



SATISFACTION AND CHALLENGES OF THE REGISTRAR'S MANUAL PROCESS OF TRANSACTIONS: BASIS FOR ENHANCED MANAGEMENT SYSTEM

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ABSTRACT

This study investigated the level of satisfaction and challenges experienced by clients of the Registrar's Office at Cebu Technological University–San Francisco Campus toward its manual process of transactions, with the aim of providing an evidence-based foundation for the development of an Enhanced Registrar Management System. The study was grounded in three theoretical frameworks: the SERVQUAL Model (Parasuraman, Zeithaml, & Berry, 1985; 1988), Total Quality Management (Deming, 1986; Juran, 1988), and Republic Act No. 10173 – the Data Privacy Act of 2012. A mixed-methods research design was employed, combining descriptive quantitative approach with qualitative inquiry through open-ended survey items. A structured questionnaire was administered to 298 respondents – comprising 288 students (96.64%) and 10 faculty and staff (3.36%) – selected through simple random sampling. Data were analyzed using frequency distribution, weighted mean, standard deviation, independent samples *t*-test, and one-way ANOVA at a 0.05 level of significance. Results revealed that client satisfaction with the manual record management system was at a moderate level across most dimensions and dissatisfied in the most operationally critical areas, particularly time efficiency ($M = 2.59$, $SD = 1.32$) and accuracy ($M = 2.60$, $SD = 1.30$). Inferential analysis indicated no significant differences in satisfaction when respondents were grouped by age ($F = 0.386$, $p = 0.857$) or gender ($t = 0.412$, $p = 0.681$). However, statistically significant differences were found for client type ($t = 2.84$, $p = 0.005$) and frequency of transaction ($F = 4.36$, $p = 0.005$). The study proposes an Enhanced Registrar Management System integrating an online service portal, a centralized digital records database, automated transaction tracking, and role-based access controls.

KEYWORDS: Client Satisfaction, Digital Record Management, Manual Operations, Registrar's Office Services, Service Quality

INTRODUCTION

Effective academic administration is foundational to institutional quality, service delivery, and stakeholder satisfaction in educational environments. Manual operational practices within registrar offices continue to present significant challenges, including inefficient processes, prolonged document processing time, errors in record keeping, and limited accessibility of student information (Aquino & de Asis, 2025; Pagay-Cierva, 2024). These issues not only compromise service efficiency but also negatively affect stakeholder satisfaction and institutional performance.

In higher education institutions, the Office of the University Registrar serves as a central hub for academic administration, responsible for maintaining student academic records, facilitating enrollment processes, issuing official documents, and ensuring compliance with regulatory requirements. At Cebu Technological University (CTU)–San Francisco Campus, registrar services encompass student registration, graduation processing, issuance of transcripts of records and certifications, and the facilitation of online applications via the Registrar Portal, yet many transactions continue to involve manual verification, processing, submission, and follow-up procedures.

Despite advancements in digital record management, manual administrative operations in registrar offices remain prevalent

in many universities and are frequently associated with workflow bottlenecks, prolonged processing times, susceptibility to human error, and limited accessibility of records (Pagay-Cierva, 2024; Dada & Ogunwemimo, 2024). Research exploring registrar service quality has underscored the importance of timely, reliable, and transparent administrative practices in shaping stakeholder satisfaction (Ramirez, 2025; Picardo et al., 2025). Emerging solutions such as mobile-based record management and automated registrar systems have been shown to significantly enhance processing accuracy, reduce queues, and improve user satisfaction compared with conventional manual procedures.

Given the continued reliance on manual operations at CTU's registrar functions, there was a critical need to empirically investigate the specific challenges faced by students, faculty, and administrative personnel and their satisfaction levels with current practices. Such investigation provides the evidence base required to recommend an enhanced management system—one that aligns CTU's service delivery with contemporary standards in administrative efficiency, records integrity, and stakeholder satisfaction.

Theoretical Framework

This study was grounded on three complementary frameworks. The SERVQUAL Model (Parasuraman, Zeithaml, & Berry,



1985; 1988) evaluates service quality through five dimensions: reliability, responsiveness, assurance, empathy, and tangibles. This model has been widely used to assess service quality in higher education administrative services, indicating that gaps between expected and perceived service quality negatively impact stakeholder satisfaction (Alamri et al., 2021; Rizos, Sfakianaki, & Kakouris, 2022).

Total Quality Management (TQM), as articulated by Deming (1986) and Juran (1988), focuses on continuous improvement, employee involvement, customer orientation, and data-driven decision making. Hasan et al. (2020) demonstrated that implementing TQM in university administrative units significantly reduced procedural redundancies and enhanced service reliability. By integrating TQM principles, registrar offices can transition from manual, error-prone operations to quality-oriented, efficient, and reliable service systems.

Additionally, compliance with Republic Act No. 10173—the Data Privacy Act of 2012—is a legal framework ensuring the protection of personal information in the Philippines. Registrar operations involve handling sensitive student data, such as academic records, identification information, and enrollment details. Integrating privacy standards into registrar processes ensures personal data is collected, stored, and shared securely while maintaining service quality.

Research Objectives

Specifically, this study sought to: (1) describe the demographic profile of respondents in terms of age, gender, client type, and frequency of transaction; (2) determine the level of satisfaction among clients in the manual record management system in terms of time efficiency, accuracy, accessibility, clarity, interaction quality, and cost; (3) identify the opportunities and challenges experienced by clients; (4) examine whether significant differences in satisfaction exist based on client profile characteristics; and (5) propose improvements to enhance the registrar management system.

Respondents	Frequency (f)	Percentage (%)
Students	288	96.64%
Faculty/Staff	10	3.36%
Total	298	100%

Table 1. Distribution of Respondents

Research Instrument

The research instrument was a structured questionnaire composed of five sections. The first section gathered the demographic profile of respondents. The second section measured the level of satisfaction with the manual record management system across six service quality dimensions—time efficiency, accuracy, accessibility, clarity, interaction quality, and cost—using a 5-point Likert scale (5 = Very Satisfied, 4 = Satisfied, 3 = Moderately Satisfied, 2 = Dissatisfied, 1 = Very Dissatisfied). The third and fourth sections identified challenges and opportunities in the manual system. The fifth section consisted of open-ended questions for qualitative insights. The questionnaire underwent content validation by experts in educational administration prior to distribution, and a pilot test was conducted to assess reliability and consistency.

METHODS

Research Design

This study employed a mixed-methods research design combining a descriptive quantitative approach with qualitative inquiry through open-ended survey items (Creswell, 2014). This design allowed the researcher to collect quantitative and qualitative data simultaneously, analyze them independently, and then merge the results for comprehensive interpretation. Descriptive research was used to quantify operational inefficiencies such as processing time, document retrieval delays, and accuracy of records, and to determine how these factors influenced overall satisfaction. Qualitative inquiry provided contextual depth to the statistical findings.

Research Environment

The study was conducted at Cebu Technological University—San Francisco Campus, a public higher education institution in the Philippines mandated to provide advanced instruction, professional training, research, and extension services. The focal unit was the Campus Registrar's Office, which is responsible for the custody, processing, and issuance of academic records. At the time of the study, several core processes were conducted through manual or semi-manual systems—records were primarily maintained in physical files, logbooks, and printed forms, with limited integration of automated database management systems.

Respondents and Sampling

The respondents consisted of 298 participants (N = 298) composed of currently enrolled students of the Second Semester, Academic Year 2025–2026, as well as faculty and staff members who had direct and documented experience with the manual operations of the Registrar's Office. A simple random sampling technique was employed to ensure that only individuals who had completed at least one formal transaction during the covered academic period were included. As shown in Table 1, the majority of respondents were students (n = 288; 96.64%), while faculty and staff comprised 10 respondents (3.36%).

Data Analysis

The quantitative data were analyzed using descriptive and inferential statistical techniques. Descriptive statistics—including frequency counts, percentage distributions, weighted means, and standard deviations—were used to summarize and present respondent profiles and satisfaction levels. The weighted mean was computed using the formula $\bar{X} = \sum fX/N$. An independent samples t-test was used to determine significant differences in satisfaction between two independent groups, while a one-way ANOVA compared satisfaction levels across three or more groups. A significance level of $\alpha = 0.05$ was adopted for all hypothesis tests. Qualitative data from open-ended survey items were analyzed thematically—responses were coded, grouped into recurring themes, and interpreted in relation to quantitative findings.



RESULTS

Profile of Respondents

The age profile revealed that the majority of clients were in the 21–23 years old bracket (47.65%), confirming that the primary clientele are traditional college-aged students, followed by the 18–20 age group at 28.52%. Older age brackets (24–35 years) represented smaller proportions. In terms of gender, there were 166 female respondents (55.70%) and 132 male respondents (44.30%), reflecting a relatively balanced distribution. As to

frequency of transaction, most respondents conducted transactions once a semester (46.6%) or 2–4 times per semester (33.5%), suggesting that their evaluations were based on regular and actual service experiences.

Level of Client Satisfaction

The level of satisfaction among clients toward manual transactions in the Registrar's Office was examined across six key dimensions. Table 2 presents the grand mean scores and verbal interpretations for each dimension.

Dimension	Grand Mean	SD	Interpretation
Time Efficiency	2.59	1.32	Dissatisfied
Accuracy	2.60	1.30	Dissatisfied
Accessibility	2.72	1.27	Moderately Satisfied
Clarity	2.69	1.28	Moderately Satisfied
Interaction Quality	2.85	1.26	Moderately Satisfied
Cost	2.88	1.24	Moderately Satisfied

Table 2. Summary of Client Satisfaction Levels Across Six Dimensions

Time efficiency obtained the lowest grand mean of 2.59, falling within the Dissatisfied range, indicating that respondents commonly experienced delays in document processing, extended waiting times, and slow service delivery. Most indicators reflected dissatisfaction: waiting time before being served was rated $M = 2.55$, $SD = 1.28$ (Dissatisfied); overall speed of service rated $M = 2.59$, $SD = 1.34$ (Dissatisfied). The standard deviation values (1.28–1.35) indicate moderate variability, implying that while some respondents perceived service speed as acceptable, a substantial portion encountered inefficiencies. These findings are consistent with studies in higher education service quality that identified time-related delays as a primary driver of client dissatisfaction in registrar offices (Chavez, 2024; Osalia & Celis, 2025).

Accuracy also registered a grand mean of 2.60, at the upper boundary of the Dissatisfied range, indicating respondents encountered errors or inconsistencies in student records, issued documents, and transaction outputs. The standard deviation of 1.30 indicates moderate variability, implying that a considerable number experienced inaccuracies, highlighting weaknesses in record verification and quality control mechanisms. Anchored on the SERVQUAL model, these findings indicate a gap in the reliability dimension—the ability to perform services accurately and dependably (Parasuraman, Zeithaml, & Berry, 1988).

Accessibility obtained a grand mean of 2.72, falling within the Moderately Satisfied range. Clients experienced some difficulty in accessing services and retrieving records promptly, though physical accessibility to the office was somewhat acceptable. Clarity registered a grand mean of 2.69, also within Moderately Satisfied, indicating that some clients experienced confusion with procedures, requirements, and transaction steps. Interaction quality obtained the highest grand mean of 2.85, reflecting that staff were generally perceived as courteous, professional, and willing to assist clients. Cost registered a grand mean of 2.88, also Moderately Satisfied, suggesting that clients considered service fees generally acceptable, though some concerns regarding affordability and transparency persisted.

Opportunities and Challenges

In terms of opportunities, face-to-face interaction with staff was the most frequently cited benefit (51.3% of respondents), followed by immediate clarification of concerns (34.2%), physical verification of records (27.5%), and perceived security of tangible documents (20.5%). These results indicate that interpersonal service remains a recognized strength of the manual system. Table 3 presents the full distribution of opportunities and challenges.

Category	Indicator	Frequency (f)	Percentage (%)
Opportunity	Face-to-face interaction with staff	153	51.3%
Opportunity	Immediate clarification of concerns	102	34.2%
Opportunity	Physical verification of records	82	27.5%
Opportunity	Perceived security of tangible documents	61	20.5%
Challenge	Long waiting time	161	54.2%
Challenge	Errors or misfiling of records	120	37.2%
Challenge	Difficulty accessing records quickly	103	34.6%
Challenge	Inconsistent client service quality	92	30.9%
Challenge	Additional costs (copies, travel, etc.)	88	29.5%
Challenge	Confusing or unclear procedures	75	25.2%

Table 3. Opportunities and Challenges Experienced by Clients in the Manual Record Management System



In terms of challenges, long waiting time was the most frequently identified issue, cited by 54.2% ($n = 161$) of respondents, indicating widespread dissatisfaction with processing speed and service efficiency. Errors or misfiling of records (37.2%), difficulty accessing records quickly (34.6%), and inconsistent client service quality (30.9%) were also commonly reported. Additional costs (29.5%) and unclear procedures (25.2%) rounded out the major challenges. These findings confirm that operational inefficiencies—particularly in processing speed, record accuracy, and access—constitute the primary concerns associated with the manual system, consistent

with research documenting the limitations of manual administrative systems in academic institutions (Mendoza et al., 2022).

Significant Differences in Satisfaction Based on Client Profile

The study further examined whether significant differences in satisfaction existed based on demographic profile characteristics. Table 4 presents the inferential statistics for each profile variable.

Profile Variable	Statistical Test	F/t value	p-value	Decision
Age	One-Way ANOVA	$F = 0.386$	0.857	Fail to Reject H_0
Gender	Independent t-test	$t = 0.412$	0.681	Fail to Reject H_0
Client Type	Independent t-test	$t = 2.84$	0.005*	Reject H_0
Frequency of Transaction	One-Way ANOVA	$F = 4.36$	0.005*	Reject H_0

Table 4. Summary of Inferential Statistics on Significant Differences in Satisfaction (* $p \leq 0.05$)

The one-way ANOVA results indicated no significant difference in satisfaction when respondents were grouped by age, $F(5, 292) = 0.386$, $p = 0.857$. Satisfaction levels were consistent across all age groups, suggesting that the inefficiencies of the manual system were experienced uniformly regardless of age. The independent samples t-test also revealed no significant difference when grouped by gender, $t(296) = 0.412$, $p = 0.681$. Male respondents ($M = 2.76$, $SD = 1.18$) and female respondents ($M = 2.79$, $SD = 1.16$) reported nearly identical mean satisfaction levels, indicating that gender did not influence perceptions of service quality.

In contrast, a statistically significant difference was found when grouped by client type, $t(296) = 2.84$, $p = 0.005$. Faculty and staff reported higher mean satisfaction ($M = 3.18$, $SD = 1.05$) compared to students ($M = 2.75$, $SD = 1.16$). This finding is consistent with research demonstrating that satisfaction with university administrative services differs based on user role and nature of transactional needs (Ramirez, 2025). Faculty and staff, who typically engage with the Registrar's Office for well-defined professional purposes, tend to experience fewer systemic barriers than students who navigate transactions under time pressure and with less procedural familiarity.

The one-way ANOVA also revealed a statistically significant difference when grouped by frequency of transaction, $F(3, 294) = 4.36$, $p = 0.005$. This finding suggests that more frequent engagement with the manual system amplifies awareness of and sensitivity to its inefficiencies. Clients who interact more regularly accumulate repeated exposure to processing delays, procedural complexities, and access limitations, leading to lower overall satisfaction. This pattern is consistent with service quality theory, in which repeated service encounters heighten the perception of service gaps in reliability and responsiveness (Parasuraman, Zeithaml, & Berry, 1988).

Open-Ended Responses

Qualitative data were gathered from optional open-ended items. Of 298 total respondents, 30 provided responses regarding challenges encountered and 35 provided suggestions for improvement. Thematic analysis of challenges revealed five major themes: delays in processing (36.67%), manual errors

(20.00%), lack of accessibility (16.67%), poor communication (13.33%), and document misplacement (13.33%). These themes corroborate the quantitative findings, particularly the low satisfaction scores in time efficiency and accuracy dimensions.

Thematic analysis of improvement suggestions revealed system automation as the most dominant recommendation (48.57%), reflecting a strong and consistent client preference for digital transformation. Faster processing (22.86%) was the second most frequently cited improvement, followed by enhanced customer service (11.43%), clearer procedures (8.57%), and improved record management (8.57%). The predominance of system automation as the preferred improvement aligns with global emphasis on e-governance and digital transformation in public service institutions (Garcia & Lopez, 2023).

DISCUSSION

The findings of this study reveal a nuanced picture of client satisfaction with the Registrar's Office manual operations at CTU–San Francisco Campus. The most critical finding is the dissatisfaction in time efficiency and accuracy—the two most operationally fundamental dimensions of registrar service. These dimensions correspond directly to the SERVQUAL framework's responsiveness and reliability components, which Parasuraman et al. (1988) identify as central to service quality perception. When clients experience repeated delays in document processing and encounter errors in academic records, trust in the institution's administrative competence is eroded.

The moderate satisfaction scores across accessibility, clarity, interaction quality, and cost indicate that while the manual system is not entirely dysfunctional, it operates significantly below the expectations of a digitally oriented student population. This is particularly important given that the majority of respondents were young adults aged 21–23—a demographic that has grown up with digital services and has correspondingly higher expectations for speed, accessibility, and accuracy in service delivery. Flores and Ong (2023) similarly found that registrar and records units operating without integrated systems tend to score lower on SERVQUAL dimensions, particularly responsiveness and reliability.



The finding that interaction quality received the highest satisfaction score across all dimensions suggests an important organizational strength: despite systemic deficiencies, registrar staff demonstrate professionalism and willingness to assist clients. This finding aligns with TQM's emphasis on human factors in service quality (Deming, 1986), suggesting that staff competence and interpersonal skills are assets that can anchor a broader digital transformation. However, as confirmed by the inferential analysis, interpersonal quality alone cannot fully compensate for structural and procedural inefficiencies.

The absence of significant differences in satisfaction by age and gender is theoretically consistent with SERVQUAL's principle of equitable service delivery, reinforcing that service quality gaps are systemic in nature rather than demographic-specific. The significant differences by client type and frequency of transaction, however, reveal important nuances. The higher satisfaction among faculty and staff compared to students likely reflects familiarity with procedures, professional relationships with registrar personnel, and more clearly defined transactional needs. The lower satisfaction among frequent users confirms that cumulative exposure to systemic inefficiencies amplifies dissatisfaction—a finding that has important implications for service planning during peak academic periods.

The qualitative data provide convergent validity for the quantitative findings while adding important contextual depth. The overwhelming preference for system automation (48.57%) among those who provided suggestions signals that clients are not merely dissatisfied but have a clear vision of the solution: digital transformation. This aligns with global trends in academic administration, where e-governance initiatives have demonstrated significant improvements in service quality, processing time, and stakeholder satisfaction (Garcia & Lopez, 2023; Liu et al., 2025).

From a Data Privacy perspective, the transition to a digital system must be carefully managed. RA 10173 mandates strict protocols for data collection, storage, access, and sharing. The current manual system, while arguably simpler in its privacy architecture, presents significant vulnerabilities in terms of unauthorized access to physical records, potential for data loss through misfiling, and limited audit trails. An enhanced digital system with role-based access controls, encrypted storage, and systematic audit mechanisms would actually strengthen data privacy compliance while simultaneously improving service quality.

CONCLUSION

Based on the empirical findings of this study, several conclusions are drawn. First, clients were generally dissatisfied to moderately satisfied with the manual record management system of the Registrar's Office, with time efficiency and accuracy registering the lowest satisfaction levels. These findings are consistent with the SERVQUAL framework, which posits that gaps in responsiveness and reliability directly reduce overall client satisfaction (Parasuraman, Zeithaml, & Berry, 1988; Alamri et al., 2021). While the system is

functional in terms of interpersonal service, it is not fully responsive to the evolving needs of its users.

Second, the manual record management system is operationally inefficient, particularly in terms of processing time, accuracy, and accessibility. These weaknesses reflect limitations in reliability and process control, which are critical components of service quality. From a Total Quality Management perspective, this indicates a lack of continuous process improvement and error reduction mechanisms essential for maintaining efficient service delivery (Deming, 1986; Rahman et al., 2022). Although interaction quality among staff was generally perceived as moderately satisfactory, it was insufficient to compensate for structural and procedural inefficiencies.

Third, satisfaction varied significantly depending on client type and frequency of transaction, indicating that frequent users and students were more sensitive to the inefficiencies of the manual system. The absence of significant differences across age and gender confirms that challenges are systemic in nature, requiring institution-wide interventions rather than targeted demographic-specific solutions. These findings support TQM principles, where repeated engagement leads to more critical assessment of service performance.

Fourth, the study establishes a clear and urgent need for digital transformation of the Registrar's Office. Transitioning from a manual to an enhanced automated system will address identified service quality gaps in responsiveness, reliability, and accessibility. The proposed Enhanced Registrar Management System should integrate an online service portal, a centralized digital records database, automated transaction tracking, and role-based access controls. Such modernization must ensure compliance with the Data Privacy Act of 2012 (RA 10173) by strengthening data security, access control, and information integrity within the institution.

RECOMMENDATIONS

Grounded in the empirical findings of this study and anchored on SERVQUAL, TQM, and the Data Privacy Act of 2012, the following integrated recommendations are proposed:

- **System Automation and Digitalization:** Development and implementation of an Enhanced Registrar Management System is strongly recommended as the primary modernization strategy, integrating an online request and application platform, a centralized digital records database, and an automated tracking and notification system. This directly addresses deficiencies in responsiveness and reliability by streamlining service delivery and improving accessibility.
- **Process Optimization (TQM Approach):** Institutional processes must be systematically redesigned to ensure efficiency, consistency, and predictability. This involves standardizing all transaction workflows, eliminating redundant procedural steps, and implementing structured queue management systems, ensuring services are not only faster but also more controlled.
- **Staff Development and Training:** Regular capacity-building programs should be implemented focusing on customer service excellence, accurate records



management, and error prevention strategies. Improving staff competencies enhances consistency in service delivery and ensures personnel are equipped to adapt to both current manual processes and future digital systems.

- **Clear Communication and Transparency:** The institution should provide structured step-by-step transaction guides, visible process flowcharts within the office and online platforms, and accessible FAQs. Clarity of processes strengthens client confidence and trust in institutional services, aligned with the SERVQUAL assurance dimension.
- **Accessibility Improvements:** Adoption of a hybrid service delivery model combining online and face-to-face transactions is recommended, along with extending service hours during peak enrollment and processing periods. These measures directly improve service reach and reduce client burden.
- **Data Privacy and Security Compliance:** As the institution transitions toward digital systems, strict compliance with the Data Privacy Act of 2012 (RA 10173) is essential, including secure digital storage systems, role-based access control for sensitive records, and regular data protection audits.
- **Continuous Monitoring and Evaluation:** Institutionalization of continuous monitoring mechanisms—including regular client satisfaction surveys, structured feedback systems, and data-driven process refinement—ensures that service quality evolves in response to actual client needs and experiences.

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