influence on competitiveness.

This study, therefore, contributes to theory and practice by extending CRM theory, Relationship Marketing Theory, and SERVQUAL in higher education. It provides empirical evidence to guide policymakers and university managers in improving service quality, student experience, and institutional competitiveness.

Private universities in Kenya operate in a highly competitive environment characterised by increasing student expectations, expansion of institutions, and pressure to enhance service quality and performance. Despite growing demand for higher education, many institutions continue to experience low enrollment growth, declining retention rates, and limited market share, raising concerns about their long-term competitiveness (Government of Kenya, Ministry of Education, 2024).

Although CRM is widely recognised as a strategic tool for improving student engagement, service quality, and institutional performance, its implementation in many private universities remains fragmented, technology-centred, and weakly aligned with service delivery processes (Nguyen, 2012). As a result, institutions are unable to fully leverage CRM to enhance administrative responsiveness, communication, customer service, student support, and complaint handling—critical dimensions of service delivery that influence competitiveness.

Furthermore, existing empirical studies have not sufficiently examined CRM service delivery management as an integrated construct, nor its combined effect on competitiveness in Kenyan private universities. This creates a contextual and conceptual gap in understanding how specific service delivery dimensions collectively drive institutional competitiveness.

Therefore, this study investigates the strategic role of CRM service delivery management in enhancing the competitiveness of private universities in Kenya by examining administrative responsiveness, communication, customer service management,

student support management, and complaint handling.

The general objective of the study is to evaluate the strategic role of CRM service delivery management in enhancing the competitiveness of private universities in Kenya. Specifically, the study seeks to describe the effect of administrative responsiveness on the competitiveness of private universities in Kenya, establish the impact of communication on the competitiveness of private universities in Kenya, measure the effect of customer service management on the competitiveness of private universities in Kenya, analyse the role of student support management in the competitiveness of private universities in Kenya, and evaluate the effects of complain handling on competitiveness of private universities in Kenya.

The study is guided by the following hypothesis: H_0 : Strategic CRM service delivery management has no significant effect on enhancing the competitiveness of private universities in Kenya.

LITERATURE REVIEW

Theoretical Foundation of CRM in Higher Education

This study is grounded in Relationship Management Theory, Customer Relationship Management (CRM) Theory, and SERVQUAL Theory, which collectively emphasise the development of long-term relationships through trust, service quality, and personalised engagement. These theories argue that sustained institutional competitiveness is achieved when organisations consistently deliver value through responsive communication, relationship-building strategies, and high-quality service delivery (Morgan & Hunt, 1994; Soltani, 2018). In higher education institutions (HEIs), CRM is therefore conceptualised as a strategic approach that integrates people, processes, and technology to enhance student satisfaction, loyalty, and institutional performance.

CRM Systems Integration and Institutional Efficiency

CRM systems in HEIs function as integrated platforms that connect core institutional systems such as student information systems (SIS), learning management systems (LMS), enterprise resource planning (ERP), and finance systems. This integration enhances data flow, operational coordination, and

decision-making efficiency (Karimi, 2001; Kaur & Singh, 2021). Digital transformation through CRM further improves institutional performance by enabling data-driven management and streamlined service delivery processes. Empirical evidence also suggests that CRM capabilities significantly contribute to organisational performance and competitiveness in educational institutions (Gil-Gomez et al., 2020).

CRM and Communication Management

Effective communication is a central pillar of CRM in HEIs, enabling real-time engagement across multiple stakeholder groups. CRM platforms facilitate omnichannel communication through email, SMS, social media, chatbots, and web portals, improving responsiveness and information accessibility (Khan et al., 2022). Additionally, integrated communication systems eliminate data silos and promote institutional coordination, thereby improving service efficiency and stakeholder satisfaction. Automation of communication processes further enhances institutional responsiveness and consistency in information delivery.

CRM in Service Delivery and Automation

CRM systems significantly enhance service delivery by automating administrative and student-facing processes such as admissions, inquiries, and academic support. Customer service automation improves efficiency, reduces workload, and increases response accuracy (Zawacki-Richter et al., 2019). Service quality is further enhanced through structured CRM systems that support timely and personalised service provision, which directly influences student satisfaction and institutional competitiveness (Zeithaml et al., 1996). These systems also support continuous improvement by tracking service performance and user interactions.

Student Support and Experience Management

CRM plays a critical role in enhancing student experience through personalised support systems and proactive engagement strategies. Data-driven CRM tools enable institutions to monitor student behaviour, identify at-risk students, and provide timely interventions that improve retention and satisfaction (Kuh et al., 2008). In addition, digital support systems such as self-service portals and automated helpdesks improve accessibility and responsiveness. In the Kenyan context, CRM adoption has been linked to

improved student satisfaction and engagement in universities (Richardson, 2005).

CRM in Marketing, Recruitment, and Student Lifecycle Management

CRM systems support the entire student lifecycle from recruitment to alumni engagement. Marketing automation enables institutions to segment prospective students, analyse behaviour, and deliver targeted communication across multiple channels (Ruffalo Noel Levitz, 2021). This enhances enrollment efficiency and institutional visibility. Relationship marketing strategies further strengthen student loyalty and long-term engagement with institutions (Baloch et al., 2023). These processes align CRM with strategic enrollment management and competitiveness objectives.

CRM Feedback and Complaint Management

Feedback and complaint management are essential components of CRM-driven service improvement. CRM systems enable real-time feedback collection, automated complaint tracking, and continuous service improvement mechanisms (Xin & Miao, 2022). These systems enhance institutional responsiveness and ensure that student concerns are addressed promptly. Effective feedback systems contribute to improved service quality and institutional reputation (Richardson, 2005).

Critical Review of Literature

While existing literature confirms that CRM improves service delivery, communication, and student satisfaction, most studies focus on operational efficiency and academic support systems. Less attention has been given to how CRM influences broader competitiveness outcomes such as institutional positioning, holistic student engagement, and long-term stakeholder relationships (Nguyen, 2012; Mwangi et al., 2025).

Additionally, although CRM systems enhance administrative and academic processes, their role in supporting non-academic dimensions of student experience remains underexplored. These include emotional well-being, peer relationships, confidence development, and social integration within the university environment.

The key gap identified in the literature is the limited empirical focus on how CRM service delivery management influences the holistic student experience, particularly non-academic dimensions such as emotional support, social integration, and student well-being. Existing studies predominantly emphasise academic support, recruitment, and retention, with insufficient attention to the socio-emotional aspects of student life. This study, therefore, seeks to address this gap by examining how CRM service delivery management contributes to student experience and enhances the competitiveness of private universities in Kenya through both academic and non-academic support systems.

METHODOLOGY

This study adopted a pragmatic philosophical stance, integrating positivist and interpretivist approaches within a mixed-methods framework to examine CRM service delivery management in private universities in Kenya (Creswell & Creswell, 2023). A cross-sectional descriptive research design was employed to capture data at a single point in time. The target population comprised 36 accredited private universities in Kenya and key stakeholders, including registrars, deans of students, marketing and ICT managers, deans of schools, and student leaders (Mwangi et al., 2025).

Using Cochran's formula, 17 universities were selected through stratified random sampling, while purposive and convenience sampling were used to identify knowledgeable and accessible respondents (Schindler, 2019; Bell et al., 2022). The final sample comprised 204 respondents drawn from registrars, deans of students, marketing managers, ICT managers, deans of schools, and student leaders. Data were collected using structured questionnaires, interview schedules, and focus group discussions, enabling triangulation of findings (Saunders et al., 2019).

A pilot test involving two universities (not included in the final sample) was conducted to enhance validity, while reliability was assessed using internal consistency measures (Creswell & Creswell, 2023). Quantitative data were analysed using SPSS version 30, employing descriptive statistics, Pearson correlation, ANOVA, and multiple regression analysis to test relationships and hypotheses at a 95 per cent confidence level. Qualitative data were analysed

thematically to generate patterns and contextual insights that complemented quantitative results (Creswell & Creswell, 2023). Ethical considerations included obtaining approval from relevant institutional authorities, securing informed consent, ensuring voluntary participation, and maintaining confidentiality, anonymity, and data protection throughout the study process.

The data was cleaned, prepared and coded to identify any missing or incomplete responses and detect the outliers.

This section presents the demographic profile and response characteristics of the study participants. It is

crucial in establishing the validity and reliability of the data collected. These include response rate, respondent composition by designation and experience levels within the institution. Understanding the respondents and the context of their perspectives on CRM ensures balanced representation across strategic, analytical and operational roles.

Response Rate and Composition

The table below summarises the number of targeted respondents versus actual responses received across three data collection instruments: questionnaires, interviews, and focus group discussions (FGDs).

Table 1: Response Rate and Composition

Instrument / Category	Target Respondents	Responses Received	Response Rate (%)	% Of Total Respondents
Questionnaire (Total)	85	70	82.3	37.0
Interviews	34	34	100	18.0
Focus Groups (Students)	17 groups × 5 = 85	85	100	45.0
TOTAL	204	189	93.0	100.0

Source: Mwangi et al., (2025).

The overall response rate was 93 per cent, indicating high participant engagement. All targeted participants for interviews and focus group discussions responded, while the questionnaire achieved an 82.35 per cent return rate.

Reliability Test

Cronbach's Alpha was used to assess the reliability.

Table 2: Cronbach's Alpha Coefficient (N=70)

Focus / Construct	Cronbach's Alpha	No. of Items
Administrative responsiveness	0.832	7
Communication	0.850	9
Customer service management	0.813	7
Student support management	0.873	5
Complain handling	0.845	5

All constructs yielded a Cronbach's Alpha coefficient value of over 0.8. This indicates a high level of internal

consistency among the items. According to Schindler (2019), a value of $\alpha \geq 0.7$ is acceptable.

Table 3: Common Tools Used for Communication and Engagement

Tool/Platform	Uses
Face-to-face interactions	Commonly used throughout
Email	Widely used across departments
WhatsApp and Mobile phones Application	Formal and informal real-time communication
Student/Staff Portals (LMS, ERP)	Academic and administrative tasks
Zoom / Google Meet / Microsoft Teams	Virtual classes and meetings
Social media (Facebook, X & LinkedIn)	Outreach, marketing, and alumni engagement
Chatbots / Live Chat	Handling inquiries

The table reveals that communication in private universities integrates both traditional and digital tools. Face-to-face communication continues to be highly valued by faculty and administrative staff, particularly for handling complex and strategic matters. Higher Education Policy Institute (2020) emphasises the importance of face-to-face interactions in maintaining institutional cohesion. Digital platforms such as emails and university portals—particularly Learning Management Systems (LMS) and Enterprise Resource Planning (ERP) systems—have become indispensable tools for formal communication and Service management. These systems support administrative tasks, academic scheduling and learning resources. This aligns with the findings of Xin & Miao (2022) who highlight the strategic importance of integrated digital platforms in modern academic institutions.

Instant messaging tools like WhatsApp and mobile phones are commonly used to support informal, formal and real-time communication. Zawacki-Richter et al. (2019) noted that such mobile applications are

well-suited to digitally native users. Virtual meeting platforms such as Zoom, Google Meet and Microsoft Teams facilitate remote teaching, meetings, administrative collaboration and geographically dispersed engagements. These platforms have redefined academic communication by enhancing accessibility and reducing logistical issues.

Social media platforms such as Facebook, Twitter (X), and LinkedIn are predominantly used for marketing, outreach and alumni relations. They contribute to institutional visibility and stakeholder engagement. Chatbots and live chat are emerging technologies used to manage inquiries, particularly in admissions, marketing, tracking complaints, and providing feedback. Though their adoption remains limited, these tools represent the future of automated, user-centred communication.

Factor Analysis

To examine the latent dimensions underlying CRM service delivery management in private universities, Exploratory Factor Analysis (EFA) was carried out.

Table 4: Factor Analysis for CRM Service Delivery Management

CRM Service delivery management Items	Administrative	Communication	Support & Engagement	Complaint & Feedback
Automation of administrative functions	0.814			
Timely updates and alerts		0.742		
Multiple channels communication		0.787		
Personalized communications		0.721		
Proactive tracking students' behaviour			0.769	
Students support			0.754	
Complaints and timely responses				0.813

Table 5: Total Variance Explained

Component	Initial Eigenvalue	% of Variance	Cumulative %
Administrative	2.913	29.61%	29.61%
Communication	1.562	22.31%	51.92%
Support & Engagement	1.029	14.70%	66.62%
Complaint & Feedback	1.016	12.13%	78.75%

Table 6: KMO and Bartlett's Test

Measure	Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy	0.828
Bartlett's Test of Sphericity Approx. Chi-Square	874.276
Df	21
Sig.	0.021

Rotation Method: Varimax with Kaiser Normalisation
 Rotation converged in 5 iterations. KMO value of 0.828 exceeds the recommended threshold of 0.50 (Creswell & Creswell, 2023), indicating that the sample size and data were suitable for factor analysis. The significant Bartlett's test ($\chi^2 = 874.276$, $df = 21$, $p < 0.05$) confirms the presence of sufficient correlations among variables (Neuman, 2020). Principal Component Analysis with Varimax rotation extracted four main components with eigenvalues above 1, accounting for a cumulative 78.75 per cent of the total variance. This

indicates that these components effectively represent the key dimensions of CRM service delivery management (Saunders et al., 2019).

Descriptive Statistics: CRM Service Management and Competitiveness

Descriptive statistics were used to rate how various CRM service delivery management indicators predicted the competitiveness of private universities in Kenya.

Table 7: Descriptive Statistics of CRM Service Management Indicators (N= 70)

Service delivery management Process	CRM Service delivery management Indicator	Mean	SD
Administrative	Administrative automation	4.34	0.41
	Timely updates on academic and cocurricular	4.09	0.73
Communication	Multichannel engagement via portable devices	4.36	0.64
	Personalized communication via CRM	2.91	1.30
Customer Service	Data-driven personalized academic guidance	3.00	1.27
Support and Engagement	Early intervention for support needs	2.89	1.28
Complaint Handling	Tracking complaints and prompt responses	3.26	1.13

Results demonstrate that administrative automation ($M = 4.34$), multichannel engagement through portable devices ($M = 4.36$), and timely updates on academic and cocurricular matters ($M = 4.09$) are the most highly rated CRM Service delivery management practices among private universities in Kenya. These findings suggest that institutions are investing significantly in scalable, technology-driven platforms that enhance communication and streamline administrative processes. Such digital transformation through device-agnostic engagement and real-time

updates not only supports operational efficiency but also improves student satisfaction, thereby strengthening institutional competitiveness. This aligns with relationship marketing theory, which emphasises maintaining long-term relationships through dynamic, multichannel communication (Hennig-Thurau et al., 2002). The findings are further supported by recent studies that highlight the strategic role of CRM technological systems in higher education (Soltani, 2018; Grant & Anderson, 2002; Khan et al., 2022).

Conversely, lower mean scores in personalised communication ($M = 2.91$), data-driven academic guidance ($M = 3.00$), and early intervention for students with support needs ($M = 2.89$) point to significant gaps in individualized Service management. Lower ratings suggest that universities are less responsive to students' personal academic and welfare needs, which may hinder their ability to foster loyalty and retention.

Moderate rating for complaint tracking and responsiveness ($M = 3.26$) highlights only partial effectiveness in feedback resolution, a key driver of student trust and engagement. CRM theory posits that robust customer (student) engagement and service recovery mechanisms are critical for building lasting institutional relationships. These shortfalls may limit the strategic advantage of universities seeking to differentiate themselves in a competitive market.

Assumption for Regression Model Testing

Regression analysis was used to investigate the statistical relationship between the dependent and explanatory variables. The robustness and validity of the regression results depend on the extent to which

key Ordinary Least Squares (OLS) model assumptions are satisfied (Creswell & Creswell, 2023). Consequently, prior to conducting the regression analysis and hypothesis testing, diagnostic procedures were undertaken to assess the assumptions of normality, linearity, autocorrelation, multicollinearity, and homoscedasticity. Validation of these assumptions ensures the robustness of the regression model and reliability of the statistical inferences drawn from the analysis.

Normality Test of Study Variables

To ensure the appropriateness of parametric statistical procedures such as regression and correlation, normality tests were conducted. The Shapiro-Wilk test, Skewness and Kurtosis statistics, was used to evaluate whether the distribution of each construct approximated normality. According to Bell et al. (2022), values of skewness within ± 1 and kurtosis within ± 3 are considered acceptable for the assumption of normality. A Shapiro-Wilk test p-value greater than 0.05 is considered within the recommended threshold of normal distribution (Neuman, 2020).

Table 8: Shapiro-Wilk, Skewness and Kurtosis Normality Test Results (N = 70)

Main Variable Construct	No. of Indicators	Shapiro-Wilk (p)	Skewness	Kurtosis
CRM Service Management	7	0.089	-0.49	-0.60

According to Neuman (2020) and Bell et al. (2022), the results indicate all variables fall within the acceptable thresholds for normality.

Linearity Test

To evaluate the assumption of linearity of the data, the study adopted the Analysis of Variance (ANOVA) method. Bell et al. (2022) corroborate that a p-value less than 0.05 suggests a linear model is appropriate for analysing the relationship between the dependent and independent variables.

Table 9: ANOVA Test for Linearity

Variables	Sum of Squares	df	Mean Square	F	Sig.
Private universities Competitiveness * CRM Service management					
- Linearity	49.23	1	49.23	71.43	0.020

The p-value were below the 0.05 threshold, indicating statistically significant linear relationships between private university competitiveness and CRM service delivery management ($F = 71.43, p < 0.05$).

Multicollinearity test

Multicollinearity test was conducted using Variance Inflation Factor (VIF) and Tolerance Test. The results are tabulated below.

Table 10: Multicollinearity Diagnostics Table (N = 70)

Predictor Variable	VIF	Tolerance
CRM Service management	1.37	0.730

VIF value is 1.37. These are below the critical threshold of 5.0, conventionally used to detect high multicollinearity. Tolerance values are all > 0.2 , confirming sufficient independence among predictors (Schindler, 2019). These results confirm that no serious multicollinearity.

Heteroscedasticity

The Breusch-Pagan test was conducted to detect heteroscedasticity in residuals (non-constant error/residual variance).

Table 11: Breusch-Pagan Test for Heteroscedasticity on CRM (N = 70)

CRM Dimension / Variable	Test Statistic (χ^2 / LM)	df	p-value
CRM Service delivery management	6.09 (χ^2)	7	0.331

The p-value is 0.331. They are above 0.05 critical threshold, indicating no violation of the homoscedasticity assumption in the model. This aligns with statistical guidelines provided by Creswell and Creswell (2023), confirming that variance in residuals is

stable across the data points if the p-values are above 0.05.

Autocorrelation Test

The Durbin-Watson statistic was used to test autocorrelation.

Table 12: Durbin-Watson statistic: Autocorrelation Test on CRM Dimensions (N = 70)

CRM Dimension	Durbin-Watson (DW)
CRM Service management	1.92

The table indicates there was no significant autocorrelation in the CRM variables. Durbin Watson statistics value was 1.92, which is within the acceptable range of 1.5 to 2.5 (Creswell & Creswell, 2023). This suggests the residuals are independent and the model is statistically sound and appropriate for inferential statistics.

Inferential Statistics

Inferential statistics is a set of methods that allow researchers to draw conclusions and make predictions about a population based on data collected from a sample. It enables the researcher to make generalisations beyond the observed data (Schindler, 2019). In this study, inferential statistics were conducted using Pearson correlation, multiple

regression analysis, ANOVA and hierarchical regression.

Pearson Correlation Analysis

Pearson Correlation Coefficient analysis (r) was used to evaluate the strength and direction of the linear relationship between CRM service delivery management and the competitiveness of private universities in Kenya.

Table 13: Pearson Correlation Analysis

		FC	CRMSD
Firm Competitiveness (FC)	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	70	
CRM Service Delivery Management (CRMSD)	Pearson Correlation	.598**	1
	Sig. (2-tailed)	.001	
	N	70	70

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

Abbreviations:

FC = Firm Competitiveness

CRMSD= CRM Service Management

The results reveal strong, positive, and statistically significant correlations between all CRM Service delivery management variables and competitiveness of private universities ($r = .598$), $p < .05$. These results suggest that CRM service management contributes directly to enhanced competitiveness. This finding supports CRM theory, which emphasises that relationship management is a tool for improving institutional performance, satisfaction, and loyalty (Gil-Gomez et al., 2020). CRM systems, in particular, facilitate personalised student interactions, improving institutional appeal and performance.

The findings further align with Relationship Marketing Theory, which stresses long-term value co-creation through sustained interaction and engagement (Hennig-Thurau et al., 2002; Hansen, 2001). The positive link with Service delivery management also reflects principles of the SERVQUAL model, which highlights responsiveness, reliability and assurance as key service quality dimensions that influence stakeholder perceptions (Kamalanabhan, 2016).

Multiple Linear Regression

Multiple linear regression examined the strength of each CRM service delivery management predictor on the competitiveness of private universities. It also aimed to assess whether the constructs are statistically significant.

Table 14: Coefficient Estimates: CRM Service Delivery Management on Competitiveness (N = 70)

Predictor	Unstandardized Coefficients (B)	Std. Error	Standardized Coefficients (Beta)	t	Sig. (p)
(Constant)	1.05	0.364	—	2.88	0.006
Automation of Administrative	0.32	0.113	0.35	2.83	0.002
Timely Updates	0.28	0.104	0.31	2.69	0.009
Multichannel Engagement	0.36	0.113	0.39	3.18	0.002
Personalized Communication	0.17	0.118	0.18	1.44	0.154
Academic Guidance	0.12	0.101	0.14	1.19	0.239
Early Intervention	0.10	0.098	0.11	1.02	0.312

a Dependent Variable: Competitiveness of Private Universities

Model Summary: $Y = 1.05 + 0.32AAF + 0.28TU + 0.36MCE + 0.17PC + 0.12AG + 0.10EI + 0.23CT + 0.364$

Where:

- CPU = Competitiveness of Private Universities
- AAF = Automation of Administrative Functions
- TU = Timely Updates
- MCE = Multichannel Engagement
- PC = Personalised Communication
- AG = Academic Guidance
- EI = Early Intervention
- CT = Complaint Tracking
- ϵ = Error Term (residual)

The strongest predictor is multichannel engagement ($\beta = .36$), followed by automation of administration functions ($\beta = .32$), then timely updates ($\beta = .28$). This

confirms Karimi, (2001) proposition on the importance of integration and centrality of real-time communication in CRM efficacy in institution of higher learning. Complain tracking and prompt response is also has relatively strong impact and its statistically significant ($\beta = .23$, $p = 0.038$).

Variables like personalized communication, academic guidance and early intervention had lowest beta and were not statistically significant. This aligns with earlier descriptive results showing these services are inconsistently executed and likely under-resourced—echoing CRM theory's warning about relationship management breakdowns in the absence of personalization (Morgan & Hunt, 1994).

Table 15: Model Summary (N = 70)

R	R ²	Adjusted R ²	Std. Error	F	Sig.
0.776	0.602	0.567	0.61	17.04	.001

The results indicate 60.2 per cent of the variance in competitiveness of private universities in Kenya is explained by CRM service delivery management ($R^2 = 0.602$), with a significant F-test ($p < .05$), indicating strong model fit.

Hierarchical Regression

Hierarchical Regression was conducted to examine the incremental contribution of CRM personalisation variables and tracking student complaints and queries to communication variables.

Table 16: Hierarchical Regression Summary (N = 70)

Model Block	R ²	ΔR^2	F Change	Sig. Change
Block 1: Communication (2 vars)	0.467	—	—	—
Block 2: Personalization (3 vars)	0.556	0.089	4.23	.001
Block 3: Complaint monitoring	0.602	0.046	3.19	.038

The first block is composed of three communication variables—automation of administrative functions, timely updates, and multichannel engagement—and explained 46.7 per cent of the variance, with subsequent blocks contributing incremental explanatory power. The addition of personalisation variables (track student performance, provide proactive personalised support tailored to individual needs and identify students who need additional social, financial or emotional support and provide early interventions) improved R^2 by 8.9 per cent, while complaint tracking added 4.6 per cent, both statistically significant improvements.

These results highlight effective communication through automation, timely updates, and multichannel

engagement forms as foundational infrastructure to quality personalised service management. Personalisation and complaint resolution are built on communication, ultimately enhancing service quality and Soltani, 2018). This also supports both CRM theory that emphasises two-way and transparent communication as the foundation of building long-term trust (Gil-Gomez et al., 2020), and SERVQUAL dimensions of empathy and responsiveness frameworks (Zeithaml et al., 1996).

ANOVA Summary

The ANOVA was used to test whether the regression model significantly predicts the competitiveness of private universities. It was used to show how well regression model fits the overall data.

Table 17: ANOVA Summary (N = 70)

Source	df	SS	MS	F	Sig.
Regression	4	53.682	13.421	26.89	.001
Residual	65	32.417	0.499		
Total	69	86.099			

The ANOVA results indicate that the overall regression model predicted the competitiveness of private universities in Kenya. The regression model is statistically significant and has strong explanatory power (F Statistics (4, 65) = 26.89, $p < 0.05$). The findings are grounded in SERVQUAL theory that explains how perceived service quality dimensions directly influence student satisfaction and retention (Zeithaml et al., 1996). Relationship Marketing Theory supports the need for ongoing interactions and institutional trust-building (Morgan & Hunt, 1994), all of which are evident in the model. The multi-linear model demonstrates strong alignment with CRM and service quality theories, justifying its practical application in strategic planning for institutional growth and differentiation in higher education.

FINDINGS AND DISCUSSION

Thematic Findings

Thematic findings highlighted critical issues related to CRM service delivery management within private universities in Kenya. Participants consistently reported that CRM service delivery management across private universities was inconsistent, fragmented, and overly dependent on static communication channels such as emails and physical noticeboards.

Participants emphasised that effective communication was a central component of CRM Service management, highlighting that multichannel engagement—via email, SMS, mobile applications, social media platforms, and chatbots—significantly improves both accessibility and real-time responsiveness within the university environment. Students advocated adoption of one-stop self-service

CRM platforms, noting that such technologies would empower students to manage their academic, financial, and administrative needs more efficiently. The majority also advocated for automated helpdesk or service desk portals, offering IT support, ticketing

systems, and administrative assistance, rather than relying on traditional physical customer service offices and writing unanswered Emails. They emphasised the need for digital platforms that integrate workflow automation, cross-functional communication, and real-time data exchange, which would collectively enhance institutional agility, responsiveness and student satisfaction. These preferences are consistent with Relationship Marketing Theory, which advocates for continuous value creation, two-way communication, and the development of long-term trust-based relationships.

Despite visible improvements in CRM infrastructure in some institutions, several deficiencies were reported, particularly in the provision of early intervention, personalised academic advising, career support, financial aid services, and mental health counselling. Complaints and feedback systems were largely manual, often involving in-person submissions or email correspondence. The absence of formal, digitised feedback channels limited the institutions' ability to track, respond to, and learn from student concerns in a structured and timely manner. This aligns with Soltani (2018) assertion that the lack of integrated feedback systems weakens organisational learning and continuous improvement loops in Service management.

Data Triangulation

Quantitative data indicated that CRM service delivery management, such as administrative automation ($M = 4.36$), timely updates ($M = 4.34$), and multichannel engagement ($M = 4.09$), are strong predictors of competitiveness ($\beta = .39, .35, \text{ and } .31$, respectively). These findings were echoed in qualitative analysis, where students and administrators reported improved operational efficiency and communication, reinforcing CRM's foundational role in competitiveness (Soltani, 2018).

However, personalised service aspects—academic advising, early interventions, and tailored communication—received low quantitative ratings (Mean between 2.89 and 3.00) and were not statistically significant predictors. Qualitative data revealed limited access to proactive student support and underutilization of predictive analytics, reflecting a gap in realising CRM’s full potential to enhance individualised engagement (Morgan & Hunt, 1994; Kamalanabhan, 2016).

Hierarchical regression highlighted that while communication variables explain most competitiveness variance ($R^2 = 0.467$), personalisation and complaint-tracking added smaller but meaningful contributions ($\Delta R^2 = 0.089$ and 0.046). Thematic analysis found that only 21 per cent of institutions had

formal feedback mechanisms, with complaint resolution largely manual—contradicting CRM’s promise of responsiveness and continuous improvement (Zhang et al., 2021). These findings emphasise the need for better policy alignment, capacity building, and integration to unlock CRM’s transformative potential in Service delivery management (Nguyen, 2012).

Hypothesis Testing and Interpretation

The hypothesis (H_0), CRM service delivery management does not significantly influence competitiveness. The results showed a t-value of 3.344 and a p-value of 0.002. Since the p-value < 0.05, H_0 was rejected. This confirms that CRM service delivery management contributes positively to institutional competitiveness.

Table 18: Summary of Hypothesis Testing Results

Hypothesis	Predictor	t-value	p-value	Decision	Interpretation
H_0	Service management	3.344	0.002	Reject H_0	Significant positive effect

Based on the regression results, the null hypothesis (H_0) was rejected at the 0.05 level of significance. This indicates CRM service delivery management processes have a positive and statistically significant effect on the competitiveness of private universities in Kenya.

Summary of the Findings

The study was conducted using both quantitative (questionnaires) and qualitative methods (interviews and FGDs). The study revealed that CRM service delivery management processes significantly influence the competitiveness of private universities in Kenya.

CRM service delivery management processes are a crucial driver of competitiveness in private universities in Kenya. Quantitative analyses revealed strong and statistically significant relationships between CRM service delivery management processes and competitiveness ($M=3.69$, $r = 0.598$, $\beta = 0.224$, $t(5) = 3.344$, $p = .002$). Hence, a unit improvement in CRM service delivery management while holding other factors constant will enhance competitiveness by 0.224 units. The regression model reveals that 60.2 per cent of the variation in competitiveness can be explained by Service delivery management processes. Structural path coefficient confirmed the results (β

$=0.24$, $p = .000$). Thus, the null hypothesis, H_0 : CRM service processes do not significantly influence competitiveness, was rejected.

The findings confirm that CRM service delivery management enhances institutional competitiveness by improving the efficiency, responsiveness, and quality of services offered to students and stakeholders (Kamalanabhan, 2016). Empirical literature affirms that CRM systems streamline administrative and student support workflows, optimise multichannel communication, and support timely, data-driven decision-making, which are prerequisites to student satisfaction (Zawacki-Richter et al., 2019). The full strategic value of CRM is often undercut by poor personalisation and weak feedback mechanisms, an issue echoed in this study's findings.

SERVQUAL Theory supports this by highlighting gaps between expected and perceived service—particularly in responsiveness, reliability and empathy—as barriers to competitive differentiation (Zeithaml et al., 1996). These findings align with CRM Theory, which emphasises leveraging technology to manage interactions and deliver personalised, seamless services that build long-term loyalty (Gil-Gomez et al.,

2020). Relationship Marketing Theory underscores the importance of consistent quality Service delivery management in fostering strong institutional relationships in critical touchpoints (Morgan & Hunt, 1994; Hennig-Thurau et al., 2002). Mwangi & Mutai (2022) support that private universities in Kenya must invest in user-centred, feedback-driven CRM systems to foster trust, satisfaction, and long-term value co-creation to realise their full strategic potential.

CONCLUSION AND RECOMMENDATIONS

Conclusion: CRM service delivery management was identified as a significant driver of competitiveness. Administrative responsiveness, multichannel communication and targeted support services, such as career development, are strengthened by effective service delivery. However, proactive support for emotional and mental health, academic advising, financial guidance, and complaint handling remains underdeveloped. These findings are supported by SERVQUAL theory, particularly the dimensions of reliability, assurance, and empathy, emphasising the importance of delivering consistent, trustworthy, and responsive services (Zeithaml et al., 1996).

They also resonate with RMT, which underscores relational commitment and engagement as mechanisms for long-term competitive advantage (Morgan & Hunt, 1994). Strengthening service delivery management enhances operational efficiency, student satisfaction, and long-term stakeholder loyalty.

Recommendations: Universities should improve student experience by adopting integrated CRM service delivery management-driven strategies. These include strengthening multichannel communication (email, WhatsApp, SMS) to ensure timely and consistent interactions, enhancing accessibility and service quality perceptions (Kamalanabhan, 2016). Institutions should also prioritise service personalisation by integrating academic, financial, and well-being support within CRM systems to address diverse student needs and improve satisfaction.

Automating administrative processes like enrollment and payments can boost efficiency, though it should be balanced with human-centred service elements such as empathy and responsiveness (Gil-Gomez et al., 2020). Finally, establishing structured feedback and

complaint systems enables continuous improvement, builds trust, and strengthens long-term relationships with students, in line with Relationship Marketing Theory (Morgan & Hunt, 1994; Hennig-Thurau et al., 2002).

Application of the Study

This study contributes to CRM theory by showing that the strategic use of CRM service management systems in higher education enhances institutional competitiveness through personalised services. It emphasises that CRM should be viewed not merely as a technological tool but as a strategic organisational resource that integrates systems, human capital, and institutional processes to achieve sustainable competitive advantage.

The findings highlight that universities can create long-term value when CRM is aligned with institutional goals, supported by leadership, and adequately resourced. A key implication is the importance of fostering long-term relationships with students, which increases student lifetime value through cross-selling (additional courses) and up-selling (future studies). Satisfied students also act as brand ambassadors, improving institutional reputation and attracting new students, consistent with CRM theory (Gil-Gomez et al., 2020).

Grounded in Relationship Marketing Theory, the study demonstrates that trust, commitment, value co-creation, and long-term orientation are essential for sustaining strong institutional relationships. These elements strengthen emotional connections and loyalty, positioning CRM as a foundation for stakeholder retention and long-term value creation.

The application of the SERVQUAL model further explains how CRM practices enhance perceived service quality. Key dimensions—responsiveness, assurance, reliability, empathy, and tangibility—are reflected in practices such as timely communication, automated service delivery, and multichannel engagement (Zeithaml et al., 1996). These contribute directly to student satisfaction and institutional credibility.

The study advances academic understanding by linking CRM service delivery management directly to

institutional competitiveness outcomes. It identifies key operational mechanisms—administrative responsiveness, communication quality, student support, and complaint handling—as critical pathways through which CRM strategies improve service quality and institutional reputation. This provides clarity on how CRM translates into performance, addressing gaps in prior research.

Recommendation for Further Studies

Further investigation into CRM user experiences through qualitative case studies would add more knowledge to the existing literature and uncover institutions' success stories, challenges and specific best practices. Users may include administrative staff, faculty, students, alumni or even external partners and networks. This would offer practical guidance for policy and strategy implementation across diverse contexts.

REFERENCES

- Bell, E., Bryman, A., & Harley, B. (2022). *Business research methods* (6th ed.). Oxford University Press.
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE.
- Gil-Gomez, H., Guerola-Navarro, V., Oltra-Badenes, R., & Lozano-Quilis, J. A. (2020). Customer relationship management: Digital transformation and sustainable business model innovation. *Economic Research-Ekonomska Istraživanja*, 33(1), 2733–2750. <https://doi.org/10.1080/1331677X.2019.1676283>
- Government of Kenya, Ministry of Education. (2024). *Education sector report: Medium term expenditure framework 2025/26–2027/28*. National Treasury Kenya.
- Grant, G., & Anderson, G. (2002). CRM vision in higher education. In R. Katz (Ed.), *Web portals and higher education*. Wiley.
- Hansen, U. (2001). Modeling and managing student loyalty: An approach based on the concept of relationship quality. *Journal of Service Research*, 3(4), 331–344. <https://doi.org/10.1177/109467050134006>
- Hennig-Thurau, T., Gwinner, K. P., & Gremler, D. D. (2002). Understanding relationship marketing outcomes: An integration of relational benefits and relationship quality. *Journal of Service Research*, 4(3), 230–247. <https://doi.org/10.1177/1094670502004003006>
- Kamalanabhan, T. J., & Seebaluck, A. K. (2016). Measuring service quality in higher education: Development of a hierarchical model. *Quality Assurance in Education*, 24(2), 244–258. <https://doi.org/10.1108/QAE-06-2014-0028>
- Karimi, J., Somers, T. M., & Gupta, Y. P. (2001). Impact of information technology management practices on customer service. *Journal of Management Information Systems*, 17(4), 125–158. <https://doi.org/10.1080/07421222.2001.11045661>
- Kaur, H., & Singh, J. (2021). Digital transformation in higher education through CRM systems. *Education and Information Technologies*, 26, 789–805. <https://doi.org/10.1007/s10639-020-10283-4>
- Khan, M. A., Ahmed, S., & Mehmood, K. (2022). CRM communication tools and institutional efficiency. *International Journal of Information Management*, 64, 102456. <https://doi.org/10.1016/j.ijinfomgt.2021.102456>
- Kuh, G. D., Cruce, T. M., Shoup, R., Kinzie, J., & Gonyea, R. M. (2008). Unmasking the effects of student engagement on first-year college grades and persistence. *The Journal of Higher Education*, 79(5), 540–563. <https://doi.org/10.1080/00221546.2008.11772116>
- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58(3), 20–38. <https://doi.org/10.1177/002224299405800302>
- Mwangi, T. M., Maina, E., & Mwai, W. (2025). Strategic role of customer relationship management (CRM) policies in enhancing competitiveness in private universities in Kenya. *Editon Consortium Journal of Business and Management Studies*, 7(1), 78–92. <https://doi.org/10.51317/ecjbms.v7i1.637>
- Neuman, W. L. (2020). *Social research methods* (8th ed.). Pearson.

- Nguyen, B., & Mutum, D. S. (2012). A review of customer relationship management: Successes, advances, pitfalls and futures. *Business Process Management Journal*, 18(3), 400–419. <https://doi.org/10.1108/14637151211232614>
- Richardson, J. T. E. (2005). Instruments for obtaining student feedback: A review of the literature. *Assessment & Evaluation in Higher Education*, 30(4), 387–415. <https://doi.org/10.1080/02602930500099193>
- Ruffalo Noel Levitz. (2021). 2021 national student satisfaction and priorities report. RNL. <https://www.ruffalonl.com/papers-research-higher-education-fundraising/2021-national-student-satisfaction-and-priorities-report/>
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Pearson.
- Schindler, P. S. (2019). *Business research methods* (13th ed.). McGraw-Hill Education.
- Soltani, Z., Zareie, B., Milani, F. S., & Navimipour, N. J. (2018). The impact of the customer relationship management on the organization performance. *The Journal of High Technology Management Research*, 29(2), 237–246. <https://doi.org/10.1016/j.hitech.2018.10.001>
- Xin, X., & Miao, X. (2022). User participation, knowledge management capability and service innovation: E-commerce enterprises in the digital age. *Asia Pacific Journal of Marketing and Logistics*, 34(4), 629–646. <https://doi.org/10.1108/APJML-10-2020-0724>
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education. *International Journal of Educational Technology in Higher Education*, 16, Article 39. <https://doi.org/10.1186/s41239-019-0171-0>
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60(2), 31–46. <https://doi.org/10.1177/002224299606000203>