

Analyzing Operational Efficiency in Consultancy Firm

A Final report for the BDM capstone Project

Submitted by

Name: Rajasi Deshpande

Roll number: 23f2002389



IITM Online BS Degree Program,
Indian Institute of Technology, Madras, Chennai
Tamil Nadu, India, 600036

Contents

1	Executive Summary	2
2	Detailed Explanation of Analysis Process/Method	2
3	Result and Findings	6
4	Interpretation of Results and Recommendations	16

1 Executive Summary

The Splendid Solutions, a consultancy firm based in Ambarnath, Maharashtra, provides a wide range of services including accounts writing, auditing, tax consulting, loan documentation, and business support. While the firm has built a solid professional foundation and a growing client base, recurring inefficiencies limit its effectiveness. Key challenges include compliance delays in GST, TDS, and ROC filings, weak prioritization during peak quarters, irregular fee collections impacting cash flow, and limited digital presence restricting outreach to the unorganized sector.

This project analyzed the firm's operations using both quantitative and qualitative methods. Data from FY 2023–24 and FY 2024–25 was processed through descriptive and time-series analysis, supported by survey insights and partner discussions. Findings indicated a 27% rise in compliance delays year-on-year, particularly in GSTR-1 and GSTR-3B filings. Seasonal workload peaks in Q1 and Q4 highlighted the need for better capacity planning. Cash flow concerns were significant, with nearly 43% of billed amounts unpaid, mainly in B2C services. Revenue nearly doubled over two years, with audit services driving growth. However, surveys rated the firm's digital presence as average, signaling untapped opportunities for client engagement.

The report recommends automation of compliance tracking, structured payment follow-ups, resource reallocation toward high-value services, and service rationalization. Enhancing digital visibility through an improved website and client-focused content is also suggested. A SCAMPER framework further supports innovative strategies for communication and engagement.

By adopting these measures, Splendid Solutions can shift to a data-driven, client-centric approach, enabling greater efficiency, stable cash flows, and stronger market presence.

2 Detailed Explanation of Analysis Process/Method

2.a Introduction

- The analysis of data that has been collected is done through time-series analysis technique because the data has been collected over the span of two financial year.

- There are following types of analyzing data and the following written approach is adopted for analyzing the data collected:
 - Qualitative methods
 - Descriptive Statistics
 - Time Series Analysis
 - Correlation Analysis
 - Quantitative methods
 - Partner Conversation
 - Competitor Benchmarking
 - SCAMPER Analysis
 - Website and Social Media Feedback
- Descriptive analysis already identifies what has already happened. Descriptive analysis of data has already been presented in the mid-term submission.
- Time series analysis is used to decompose data over time to identify trends and seasonality allowing for forecasting and pattern recognition
- Correlation analysis is used to measure the linear relationship between variables.
- Partner Conversation is done to validate quantitative findings and provide institutional context on client behavior and market barriers, bridging the gap between data and actionable business strategy.
- Competitor Benchmarking is used to identify successful digital and communication strategies employed by rival firms, providing a blueprint for the firm's own low-cost, targeted outreach.
- SCAMPER Analysis is used to generate innovative solution by prompting the improvement of an existing product or process using a series of defined questions: Substitute, Combine, Adapt, Modify, Put to another use, Eliminate, and Reverse.
- Website and Social Media Feedback is used to measure directly assess the firm's current digital clarity and engagement levels from the perspective of potential client.

2.b Objective

The objective of this Project is to leverage the firm's operational and financial data to transition operations from an intuitive, reactive model to a proactive, data-driven framework.

- **Quantify Operational Delays:** To precisely quantify the severity and trend of operational inefficiency by using Time Series Analysis on compliance data,

specifically measuring the year-over-year increase in filing delays.

- **Identify Seasonal Peaks for Capacity Planning:** To use the derived time series patterns to identify the exact seasonal workload peaks (Q1, Q3, Q4) and enable the creation of a Service Load Dashboard for proactive resource allocation.
- **Segment Financial Risk:** To conduct Correlation Analysis on the payments data to specifically segment and quantify the services (e.g., ITR Fees, Accounts Writing) that contribute most heavily to the 39% payment delinquency, thus informing collection strategy.
- **Design Targeted Outreach Strategy:** Using Competitive Benchmarking and SCAMPER Analysis to understand the digital habits of the target demographic and generate specific, low-cost digital tactics (such as utilizing WhatsApp Business) for expanding client reach into the unorganized sector.

2.c Pre-Processing of the Data

Before beginning any statistical analysis, the raw data collected from the firm had to be carefully structured and standardized. The original dataset contained missing entries, inconsistencies, and unorganized fields, which made it unsuitable for direct use. To overcome these challenges, several pre-processing steps were carried out to ensure that the data was both reliable and aligned with the project objectives:

- **Creation of Filing Status Logs (FY 2023–24 and FY 2024–25):**

Separate filing status logs were designed for each year to enable year-on-year comparison. This structure not only made the dataset more organized but also allowed clearer measurement of compliance delays across periods.

- **Completion of Missing Entries through Owner Validation:**

In cases where companies had mandatory monthly filings (e.g., GST, TDS) but certain months were missing, the missing details were confirmed directly through discussions with the firm owner. This step ensured continuity of records and improved the accuracy of quarterly and annual trend analysis.

- **Standardization of Dates and Backdated Records:**

Some entries had inconsistently recorded or backdated filing dates. These were validated with the firm and corrected to maintain chronological accuracy, which was essential for time series analysis.

- **Handling of Vacant Fields:**

Empty cells in columns such as comment and payment type were standardized with the value “NA”. This distinction clarified that the data was unavailable, not omitted, and eliminated ambiguity during further calculations.

- **Removal of Irrelevant Fields:**

Fields such as voucher number and voucher name were excluded from the dataset. They had no analytical relevance to the identified problem statements, and their removal reduced unnecessary complexity.

- **Splitting and Structuring Monthly Entries:**

In some cases, records for multiple months were combined into a single entry. These were split into individual month-wise records, which made quarterly and filing-type level analysis more precise.

- **Creation of Derived Fields (Delay Days):**

A calculated field for delay days was introduced by comparing due dates with actual submission dates. This derived metric provided a standardized way to measure compliance inefficiency and served as a key variable in the later analysis.

2.d Descriptive Analysis

Descriptive statistics were applied to summarize filing delays, receipts, and outstanding payments. This was necessary to establish a baseline view of operational performance and detect inconsistencies. The data was structured into filing logs, and measures like mean, median, and variance, helps to quantify delays and irregular payment patterns in a simple, interpretable form.

2.e Time-series Analysis

Since compliance activities follow seasonal deadlines, time series analysis was used to identify trends in delay days across FY 2023–24 and FY 2024–25. Quarterly breakdowns allowed the detection of workload peaks in Q1, Q3, and Q4. By plotting these patterns, the analysis revealed how deadlines create seasonal bottlenecks, providing evidence for the need for capacity planning.

2.f Correlation Analysis

Correlation analysis was conducted to uncover relationships between client payment status, outstanding amounts, and services rendered. This approach was chosen to segment financial risk and identify which services contribute most to overdue payments. By cross-tabulating variables, patterns such as higher dues in B2C services emerged, enabling targeted strategies for cash flow stability.

2.g Survey-Based Analysis

A survey was carried out to capture external perceptions of the firm’s digital presence, as operational data alone could not explain client acquisition challenges. Structured questions on awareness, social media engagement, and website usability were shared with potential clients. The responses highlighted low visibility and engagement, providing qualitative support for strengthening digital outreach. I have made a Google Form for survey, conducted targeting potential clients and general users. I am attaching the google form link to show which questions I have asked people to fill and also the response sheet link to understand what people’s opinion on it.

[Google Form Link](#)

[Response Sheet Link](#)

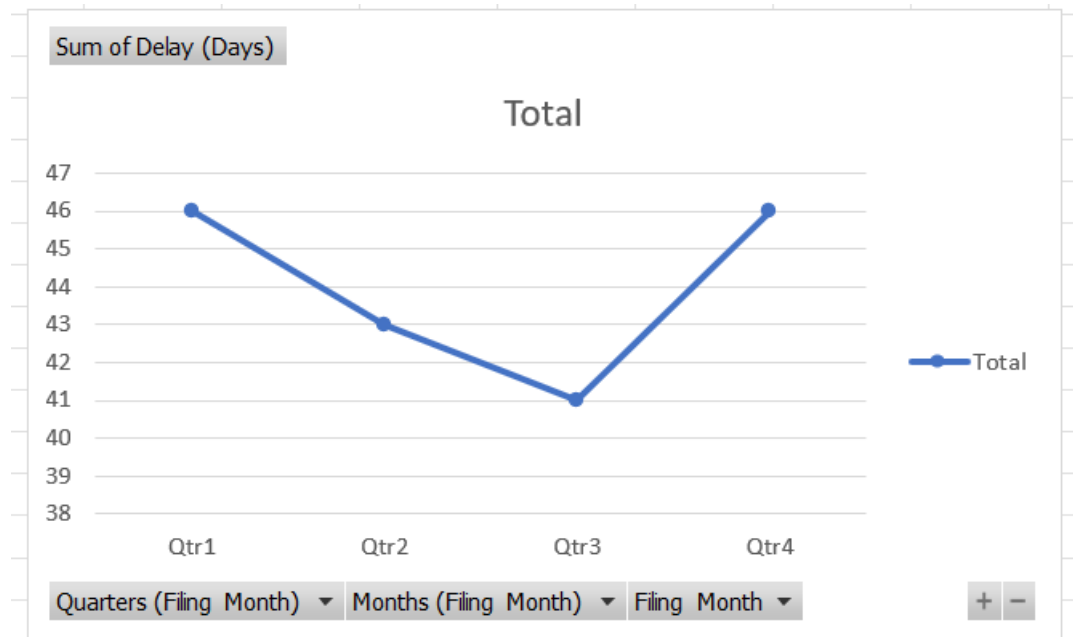
3 Result and Findings

The insights drawn from the analysis of the data are following:

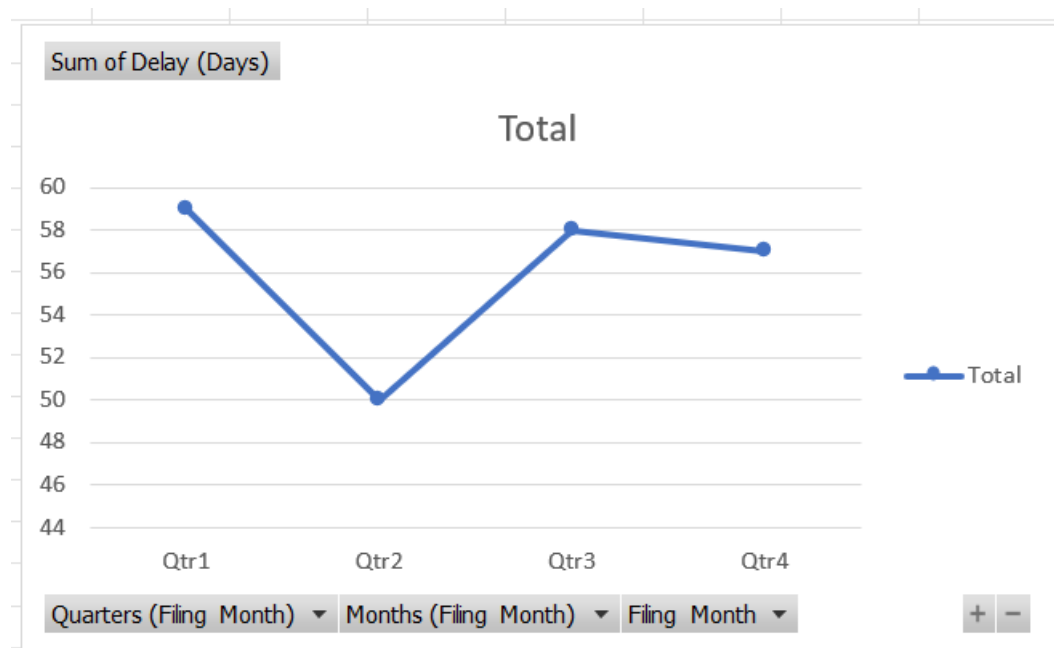
1. A pivot table with a line chart was created to analyze the total delay days across four quarters for FY 2023–24 and FY 2024–25. The pivot table aggregates filing delays, while the line chart visualizes quarter-wise fluctuations in delay patterns.

This method allows us to track seasonal variations and quarterly filing efficiency. By

comparing year-on-year delays, it highlights whether compliance issues are improving or worsening.



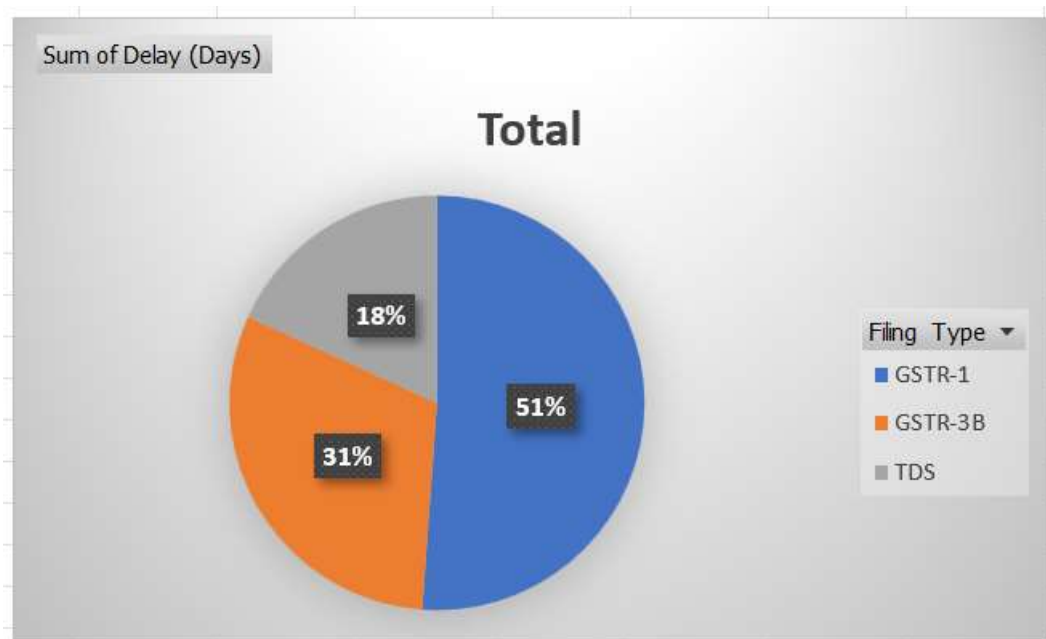
2023-24



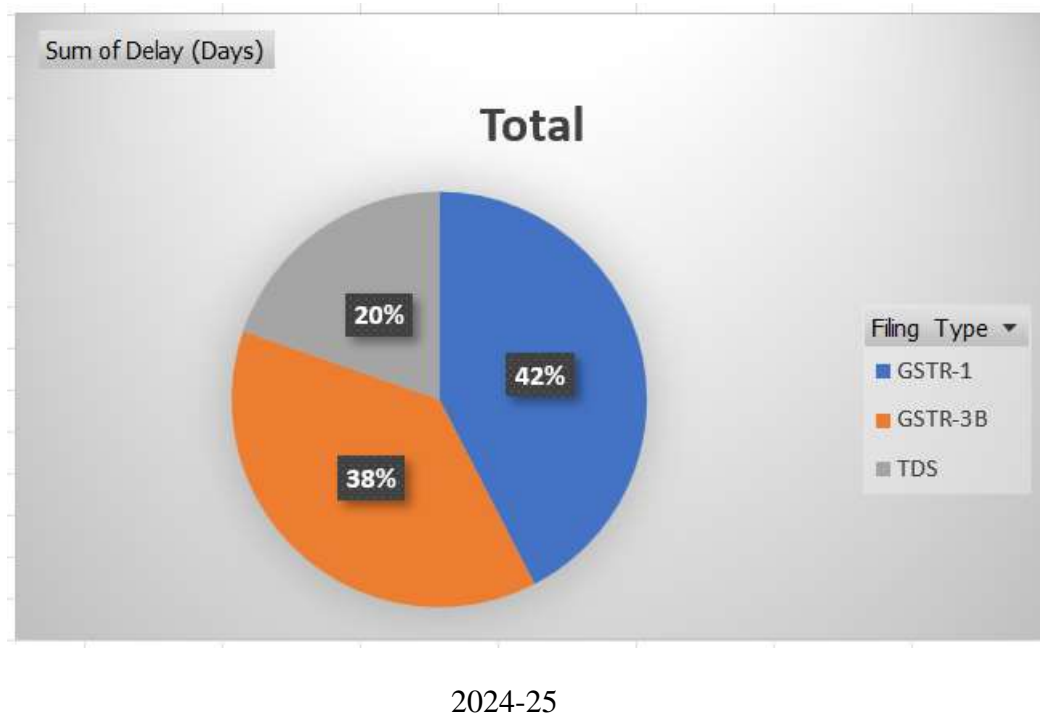
2024-25

It helps in identifies peak quarters with higher delays, support resource planning and deadline management and helps in root cause analysis of delay trends (workload, client submissions, staff availability).

- **2023–24:** Total delays = 176 days. Qtr1 (46 days) and Qtr4 (46 days) recorded the highest delays, while Qtr3 (41 days) had the lowest.
 - **2024–25:** Total delays increased to 224 days. Qtr1 (59 days) and Qtr3 (58 days) were the most delayed, while Qtr2 (50 days) was relatively lower.
 - **Year-on-Year Comparison:** Delays increased significantly in 2024–25 (224 vs. 176), showing a 27% rise in cumulative filing delays.
2. To identify which compliance filings contribute most to delays and to help visualize the relative share of inefficiencies across different filing types. I have created Pie chart showing proportion of total delay days by filing type.



2023-24



It reveals which compliance areas are most problematic and guides resource planning and monitoring efforts to reduce delays in priority services.

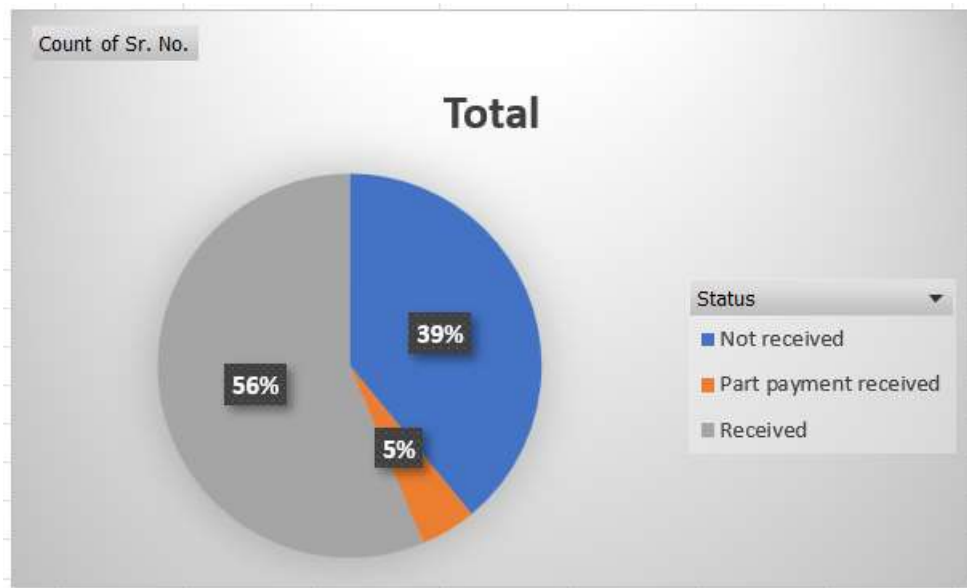
• **2023–24:**

- GSTR-1 accounts for 51% of total delays (90 days).
- GSTR-3B contributes 31% (54 days).
- TDS has the least, 18% (32 days).
- Total delay days: 176.

• **2024–25:**

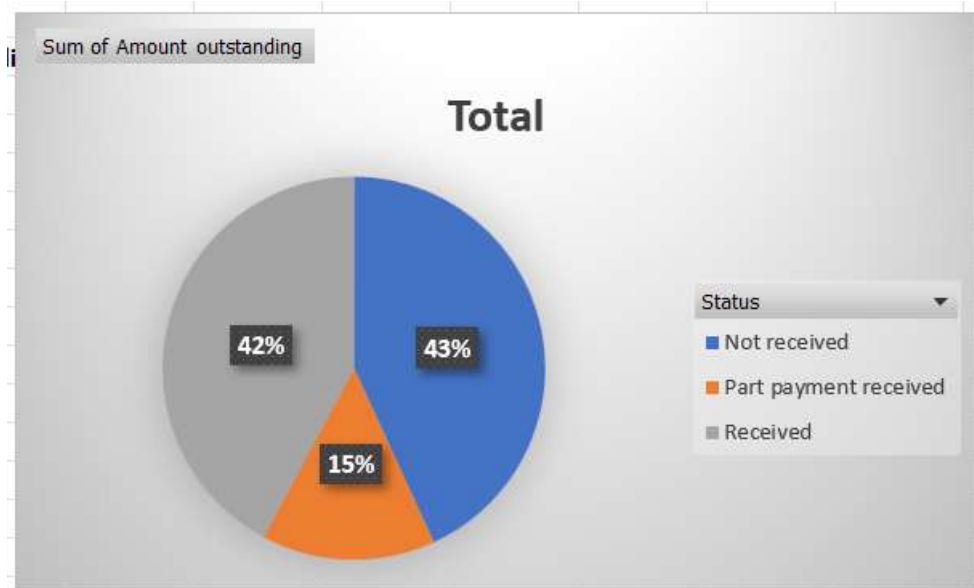
- GSTR-1 still highest (42%, 95 days).
- GSTR-3B has significantly risen (38%, 85 days).
- TDS delays increased too (20%, 44 days).
- Total delay days: 224 (increased from 176).

3. To visualize client payment behavior and its impact on cash flow and to help identify the scale of delayed collections across client base, I created Pie chart showing the proportion of clients who have fully paid, partially paid, or not paid.



It highlights the extent of overdue payments and identifies areas where stronger collection mechanisms or policy changes are required.

- Received: 36 clients (56%) have paid fully.
 - Not received: 25 clients (39%) have not paid at all.
 - Part payment received: 3 clients (5%) made partial payments.
 - Out of 64 clients, nearly 44% payments are incomplete or pending.
4. To assess the financial impact of pending collections. Unlike the earlier “count of clients” chart, this shows monetary weight of delayed payments, I created Pie chart representing the share of outstanding amount by payment status.

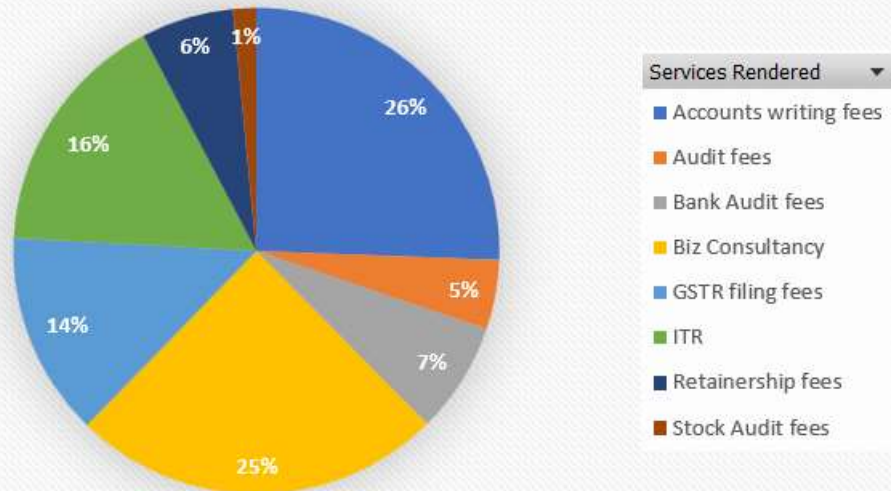


It helps the firm identify where the biggest revenue leakages are and highlights the financial risk tied to non-paying clients.

- Not received: ₹1,53,000 (43% of total).
 - Part payment received: ₹52,000 (15% of total).
 - Received: ₹1,49,525 (42% of total).
 - Total outstanding tracked = ₹3,54,525.
5. To evaluate service-wise revenue distribution and to understand which services are driving income growth and which remain marginal, I created Pie charts comparing revenue contribution of each service in two consecutive years.

Sum of Annual Receipts

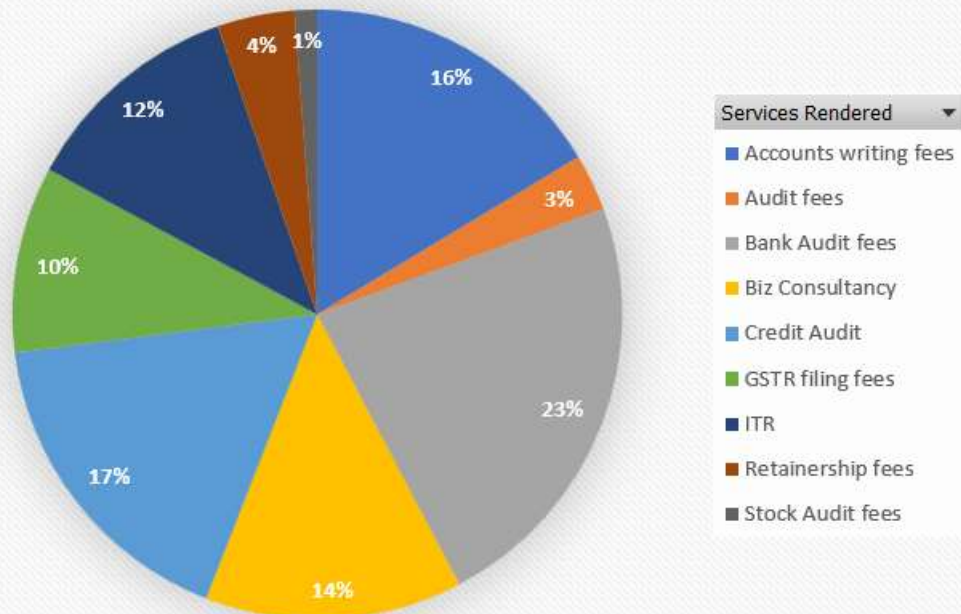
Total



2023-24

Sum of Annual Receipts

Total



2024-25

It helps understanding supports service prioritization and capacity planning and allow the firm to focus resources on high-value services and reassess low-revenue offerings.

• **2023–24 (₹4,86,500 total receipts):**

- Accounts Writing (26%) and Business Consultancy (25%) were top contributors.
- ITR (16%) also significant.
- Bank Audit (7%) and Audit Fees (5%) had smaller shares.
- Stock Audit negligible (1%).

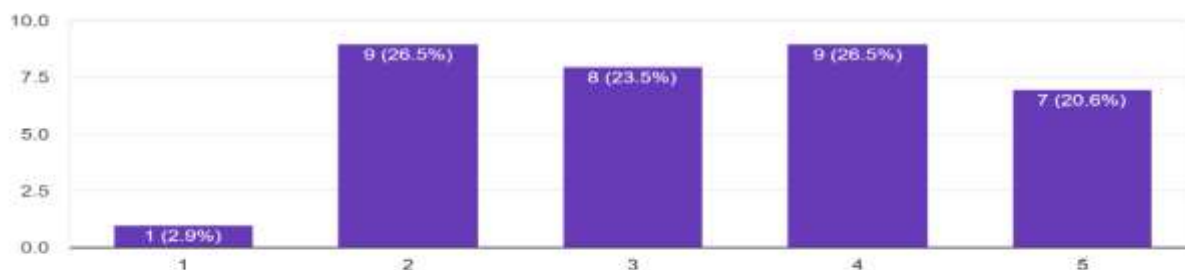
• **2024–25 (₹8,79,500 total receipts):**

- Bank Audit (23%) and Credit Audit (17%) surged, together contributing 40%.
- Accounts Writing still strong (16%).
- Business Consultancy remained steady (14%).
- ITR (12%) and GSTR filings (10%) moderate.
- Retainership fees (4%) and Stock Audit (1%) stayed minimal.
- Overall revenue almost doubled year-on-year.

6. To evaluate client perceptions of the website’s design, navigation, and overall usability, which directly impacts digital presence and engagement. I am attaching the graph generated by the google form’s response for the survey which I conducted.

How would you rate the overall User Interface (UI) of the website?

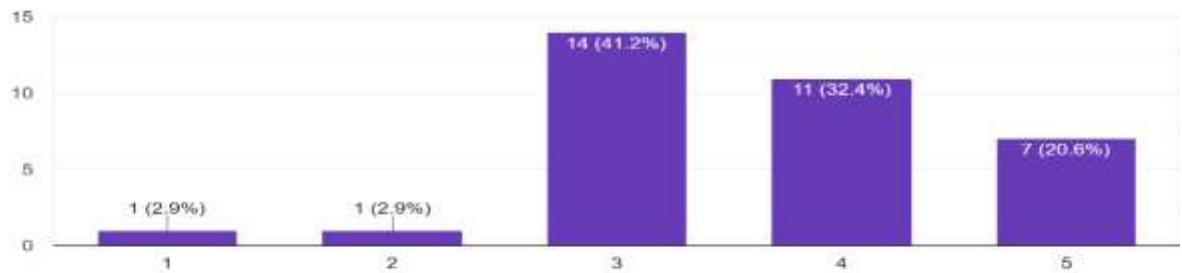
34 responses



- Majority of respondents rated the UI between 2 and 4 (26.5% each at 2 and 4).
- 20.6% gave the highest rating (5), while only 2.9% rated it lowest (1).
- This indicates the UI is perceived as functional but not exceptional.

Is the content on the website informative?

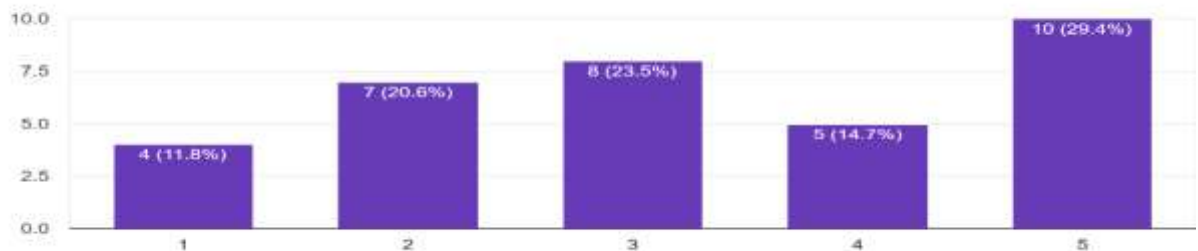
34 responses



- The highest number of responses (41.2%) rated the content at 3 (moderately informative).
- 32.4% rated it 4 and 20.6% rated it 5, showing many find it useful but not outstanding.
- Only a small minority (2.9% total) rated it 1 or 2, suggesting content is not poor, but it lacks depth.

Is the information provided on the website sufficient to understand the firm's services?

34 responses



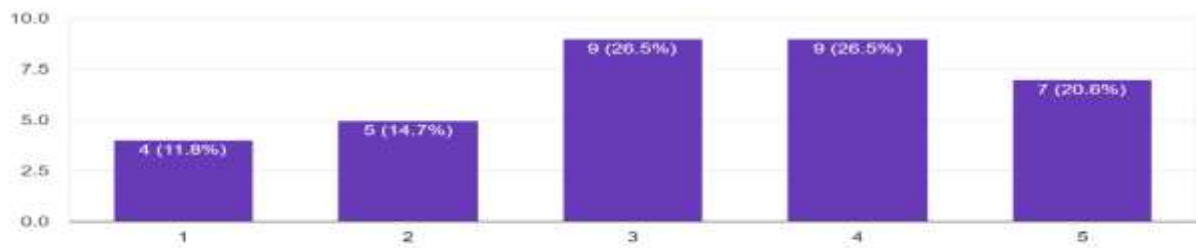
Opinions are polarized:

- 29.4% rated 5 (very sufficient).
- 20.6% and 23.5% rated 2 and 3 respectively, suggesting confusion among some users.
- 11.8% rated 1 (insufficient), indicating dissatisfaction from a notable minority.
- Only 14.7% rated 4, showing fewer people felt the service information was “almost sufficient.”

This indicates both satisfied and dissatisfied groups exist simultaneously.

Do you find the content posted on social media engaging and relevant?

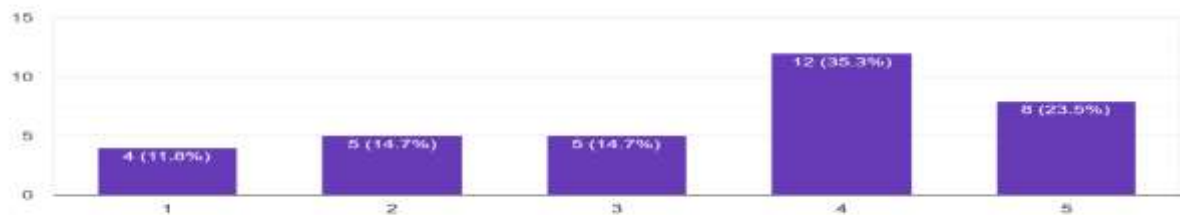
34 responses



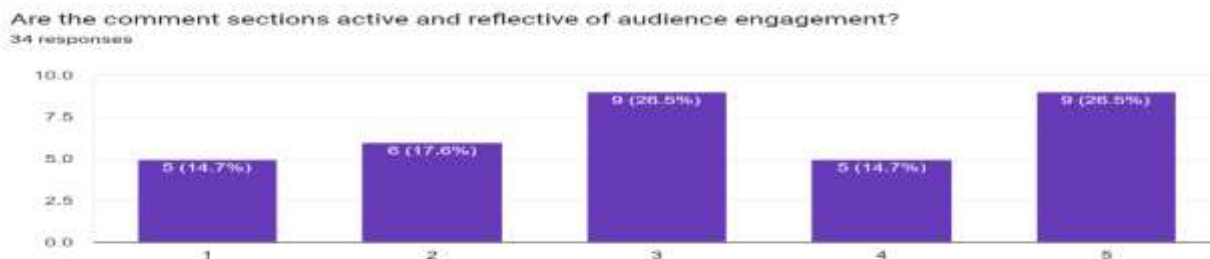
- 26.5% rated 4 and 20.6% rated 5, suggesting some users find the content engaging.
- 26.5% rated 3, showing a large portion feels neutral about the content.
- 26.5% combined rated 1–2, indicating dissatisfaction among more than a quarter of respondents.
- Overall, results suggest mixed engagement: neither poor nor strong, but inconsistent.

How would you rate the quality of visuals and captions on the social media posts?

34 responses



- 35.3% rated 4 and 23.5% rated 5, showing most respondents view quality as above average.
- 14.7% rated 3 (neutral).
- Around 26.5% rated 1–2, indicating a sizeable group is dissatisfied with the post quality.
- Overall, ratings lean positive, but quality perception is inconsistent across respondents.



Responses are highly divided:

- 27.3% each rated 3 and 5, showing mixed perception of engagement levels.
- 15.2% each rated 1, 2, and 4, indicating no clear consensus.

This suggests the comment sections are active at times, but inconsistent in driving meaningful interaction.

4 Interpretation of Results and Recommendations

Interpretations

- The firm is facing growing compliance delays year-on-year.
- Both years show higher delays in Qtr1 and Qtr4, indicating recurring workload peaks.
- Despite improvements in Qtr2, the overall trend points towards inefficiencies and workload clustering.
- Filing delays have worsened year-on-year, rising by 27%.
- GSTR-1 remains the top contributor, but GSTR-3B delays have grown notably, narrowing the gap.
- TDS delays, though smaller, have also increased.
- This indicates rising workload and insufficient resource allocation, especially during statutory deadlines.

- While more than half of the payments are collected, a large chunk of revenue is delayed.
- The majority of pending cases are complete non-payments, showing weak follow-up or enforcement.
- Part-payment share is very low, suggesting that once clients delay, they often do not even settle partially.
- Indicates higher risk of cash flow instability, especially in B2C services.
- Almost half of the billed amount (43%) is not collected at all, a major threat to cash flow.
- The share of fully collected revenue (42%) is slightly less than unpaid dues, indicating inefficiency in revenue realization.
- Part-payment (15%) shows some intent to pay, but delays extend the risk of default.
- This imbalance between services delivered and payments received signals weak collection policies and over-reliance on post-service billing.
- The firm's revenue base expanded significantly in FY 2024–25, with a shift toward audit-related services (Bank Audit + Credit Audit = 40%).
- Dependency on Accounts Writing and Consultancy reduced (from ~51% in 2023–24 to ~30% in 2024–25).
- Emerging services (like audits) show strong growth potential, indicating diversification of revenue streams.
- Low-value services (stock audit, retainership) remain insignificant contributors.
- The UI of firm's website is acceptable but not exceptional.
- While a quarter of users find website good, a significant portion sees it as just average.
- Most people don't find the Instagram and LinkedIn of the firm engaging and informative.

Recommendations

- Strengthen planning in Qtr1 & Qtr4 with dedicated filing teams.
- Introduce workflow automation tools to manage peak filing periods.
- Provide timely client reminders for data submission.
- Conduct post-quarter review meetings to analyze bottlenecks and reduce repeat delays.
- Set quarterly compliance KPIs to monitor performance.
- Task tracking system: Implement automated reminders for GSTR-1 and GSTR-3B filings.
- Resource allocation: Assign dedicated staff for high-delay filings (especially GSTR-1).
- Capacity planning: Schedule workload better around peak compliance months (Q1, Q3, Q4).
- Training & SOPs: Standardize filing processes to minimize bottlenecks.
- Introduce automated reminders (SMS/email/WhatsApp) for due dates.
- Advance payment policy: Collect partial advance before starting services, especially for tax filing and loan documentation.
- Follow-up system: Set a structured escalation mechanism (gentle reminders then firm notices).
- Client categorization: Classify clients by risk (regular payers vs. chronic defaulters) and prioritize follow-ups accordingly.
- Digital payment options: Enable quick UPI/online payments to reduce delays.
- Advance billing: Enforce part-payment or milestone-based billing before/during service delivery.
- Stronger credit policy: Avoid extending services to habitual defaulters or impose penalties on delayed payments.
- Cash flow monitoring: Maintain a real-time dashboard to track outstanding amounts by client and service.
- Strategic Marketing: Promote consultancy and ITR filing with targeted campaigns, since these have stable demand but face competition.

- Service Rationalization: Consider reducing focus on very low-revenue services (retainership, stock audits) unless they provide strategic client entry points.
- Use a mix of formats of videos, carousels, reels, infographics, polls, and stories in Instagram to keep the audience engaged.
- As per suggestions provided by the people through survey is that there is only festival related post in Instagram and LinkedIn, rather firm should focused on informative post related to tax and other filing types and such that to create awareness among unorganized sector.
- To enhance digital visibility and client engagement, particularly in the unorganized sector, the SCAMPER technique was applied.

