



ALIGNING EXPECTATIONS: CUSTOMER REQUIREMENTS FULFILMENT AND STUDENT SATISFACTION WITH EXAMINATIONS MANAGEMENT IN ISO 9001:2015 CERTIFIED UNIVERSITIES IN KENYA

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Abstract:

Universities in Kenya operating under ISO 9001:2015 quality management systems are expected to consistently deliver efficient, transparent, and reliable academic services that fully meet student expectations, particularly in critical processes such as examinations management. However, the current situation in many Kenyan public universities reveals persistent inefficiencies in examinations management despite ISO 9001 certification. This study, therefore, sought to examine the relationship between meeting customer requirements and student satisfaction with examinations management in ISO 9001: 2015 certified universities in Kenya. The study was guided by the Service Quality (SERVQUAL) model and Deming's Theory of Quality Management. The study adopted the convergent parallel mixed method research design and targeted final-year students and university management members in 24 ISO 9001:2015 certified universities in Kenya. Proportionate and stratified simple random sampling techniques were used to select 19 public and two private universities. Purposive sampling was used to select 76 university management members who served as the key informants, while the simple random sampling technique was used to select 380 final-year students. Both a student satisfaction questionnaire and an interview guide for the management were used for data collection.

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Quantitative data were analysed using descriptive and inferential statistical methods comprising means and standard deviations as well as bivariate regression analysis, respectively supported by SPSS version 28.0. Qualitative data were thematically analysed using NVivo 14.0 software. The study established that meeting customer requirements is a central driver of student satisfaction with examinations management in ISO 9001:2015 certified universities in Kenya. Grounded in SERVQUAL, particularly reliability and responsiveness, the findings affirm that satisfaction is achieved when services are delivered accurately, consistently, and in a timely manner. Universities should, therefore, enhance operational consistency in examinations management by standardizing processes and enforcing clear service timelines across departments.

Keywords: customer focus, meeting customer requirements, student satisfaction, examinations management, SERVQUAL

1. Introduction

1.1 Background of the Study

Customer satisfaction within the ISO 9001:2015 quality management framework is understood as the extent to which an institution consistently meets customer and regulatory requirements while enhancing stakeholder confidence in service delivery (ISO, 2015). In higher education, students are increasingly viewed as primary customers whose satisfaction depends on the quality, reliability, and responsiveness of academic and administrative services they receive (Bhardwaj *et al.*, 2020; Kirui, 2019). When institutional services align with or exceed student expectations, satisfaction is achieved; however, perceived service inconsistencies or inefficiencies often lead to dissatisfaction (Amoako *et al.*, 2023). Consequently, universities have progressively adopted quality management systems such as ISO 9001:2015 to strengthen service delivery and enhance institutional competitiveness (Gamit *et al.*, 2024; Boiyon, 2022). In this regard, meeting customer requirements has become a central pillar of institutional quality assurance, particularly in sensitive academic processes such as examinations management, where fairness, accuracy, and timeliness significantly influence student trust and institutional credibility.

ISO 9001:2015 is a globally recognized quality management system designed to ensure organizations consistently provide services that meet customer expectations while promoting continuous improvement (Anttila & Jussila, 2017; ISO, 2015). In higher education institutions, its adoption is driven by the need to improve administrative efficiency, enhance academic service delivery, and strengthen accountability systems (Kiarie, 2020; Maqbool *et al.*, 2023). The standard emphasizes key principles such as customer focus, process approach, leadership, and continual improvement, all of which are critical in shaping institutional performance (Grunwald *et al.*, 2026). When applied in universities, these principles translate into structured systems that govern academic processes such as examinations management, ensuring consistency in procedures

including examination setting, moderation, invigilation, marking, and results processing (Mulwa & Amukowa, 2022). Therefore, meeting customer requirements under ISO 9001:2015 goes beyond compliance; it reflects a deliberate institutional effort to align academic service delivery with student expectations and quality standards.

A core principle of ISO 9001:2015 is customer focus, which requires institutions to identify, understand, and consistently meet current and future customer needs (Fleming & Kowalsky, 2025). In higher education, this principle aligns closely with service quality and customer satisfaction theories, which argue that satisfaction is determined by the extent to which perceived service performance meets or exceeds expectations (Butt *et al.*, 2024; Goel, 2026). Students, as key institutional clients, expect examinations processes to be transparent, timely, and reliable, given their direct influence on academic progression and career opportunities (Kimaita *et al.*, 2023). However, increasing student awareness and rising expectations have made service delivery more demanding, requiring universities to continuously refine their systems. ISO 9001:2015 supports this by providing mechanisms for monitoring service performance, identifying non-conformities, and implementing corrective and preventive actions that enhance alignment between institutional processes and student expectations (Ahad *et al.*, 2025; Dibek, 2025).

Examinations management is one of the most critical functions in higher education because it directly determines academic success, graduation outcomes, and institutional reputation. It involves interconnected processes such as examination scheduling, question moderation, invigilation, marking, grading, and release of results, all of which require high levels of coordination and control (Mulongo, 2020; Moquillaza-Henríquez *et al.*, 2025). Despite its importance, empirical evidence shows that examinations management in many universities is often characterized by inefficiencies such as delays in releasing results, communication breakdowns, administrative errors, and inconsistent application of procedures (Mulongo, 2020; Kanori *et al.*, 2020). These challenges negatively affect student satisfaction and may undermine confidence in institutional fairness and academic integrity. Additionally, studies indicate that weak quality assurance systems in examinations management can increase vulnerability to malpractice and reduce overall service reliability (Kiura, 2023). As a result, ensuring that examinations processes meet customer requirements is essential for strengthening institutional trust and academic credibility.

Although ISO 9001:2015 implementation in higher education has increased, evidence on how meeting customer requirements influences student satisfaction in examinations management remains limited, particularly in the Kenyan context. Existing studies have largely focused on general quality management practices, institutional performance, and continuous improvement, without sufficiently isolating examinations management as a distinct service function (Andleeb & Ahmad, 2020; Ojwang & Chemwei, 2026). Furthermore, while research confirms that ISO-based quality systems improve institutional efficiency and service reliability, there is limited empirical clarity on how customer focus translates into improved student experiences in examination

processes (Mbaka *et al.*, 2017; Camango & Cândido, 2023). This is a significant gap because examinations are central to academic delivery and student progression, making them a critical indicator of perceived institutional quality. Therefore, there is a need for focused empirical investigation into how meeting customer requirements within ISO-certified universities influences student satisfaction with examinations management, particularly within Kenyan higher education institutions.

1.2 Statement of the Problem

Ideally, universities in Kenya operating under ISO 9001:2015 quality management systems are expected to consistently deliver efficient, transparent, and reliable academic services that fully meet student expectations, particularly in critical processes such as examinations management. In such an ideal situation, customer-focused quality systems should ensure minimal errors, timely release of results, accurate record-keeping, and high student satisfaction (Anttila & Jussila, 2017; ISO, 2015). Empirical evidence from Kenyan ISO-certified universities shows that effective quality management can improve student satisfaction levels significantly, with some institutions reporting student satisfaction improvements from about 76.98% to 91.17% after ISO implementation (Moturi, cited in Mbaka *et al.*, 2017). This indicates that when ISO principles are properly implemented, universities can enhance service quality and strengthen institutional trust.

However, the current situation in many Kenyan public universities reveals persistent inefficiencies in examinations management despite ISO 9001 certification. Studies show that students continue to experience delays in results processing, missing marks, and inconsistent grading systems, which negatively affect satisfaction levels (Kanori *et al.*, 2020; Kimaita *et al.*, 2023). For instance, a Commission for University Education audit reported widespread cases of examination irregularities, including missing marks and delayed transcripts, leading to student frustration and delayed graduation (Mulwa & Amukowa, 2022). In addition, some ISO-certified universities have recorded thousands of nonconformities in examination processes, indicating weaknesses in compliance and implementation of quality procedures (Andiva, 2019). These conditions suggest a gap between ISO certification and actual service delivery outcomes. Despite efforts such as ISO 9001 implementation, internal quality audits, and continual improvement initiatives, Kenyan universities continue to face challenges in fully aligning examination processes with student expectations (Boiyon, 2022; Kiarie, 2020). Although ISO frameworks emphasize customer focus and continuous improvement, evidence suggests that these principles are not consistently translated into improved student experiences in examinations management (Camango & Cândido, 2023; Maqbool *et al.*, 2023). Existing studies have largely examined ISO implementation in general administrative contexts, with limited focus on examinations as a distinct service function (Ojwang & Chemwei, 2026). Therefore, there is limited empirical evidence on how meeting customer requirements under ISO 9001:2015 directly influences student satisfaction in examinations management within Kenyan universities. This study is

necessary to address this gap and generate evidence on the effectiveness of ISO-driven quality practices in improving student satisfaction outcomes.

1.3 Objective of the Study

To examine the relationship between meeting customer requirements and student satisfaction with examinations management in universities in Kenya.

2. Literature Review

2.1 Meeting Customer Requirements in ISO 9001:2015 Certified Universities

Quality management in universities, as articulated in ISO 9000, involves coordinated activities aimed at directing and controlling institutional processes to achieve consistent quality outcomes (Mulwa & Amkowa, 2022). Within ISO 9001:2015 certified universities, this approach extends beyond general quality assurance to a deliberate focus on meeting customer requirements—specifically, the needs and expectations of students as primary service recipients. The ISO 9001:2015 standard provides a structured framework for aligning institutional processes with defined quality requirements through process standardization, documentation, and continuous monitoring (ISO, 2016). Its 2015 revision strengthened applicability to service organizations by emphasizing risk-based thinking, integration of processes, and flexibility in implementation (Anttila & Jussila, 2017). In the context of higher education, meeting customer requirements therefore entails ensuring that academic and administrative processes—such as examinations management—are consistently aligned with student expectations, thereby enhancing service reliability, transparency, and overall institutional effectiveness.

The adoption of ISO 9001:2015 in universities has increasingly been driven by the need to improve service delivery and demonstrate accountability to stakeholders. Globally and within Kenya, universities have implemented quality management systems to enhance operational efficiency, reduce process variability, and strengthen customer-focused service delivery (Hussein *et al.*, 2017; Muchai, 2023). In this context, meeting customer requirements is reflected in the ability of institutions to translate quality standards into responsive and reliable services, particularly in critical functions such as examinations management. Continuous improvement practices have been shown to enhance service reliability and reduce errors, thereby contributing to better academic service delivery (Andiva & Simatwa, 2018). However, while systems and procedures are often well established, evidence remains limited on whether these frameworks consistently translate into improved student satisfaction. This suggests that the effectiveness of ISO certification depends not only on system adoption but also on the extent to which institutions operationalize customer-focused practices in everyday service delivery.

ISO 9001:2015 explicitly emphasizes customer focus under Clause 5.1.2, requiring organizations to understand, meet, and anticipate customer needs to enhance satisfaction (ISO, 2016). In universities, this implies that management must align examination

processes with student expectations through timely communication, fair assessment practices, and responsive feedback mechanisms. Understanding customer expectations is fundamental, as satisfaction arises from the comparison between perceived service performance and expected standards (Lukong & Chingang, 2010). Consequently, institutions must not only meet but strive to exceed these expectations by continuously improving service processes. Scholars argue that effective fulfilment of customer requirements depends on accurately identifying student needs and integrating them into institutional processes (Tiyarattanachai & Phurinan, 2024). Given that students actively participate in the educational process, their expectations are dynamic and context-specific. Therefore, meeting customer requirements in ISO-certified universities requires a continuous, systematic, and responsive approach that links quality management practices directly to student satisfaction outcomes.

2.2 Service Quality Model (SERVQUAL)

The SERVQUAL model was developed by Parasuraman, Zeithaml, and Berry (1985). It provides a framework for assessing service quality based on five key dimensions: reliability, responsiveness, assurance, empathy, and tangibles. Tangibles relate to physical facilities and resources such as examination venues and infrastructure, while reliability refers to the ability of universities to deliver examination services accurately and consistently. Responsiveness focuses on timely handling of student inquiries and requests, whereas assurance reflects staff competence in building trust and confidence. Empathy emphasizes individualized attention to students' needs (Abd Rahim & Mohd Asaad, 2018; Ishak *et al.*, 2021). These dimensions collectively provide a comprehensive basis for evaluating how universities deliver examination services and shape students' perceptions of service quality.

In relation to the objective of meeting customer requirements and student satisfaction with examinations management in ISO 9001:2015 certified universities in Kenya, the SERVQUAL model offers a direct explanatory framework. Meeting customer requirements is reflected in reliability through accurate grading and adherence to examination procedures, responsiveness through timely feedback and communication, and assurance through transparent and professional service delivery. Tangibles, such as adequate examination venues and access to learning resources, further enhance satisfaction, while empathy ensures that student concerns are addressed with care (Parasuraman *et al.*, 1985; Ishak *et al.*, 2021). Therefore, the consistent operationalization of these dimensions determines how effectively universities meet student expectations. When service delivery aligns with these quality dimensions, students perceive higher service quality, which translates into increased satisfaction with examinations management.

2.3 Deming's Theory of Quality Management

Deming's Theory of Quality Management, advanced by W. Edwards Deming (1989), which is grounded in systems thinking and continuous improvement, also guided the

study. The theory posits that organizations operate as interrelated systems of processes and people, and that quality improvement requires coordinated efforts across all components. Central to this theory is the Plan-Do-Check-Act (PDCA) cycle, which emphasizes planning for quality, implementing processes, evaluating outcomes, and making necessary adjustments. Deming further underscores the importance of reducing variability, ensuring consistency in service delivery, and fostering a culture of continuous improvement. Leadership commitment, employee involvement, and customer focus are critical principles that drive quality enhancement and overall organizational performance (Wanza *et al.*, 2017; Ikram & Kenayathulla, 2023).

In the context of meeting customer requirements and student satisfaction with examinations management, Deming's theory provides a process-oriented explanation of how satisfaction is achieved. Meeting customer requirements involves embedding student needs within institutional processes through effective planning and execution. The PDCA cycle ensures that examination activities—such as scheduling, grading, and feedback—are continuously monitored and improved to enhance reliability and responsiveness. Consistent application of examination policies reduces uncertainty and strengthens trust among students. Additionally, leadership commitment to quality assurance and adequate resource provision enhances the institution's capacity to meet expectations (Deming, 1989; Ikram & Kenayathulla, 2023). Consequently, student satisfaction emerges as an outcome of continuous improvement and consistent execution of examination management processes aligned with customer requirements.

3. Methodology

3.1 Research Design

The study adopted the convergent parallel mixed-method research design to establish the relationship between customer focus and student satisfaction in examinations management in ISO 9001: 2015-certified universities in Kenya. The design helped describe the relationship between the variables of the study using both quantitative and qualitative methods. Convergent parallel mixed-methods design, according to Creswell and Creswell (2023), is a method that entails collecting quantitative and qualitative data simultaneously and analysing the two datasets separately. The findings of the quantitative and qualitative arms of the study were integrated at the interpretation stage for triangulation and cross-validation. The study was also cross-sectional in nature, providing a snapshot view of the study across the various universities in Kenya. This approach enabled the collection of large amounts of data for two or more variables that were analysed to show the association patterns across several universities at a point in time (Creswell & Creswell, 2023).

3.2 Location of the Study

The study was conducted in ISO 9001:2015-certified universities across Kenya, both public and private universities. According to the Kenya Bureau of Statistics (KEBS, 2024),

there are 21 public and 3 private universities which are ISO 9001: 2015 certified in Kenya. The universities are located in all parts of the country.

3.3 Population of the Study

The study focused on the 21 ISO 9000-2015 certified universities to provide insight regarding how effectively they have implemented the customer focus principle, as well as how the implementation of this principle has shaped student satisfaction with examination management. These were the units of analysis. University students in their final year and the university's management, particularly those concerned with examinations management and quality assurance, were also targeted as the unit of observation. Final-year students are targeted because they have interacted with their university over a long period of time and have undertaken most of the examinations; thus, they are better placed to establish satisfaction levels with examination management services offered by their universities. The universities' ISO coordinators, directors of quality assurance, registrars' academic affairs and university examination officers were also included as key stakeholders, as they had relevant information on quality management systems implementation.

3.4 Sampling Procedure and Sample Size

Sampling was conducted in several stages. First, a census was carried out for the relatively few (21) ISO 9001:2015 certified universities. The universities were then stratified into public and private universities were included in the sample because of their small numbers. Thereafter, systematic random sampling was used to select respondents from the list of final-year students in each university. Finally, purposive sampling was used to identify key informants, where officers linked to quality management system implementation in ISO 9000:2015 certified universities were selected. Cochran's (1977) formula was used to determine the sample size for final year students to be utilized in the study, as follows;

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where: Z is 1.96 (95 % confidence level), p = 0.5, q is 1 – p, and e is the margin of error (0.05). Upon substitution, the formula yielded a sample size of 380 final-year students. Subsequently, 20 final-year students and four management members were selected from each university using stratified random sampling and purposive sampling, respectively.

3.5 Research Instrumentation

The study was designed to use a questionnaire for students and interview schedules for key informants to collect both quantitative and qualitative data. The questionnaire was developed for the study to obtain quantifiable data to enable the testing of the research

hypotheses. Interview schedules helped in provision of critical access to key informants' opinions on the subject matter (Boiyon, 2022).

3.6 Pilot Test, Validity and Reliability of the Research Instruments

A pilot test of the instruments was conducted in one private and one public university to estimate the reliability of the questionnaire for students before the commencement of the actual data collection exercise. It involved 38 final year students and 8 management members. The purpose of the pilot study is to assess the relevance of the items in measuring study variables and estimate the time required to fill in the questionnaires (Anyango *et al.*, 2018). Construct validity was safeguarded by conducting a thorough review of literature on the study variables and constructs so as to develop a relevant and comprehensive measure, while Content validity was achieved using Confirmatory Factor Analysis. Further, the internal consistency method was used to test for the reliability of the instruments using Cronbach's alpha scale, with a value between 0.70 and 0.95 being regarded as valid (Ikram & Kenayathulla, 2023).

3.7 Data Analysis

Quantitative data were analysed using descriptive and inferential statistics using SPSS version 24.0. Descriptive statistics used included: frequencies, percentages, mean and standard deviation to provide the general trends of the data and subsequently the basis for inferential statistics. Inferential statistical analyses were carried out using bivariate regression analysis and were used to test the hypothesis of the study at the 0.05 level of significance (Andiva, 2019). Thematic analysis was used to analyse qualitative data using NVivo version 21. Thematic analysis is a procedure of identifying and analysing patterns in qualitative data.

4. Results and Discussion

4.1 Introduction

This section presents the data analysis results and discussions, beginning with the questionnaire response rate as shown in Table 1.

Table 1: Instrument Response Rate

Respondents	Instruments	No. Issued/ Targeted	No. Returned/ Completed	Response Rate (%)
Students	Questionnaires	382	311	81.41%
University Management	Interview Schedules	76	54	71.05%

The study achieved a high response rate from both students and university management, which supports the reliability and representativeness of the data collected. Out of the 384 questionnaires issued to students, 311 were completed and returned, yielding a response rate of 80.99%. Overall, both response rates surpassed the minimum thresholds of 60–

70% recommended for social science research (Fowler, 2013; Patten & Newhart, 2017; Baruch & Holtom, 2008), ensuring that the data collected are representative and reliable.

4.2 Meeting Customer Requirements

The relationship between meeting customer requirements and student satisfaction with examinations management in ISO 9001:2015 certified universities in Kenya was examined using indicators such as student inquiries, information provision, service claims, changes, statutory requirements, and suggestions for improvement. The findings are presented in Table 2.

Table 2: Meeting Customer Requirements

Statement	SA	A	N	D	SD	Mean	Std. Dev.
	Freq (%)	Freq (%)	Freq (%)	Freq (%)	Freq (%)		
Care for customer property such as answer scripts is guaranteed by the university	93 (29.9)	128 (41.2)	38 (12.2)	36 (11.6)	16 (5.1)	3.79	1.144
Student requests on examination matters are answered	67 (21.5)	108 (34.7)	68 (21.9)	55 (17.7)	13 (4.2)	3.52	1.135
The university provides timely information regarding examination schedules, formats, and guidelines well in advance	100 (32.2)	130 (41.8)	40 (12.9)	25 (8)	16 (5.1)	3.88	1.106
Examinations are designed to align closely with the learning objectives outlined in our course syllabus	89 (28.6)	124 (39.9)	55 (17.7)	28 (9)	15(4.8)	3.78	1.102
I have access to sufficient study materials and resources that help me prepare effectively for my examinations	91 (29.3)	107 (34.4)	60 (19.3)	37 (11.9)	16 (5.1)	3.71	1.159
The policies governing examinations (such as retakes, accommodations for special needs) are communicated clearly and are easy to understand	85 (27.3)	111 (35.7)	63 (20.3)	30 (9.6)	22 (7.1)	3.67	1.179
The grading process for examinations is fair and transparent, allowing me to understand how my performance was evaluated.	82 (26.4)	106 (34.1)	49 (15.8)	49 (15.8)	25 (8)	3.55	1.256
Online reviews are conducted on examinations management process by the university	66 (21.2)	97 (31.2)	75 (24.1)	43 (13.8)	30 (9.6)	3.41	1.235
The university staff go an extra mile to ensure that examination process is convenient and hassle free	76 (24.4)	96 (30.9)	67 (21.5)	49 (15.8)	23 (7.4)	3.49	1.226
The examination venues are spacious, well-lit and seats well arranged	110 (35.4)	108 (34.7)	45 (14.5)	28 (9)	20 (6.4)	3.84	1.190
Aggregate						3.664	1.173

The study findings in Table 2 indicate that universities have made moderate progress in meeting student expectations. Regarding protection of customer property, 41.2% of students agreed that answer scripts are well safeguarded (Mean = 3.79; S.Dev = 1.144), though 11.6% disagreed. A student (ST 10) stated, *“Provision of spacious examination*

venues, fair and transparent and timely information regarding examinations," while ST 20 noted, "They work efficiently based on making rules that govern examinations..." A Deputy Registrar (KII 11) confirmed, "There's cross checking of marking exams..." These findings indicate that safeguarding examination materials enhances trust, aligning with SERVQUAL reliability and student satisfaction theories emphasizing service evaluation and institutional credibility.

Responses to student inquiries showed mixed but generally positive outcomes, with 34.7% agreeing that inquiries are effectively addressed (Mean = 3.52; S.Dev = 1.135), while 17.7% disagreed. A student (ST 30) observed, "There is faster response to exam inquiries and transparent processes..." whereas ST 40 noted, "The administration tries to follow-up but never gives feedback." The ISO Coordinator (KII 01) stated, "We ensure exam results and inquiries are handled promptly and fairly..." However, inconsistencies in responsiveness were evident. Timely information provision was better rated, with 41.8% agreement (Mean = 3.88; S.Dev = 1.106). ST 50 stated, "Timely provision of timetables..." while ST 60 noted improved preparation. The Registrar (KII 09) emphasized, "Communication of exam timetable at least one month..." This demonstrates that proactive communication improves preparedness and reduces uncertainty, consistent with literature emphasizing responsiveness as a key driver of satisfaction.

Alignment of examinations with learning outcomes was positively rated by 39.9% of students (Mean = 3.78; S.Dev = 1.102), with 9% disagreement. A student (ST 71) stated, "exams were set to align to the learning objectives..." while ST 80 noted, "Exams are more often designed to match what has been taught..." A Quality Assurance officer (KII 16) confirmed, "Examinations are moderated at the department and faculty..." indicating institutional standardization. Access to study materials also showed moderate support, with 34.4% agreement (Mean = 3.71; S.Dev = 1.159). ST 90 stated, "Provision of ample study materials..." while ST 100 emphasized adherence to guidelines. Examination policies were moderately understood (35.7%; Mean = 3.67; S.Dev = 1.179), with ST 110 noting "flexible exam policies..." while others cited inconsistency. The Registrar (KII 13) confirmed, "There's an examination policy..." These findings indicate that while systems exist, communication and consistency determine effectiveness and satisfaction.

Fairness in grading received 34.1% agreement (Mean = 3.55; S.Dev = 1.256), though 15.8% disagreed. ST 13 stated, "The grading system needs improvement," while ST 140 noted improvement under quality management. A KII (10) explained, "There's cross checking of marking exams..." Online feedback systems were acknowledged by 31.2% (Mean = 3.41; S.Dev = 1.235), with ST 138 noting "Online reviews on the process are conducted..." while ST 161 stated, "The management doesn't follow up on feedback." A QA Officer (KII 05) indicated internal audits and corrective actions, though visibility remains low. Staff responsiveness was moderately positive (30.9%; Mean = 3.49; S.Dev = 1.226), with ST 17 noting improved attention and KII 27 emphasizing standardized processes. Examination venues were well rated (35.7%; Mean = 3.84; S.Dev = 1.190), with ST 26 highlighting "Well spaced and well-lit venues..." and KII 31 confirming structured seating arrangements. Overall satisfaction

was moderate (Mean = 3.664), reflecting strengths in infrastructure and communication but weaknesses in feedback utilization, grading transparency, and consistency.

Overall, the study reveals that the university generally meets student requirements in Examinations Management, especially regarding timely information, alignment of exams to syllabus content, provision of study resources, and well-arranged examination venues. However, areas such as feedback follow-up, grading transparency, and online review utilization require targeted improvements. Strengthening these aspects could enhance student satisfaction, promote trust, and align institutional practices with ISO 9001:2015 standards for customer focus, ultimately supporting better academic performance and institutional credibility. In conclusion, the analysis of student inquiries, provision of information, alignment of exams to learning objectives, access to resources, clarity of policies, grading transparency, online feedback, staff support, and venue adequacy indicates moderate performance in meeting customer requirements.

4.3 Student Satisfaction with Examination Management

The study also sought to establish the status of student satisfaction with examination management in ISO 9001: 2015 certified universities in Kenya as the dependent variable. This variable was measured through the indicators; student satisfaction levels and non-conformities. The findings are presented in Table 3.

Table 3: Student Satisfaction with Examination Management

Statement	SA	A	N	D	SD	Mean	Std. Dev.
	Freq (%)	Freq (%)	Freq (%)	Freq (%)	Freq (%)		
Clarity of information about examination time	113 (36.3)	135 (43.4)	34 (10.9)	18 (5.8)	11 (3.5)	4.03	1.012
Clarity of information about examination venues	115 (37)	135 (43.4)	37 (11.9)	17 (5.5)	7 (2.3)	4.07	0.953
The format in which the examinations are offered (online, physical, etc)	101 (32.5)	135 (43.4)	49 (15.8)	13 (4.2)	13 (4.2)	3.96	1.014
The quality of the invigilation process	106 (34.1)	110 (35.4)	48 (15.4)	34 (10.9)	13 (4.2)	3.84	1.135
The quality of the content of the examinations	105 (33.8)	129 (41.5)	49 (15.8)	17 (5.5)	11 (3.5)	3.96	1.017
The transparency of the grading process	87 (28)	102 (32.8)	49 (15.8)	35 (11.3)	38 (12.2)	3.53	1.331
The time within which results are released	78 (25.1)	118 (37.9)	52 (16.7)	41 (13.2)	22 (7.1)	3.61	1.197
The process of managing disputes related to examination	80 (25.7)	92 (29.6)	59 (19)	48 (15.4)	32 (10.3)	3.45	1.301
The process of recording marks	80 (25.7)	124 (39.9)	58 (18.6)	29 (9.3)	20 (6.4)	3.69	1.142
The structure of assessment (ie CATs, projects, assignments, end of semester examinations)	94 (30.2)	137 (44.1)	48 (15.4)	21 (6.8)	11 (3.5)	3.91	1.020
Quality of examination materials	95 (30.5)	145 (46.6)	43 (13.8)	21 (6.8)	7 (2.3)	3.96	0.958
Appropriateness of examination venues	102 (32.8)	123 (39.5)	40 (12.9)	31 (10)	15 (4.8)	3.86	1.128

Storage of examination scripts	85 (27.3)	108 (34.7)	65 (20.9)	32 (10.3)	21 (6.8)	3.66	1.178
Process used to release examination results	94 (30.2)	127 (40.8)	48 (15.4)	28 (9)	14 (4.5)	3.83	1.094
Overall experience with the examination process	88 (28.3)	128 (41.2)	45 (14.5)	26 (8.4)	24 (7.7)	3.74	1.180
Aggregate						3.807	1.111

The aggregate mean score was moderate (Mean = 3.807; S.Dev = 1.111), suggesting overall satisfactory but improvable performance. Regarding clarity of information about examination time and venues, students largely agreed that information was provided in a timely manner, with 43.4% agreement and 5.8% disagreement (Mean = 4.03; S.Dev = 1.012) for examination time, and 43.4% agreement and 5.5% disagreement (Mean = 4.07; S.Dev = 0.953) for venues. For the format in which examinations are offered (online, physical, or hybrid), 43.4% of students agreed and 4.2% disagreed (Mean = 3.96; S.Dev = 1.014). The quality of invigilation recorded 35.4% agreement and 10.9% disagreement (Mean = 3.84; S.Dev = 1.135), suggesting moderate satisfaction. Concerning the quality of examination content, 41.5% of students agreed and 5.5% disagreed (Mean = 3.96; S.Dev = 1.017). Transparency in grading showed lower satisfaction, with 32.8% agreement and 11.3% disagreement (Mean = 3.53; S.Dev = 1.331). Regarding the timeliness of result release, 37.9% agreed and 13.2% disagreed (Mean = 3.61; S.Dev = 1.197). The management of examination disputes scored 29.6% agreement and 15.4% disagreement (Mean = 3.45; S.Dev = 1.301). Students expressed satisfaction with assessment structure (44.1% agree; 6.8% disagree; Mean = 3.91; S.Dev = 1.020) and quality of examination materials (46.6% agree; 6.8% disagree; Mean = 3.96; S.Dev = 0.958), emphasizing that well-prepared assessments and accessible materials enhance the learning experience. Other indicators, such as appropriateness of examination venues (39.5% agreement; 10% disagreement; Mean = 3.86; S.Dev = 1.128) and storage of examination scripts (62.0% agreement; 10.3% disagreement; Mean = 3.66; S.Dev = 1.178), reflected moderate satisfaction.

Finally, regarding overall experience, 41.2% of students agreed and 8.4% disagreed (Mean = 3.74; S.Dev = 1.180). The integration of quantitative and qualitative findings shows that students are moderately satisfied with examination management in ISO 9001:2015 certified universities in Kenya (Aggregate Mean = 3.807; S.Dev = 1.111). Indicators with high satisfaction include clarity of information, assessment structure, examination format, and quality of materials, reflecting effective planning and communication. Lower satisfaction was noted in grading transparency, dispute management, and timely release of results, with recurring student concerns about missing marks, delayed feedback, and venue inadequacies. These findings imply that universities must prioritize transparent grading, responsive dispute resolution, and efficient communication to improve overall student satisfaction with examination management.

Open-ended responses revealed frustration with unresolved issues, particularly missing marks. A nursing student (ST 140) commented, *"I oftenly experience issues of missing marks and late release of examination results, clearly a lot has to be done,"* while a

business student (ST 141) stated, *"Poor handling of students concerns and complaints."* A Registrar Academic (KII 30) stated, *"Examination papers are moderated to ensure alignment with course objectives and syllabus coverage."* Similarly, a University ISO Coordinator (KII 11) noted, *"We ensure quality assurance through internal and external moderation before exams are administered."* Nonetheless, persistent issues with missing marks and delayed results continue to reduce full satisfaction. A Deputy Registrar Examinations (KII 54) stated, *"The examination system has become more structured, transparent, and efficient due to ISO-driven improvements."* These practices strengthen academic alignment and assessment quality. The findings imply that dispute management mechanisms require reinforcement to ensure fairness and reduce anxiety.

Thus, it was evident that while some universities successfully implement ISO processes, many fail to translate policies into consistent practices, leading to dissatisfaction (Kegoro & Anyango, 2020; Boiyon, 2022). This reinforces the need for empirical investigation into how customer focus affects student satisfaction in examination management, bridging the gap between standards adoption and service delivery outcomes. These findings align with Muchai (2023), who observed that post-examination services in Kenyan public universities often fail to resolve issues of missing marks and delayed results, compromising student satisfaction. According to ISO 9001:2015 principles, particularly customer focus, institutions are required to meet customer expectations in all services (Schmuck, 2021). The students' complaints suggest a gap between policy and operational practice, where the quality standards set by ISO 9001:2015 are not fully realized in examination management. The delays and errors lead to student dissatisfaction, consistent with Kandie (2019) and Khattab (2019), who link service quality directly to customer (student) satisfaction.

The students' complaints and praises directly support the extant literature on ISO 9001:2015 implementation and service quality. Missing marks, delays, unclear schedules, poor invigilation, and unfair grading mirror prior studies highlighting service quality gaps in Kenyan universities (Muchai, 2023; Mulongo, 2020). Positive feedback aligns with literature showing that adherence to ISO standards and proactive customer focus improves satisfaction (Schmuck, 2021; Amoako *et al.*, 2023). This alignment validates the rationale for investigating customer focus in examination management as a determinant of student satisfaction in Kenyan universities.

4.4 Regression Analysis

The study carried out a bivariate regression to establish the relationship between meeting customer requirements and student satisfaction with examinations management in ISO 9001: 2015 certified universities in Kenya. This was analysed using six indicators; Student Inquiries, Providing information about services, Meeting claims about the services, Handling changes, Statutory requirements, and Suggestions for improvement. The results are summarized in Table 4.

Table 4: Meeting customer requirements and student satisfaction with examinations management

Model 2 Summary		R	R Square	Adjusted R Square		Std. Error of the Estimate		
		.692a	0.479	0.478		0.57905		
ANOVA		Sum of Squares		df	Mean Square	F	Sig.	
	Regression	95.34		1	95.34	284.338	.000b	
	Residual	103.609		309	0.335			
	Total	198.949		310				
Coefficients			Unstandardized Coefficients		Standardized Coefficients		t	Sig.
			B	Std. Error	Beta			
	(Constant)		1.471	0.142			10.327	0.000
	Meeting Customer Requirements		0.638	0.038	0.692		16.862	0.000
a Dependent Variable: Student Satisfaction with Examinations Management								
b Predictors: (Constant), Meeting Customer Requirements								

The simple regression results indicate a strong and positive relationship between meeting customer requirements and student satisfaction with Examinations Management. The model summary shows a correlation coefficient of $R = 0.692$, reflecting a substantial association between the predictor and outcome variables. The coefficient of determination ($R^2 = 0.479$) suggests that 47.9% of the variation in student satisfaction is explained by meeting customer requirements. The adjusted R^2 of 0.478 confirms the robustness of the model, while the standard error of estimate (0.57905) indicates a relatively good fit, suggesting that the model predicts student satisfaction with reasonable accuracy.

The ANOVA results further demonstrate that the regression model is statistically significant. The analysis produced an F-statistic of 284.338 with a significance level of $p = 0.000$, which is well below the 0.01 threshold. This indicates that meeting customer requirements is a significant predictor of student satisfaction with Examinations Management. The regression sum of squares (95.34) is notably higher relative to the residual sum of squares (103.609), implying that a considerable portion of the variability in student satisfaction is explained by the model. These findings confirm the overall suitability and explanatory power of the regression model.

The regression coefficients reveal that meeting customer requirements has a positive and statistically significant effect on student satisfaction ($\beta = 0.692$, $p < 0.01$). The unstandardized coefficient ($B = 0.638$) indicates that a one-unit increase in meeting customer requirements leads to a 0.638-unit increase in student satisfaction. The high t-value ($t = 16.862$) underscores the strength and reliability of this relationship. This suggests that effectively addressing student inquiries, providing clear information, handling complaints, and accommodating changes significantly enhances satisfaction with examinations management in ISO 9001:2015 certified universities. In practical terms, this highlights the importance of translating expectations into actual service delivery. Timely release of results, accurate grading, effective handling of student inquiries, and clear communication of examination procedures directly influence how students

perceive the quality of services. Institutions that consistently meet these requirements are more likely to build trust and improve satisfaction outcomes.

Consequently, the null hypothesis was tested under:

H01: There is no significant relationship between meeting customer requirements and student satisfaction with examinations management in ISO 9001:2015 certified universities in Kenya.

Looking at Table 4, the beta value reveals that meeting customer requirements has a statistically significant positive link with student satisfaction ($\beta = 0.186$, $p = 0.001$). We reject the null hypothesis because the p-value falls below 0.05. Ultimately, this means that when an institution actually hits student requirements—like answering questions quickly and giving out correct details—satisfaction scores go up. Specifically, doing a better job with student inquiries, giving out accurate exam schedules, handling complaints, and meeting basic expectations directly boosts how students feel about examination management. These numbers prove that executing good customer service matters much more than just identifying what students need; real satisfaction depends on how an institution actually follows through. This idea matches up with Kotler and Keller (2016), who point out that hitting customer expectations dictates service satisfaction in schools.

These results show that meeting customer needs heavily drives student satisfaction during exam management, proving why customer focus is so central to quality management systems. This links back to classic literature defining satisfaction as what happens when service delivery matches or beats what the customer expects (Kotler & Keller, 2016; Parasuraman *et al.*, 1985). Under ISO 9001:2015 setups, schools must steadily hit customer and regulatory benchmarks to build trust in their services. Because of this, the data aligns well with work by Bhardwaj *et al.* (2020) and Kirui (2019), who both note that quick answers, clear information, and dependable academic services decide satisfaction levels. On the flip side, these findings contradict papers by Kanori *et al.* (2020) and Mulongo (2020). Those authors found ongoing dissatisfaction due to messy exam processes, which proves that execution quality changes depending on the campus.

This positive relationship also backs real-world evidence showing that practical execution—not just spotting what a customer wants—drives final satisfaction outcomes (Amoako *et al.*, 2023; Camango & Cândido, 2023). It mirrors service quality research that flags responsiveness, assurance, and reliability as the main predictors of user satisfaction (Parasuraman *et al.*, 1985; Ishak *et al.*, 2021). Even so, the data goes against research showing that an ISO badge by itself does not fix service experiences, especially if the quality systems lack real teeth (Andiva, 2019; Maqbool *et al.*, 2023). The takeaway here is that a school must truly commit to everyday, customer-first habits to see real changes. From a theoretical standpoint, this study builds onto the SERVQUAL model and Deming's quality management theory. It offers empirical proof that meeting customer requirements is the direct bridge connecting process quality to final satisfaction,

highlighting why continuous improvement and customer care matter so much in higher education.

5. Recommendations

Universities should enhance operational consistency in examinations management by standardizing processes and enforcing clear service timelines across departments. This should be supported through real-time communication, transparent grading practices, and responsive inquiry handling systems. Regular staff training and performance monitoring are necessary to ensure adherence to service standards, while feedback mechanisms should be actively used to drive continuous improvement and improve the student experience. In addition, institutions should make corrective actions more visible by showing how student feedback informs improvements in examination services. Strengthening digital platforms for inquiries, feedback tracking, and results communication will improve responsiveness, efficiency, and trust.

At the policy level, regulatory bodies should establish clear guidelines linking ISO 9001:2015 certification to measurable outcomes in examinations management, requiring universities to demonstrate both system presence and consistent implementation. Periodic audits should include student satisfaction indicators to ensure quality systems deliver tangible improvements. National higher education policy should further emphasize customer-centric quality assurance by mandating transparency in examination processes, feedback utilization, and corrective actions. Standardized benchmarks for communication timelines, grading transparency, and complaint resolution should be introduced to strengthen accountability, improve comparability across institutions, and ensure certification frameworks enhance both service delivery and student satisfaction.

Future studies should examine the moderating role of digital transformation in strengthening the relationship between customer requirement fulfilment and student satisfaction in examinations management.

6. Conclusion

The study established that meeting customer requirements is a central driver of student satisfaction with examinations management in ISO 9001:2015 certified universities in Kenya. Grounded in SERVQUAL, particularly reliability and responsiveness, the findings affirm that satisfaction is achieved when services are delivered accurately, consistently, and in a timely manner. The study also aligns with Deming's PDCA cycle by demonstrating that effective process execution translates into improved service outcomes. However, it extends these theories by emphasizing that the mere existence of quality management systems is insufficient; consistent operationalization is essential. Institutions that translate standards into visible actions—such as timely communication, fair grading, and responsive support—create more positive student experiences. Thus,

satisfaction is not only a function of system design but also of how effectively institutions implement, monitor, and continuously improve examination processes to meet evolving student expectations within structured quality assurance frameworks.

Empirical findings revealed a strong and positive relationship between customer requirement fulfilment and student satisfaction. Universities have established mechanisms such as inquiry channels, examination guidelines, and feedback systems, reflecting a commitment to customer-focused service delivery. Positive outcomes were associated with timely communication of examination schedules, alignment of assessments with course content, and adequate examination facilities, all of which enhanced preparedness and reduced uncertainty. However, inconsistencies were evident in grading transparency, responsiveness to feedback, and the practical use of complaint systems. While quality assurance structures exist, corrective actions are not always visible to students, weakening trust. The study therefore concludes that satisfaction depends not only on identifying student needs but on consistently translating them into responsive, transparent, and reliable services. Where implementation is strong, satisfaction and perceived fairness increase; where gaps persist, dissatisfaction emerges, highlighting the importance of execution, communication, and continuous improvement.

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Conflict of Interest Statement

The authors declare no conflicts of interest.

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