Executive Summary

This qualitative analysis evaluates the efficiency and effectiveness of Goliath National Bank's (GNB) client onboarding and billing process through different process analysis techniques. The current workflow is characterized by delays, inconsistencies, and high error rates that significantly impact client experience, operational efficiency, and compliance. At the core of the issue are manual dependencies and fragmented responsibilities across teams, which prevent seamless execution and scale.

One of the most persistent root causes is the incomplete and inconsistent submission of client requirements. With no enforced validation or centralized receiving system, brokers frequently initiate accounts without mandatory documentation, leading to costly, and time consuming follow-ups which end up with extended activation times. Manual handling of physical documents, subjective client categorization, and disconnected billing tools further compound the inefficiencies, often resulting in data entry errors, billing delays, and even regulatory fines. These issues are worsened by a lack of real-time process tracking, limited automation, and communication breakdowns between teams in different time zones.

To address these challenges, the proposed solution introduces a digital intake portal, automated document validation through OCR, and a centralized repository for all client documentation. These changes ensure that only complete and validated submissions enter the system. A rules-based categorization engine with minimal AI assistance reduces subjectivity in client profiling while retaining human oversight. Downstream, the system automates invoice generation, pricing adjustments, and payment reconciliation, eliminating manual bottlenecks and improving billing accuracy.

The feasibility of implementation is relatively high, given GNB's existing experience with proprietary automation tools. The new model builds on this foundation without requiring external service providers or additional manpower. Impact-wise, the transformation reduces onboarding time from weeks to hours, improves accuracy, lowers costs, and significantly enhances the client experience. Real-time dashboards and performance monitoring also foster accountability and continuous improvement. Overall, the proposed overhaul aligns with GNB's strategic goals by creating a more transparent, scalable, and client-centric process which helps in an increasingly competitive banking environment.

Case Analysis

Goliath National Bank's current client onboarding and billing workflow suffers from inefficiencies, manual dependencies, and misaligned priorities, which result in delayed account activation, billing errors, increased operational costs, and negative client experiences. Upon initial analysis of the case, the root causes include incomplete initial requirements, manual document handling, lack of automation, fragmented team responsibilities, and absence of real-time tracking. Despite the volume and complexity of the process, the bank continues to rely on outdated practices that prevent scale and service excellence. We conducted six analysis methods in order to further investigate the deeper inefficiencies surrounding the existing process listed and explained below.

I. Issue Analysis

Table 1. Issue Analysis Model

No.	Issue	Description	Impact/ Consequence	Priority	Type	Possible Solution	Related Project
1	Incomplete Initial Requirements	25% of clients do not submit all required documents initially	Delayed activation, rework, poor handoff quality	High	Process	Enforce a minimum document checklist pre-submission	Quick Win / SOP Update
2	Manual and Redundant Document Handling	Documents are manually processed, checked, scanned, and handed off	Slow processing, prone to human error, lost documents	High	Process	Digitalized document system,	Major Project
3	Incentive Misalignment	Brokers are incentivized to activate accounts quickly and not accurately	Premature activation, pressure on other teams, poor data quality	High	People/ Policy	Update KPIs to reward accurate and complete onboarding	Organizational Fix
4	Subjective Client Categorization	Analysts manually interpret and assign codes without clear criteria	Billing errors, $21M in fines, pricing issues	High	Process/ IT	Create rule-based criteria	Major Project

5	Manual Invoice and Payment Handling	Invoice data entry and payment matching are done manually	Prone to errors, slows down final billing	Medi um	IT/Fina nce	Integrate data systems; auto-match payments via reference	Automation Project
6	Fragmented Workflow and Handoffs	Multiple departments touch the process with unclear ownership	Wait times, accountability gaps, communication breakdowns	High	Organiz ational	Assign workflow owners or form cross-function al teams	Process Redesign
7	Lack of Real Time Process Tracking	Neither clients nor internal teams can easily check account progress	Anxiety, increased inquiries, reactive communication	High	IT	Add internal workflow dashboard; optional client-facing tracker	Medium Proeect
8	No Input Validation or Error Checks	No system checks for missing fields, duplicate entries, or invalid data	Data quality issues, rework, billing inconsistencies	High	IT/Qua lity	Add field validation rules during data entry and document submission	Quality Control Update

The Issue Analysis table above illustrates the current client onboarding and billing process at GNB and reveals eight critical issues that significantly hinder operational efficiency, accuracy, and client satisfaction.

At the root of the problem is the incomplete submission of client documents, which delays account activation and triggers a costly cycle of manual follow-ups. This is worsened by the heavy reliance on physical document handling, which introduces bottlenecks, human error, and inefficiencies. Misaligned broker incentives prioritize speed over quality, leading to the premature activation of incomplete accounts. A major source of financial loss stems from the subjective categorization process, where analysts manually assign client codes without clear guidelines, resulting in billing inaccuracies and millions in fines. The invoicing and payment processes are similarly manual, causing delays in billing closure and heightening the risk of errors.

Structural problems also persist: the workflow is fragmented across multiple teams with no central ownership, leading to accountability gaps and communication breakdowns. The lack of real-time tracking means both clients and internal teams are left in the dark about processing progress, increasing anxiety and inquiries. Finally, the absence of input validation mechanisms at key entry points further compromises data quality and reliability.

II. Fishbone Diagram

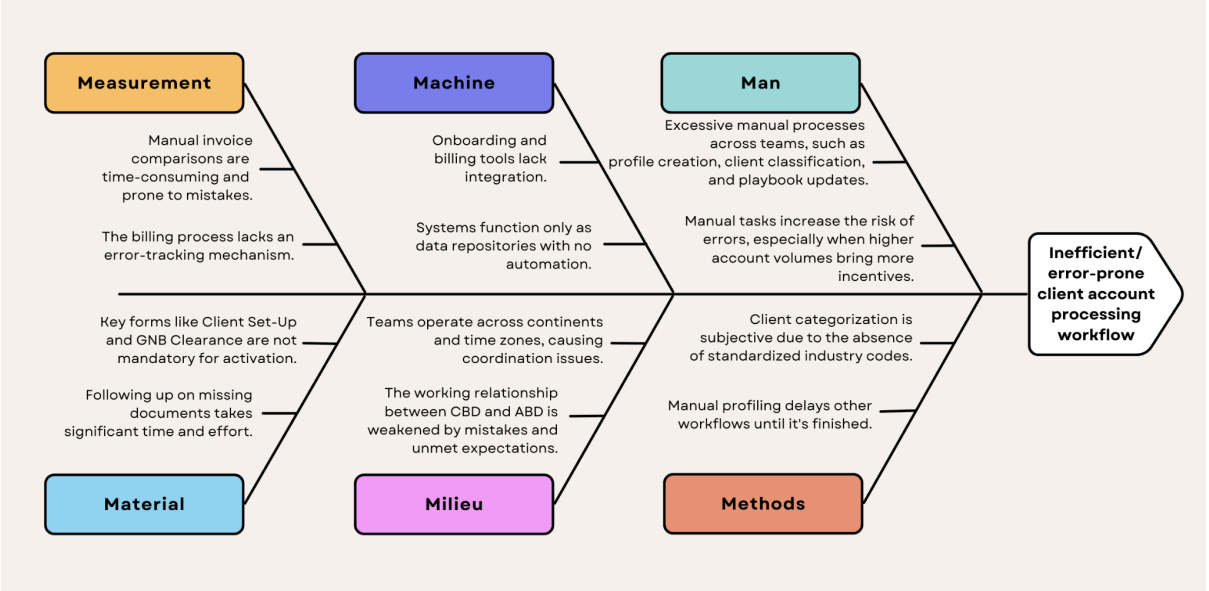


Figure 1. Diagram of Fishbone Analysis.

The Fish Diagram highlights six key drivers behind GNB's inefficient and error-prone client onboarding and billing process.

At the core is manual dependency client classification, invoicing, and playbook updates rely heavily on human input, increasing the risk of errors happening. Incomplete document submissions and non-mandatory key forms delay activation and force time consuming follow ups. System-wise, onboarding and billing tools lack integration and automation, serving only as passive data stores. Measurement gaps, like missing error tracking and manual invoice checks, further weaken billing accuracy. Structurally, a proper split between teams leads to coordination issues, unmet expectations, and communication breakdowns. Meanwhile, the absence of standardized methods for client profiling delays downstream tasks and creates inconsistencies.

All of these issues result in a fragmented, slow, and error-prone workflow that impacts both operational efficiency and customer satisfaction.

III. 5 Why's

Table 2. Five (5) Whys Model

Problem Statement: GNB's current client onboarding and billing workflow suffers from inefficiencies, manual dependencies, and misaligned priorities, which result in delayed account activation, billing errors, increased operational costs, and negative client experiences.

1	***Why*** does GNB experience some decline in its new clients, profits, and an increase in its client complaints? Answer: Client service is poor due to delays, billing errors, and overworked staff.
2	***Why*** are employees regularly overworked when it comes to their client service delivery? Answer: The bank's workflows are too rigid, inefficient, and error-prone.
3	***Why*** is GNB's workflow highly inefficient, and prone to errors? Answer: It relies too much on handovers, scattered data, and manual tasks that could be automated.
4	***Why*** does the bank still use inefficient handovers, fragmented data, and manual workflows? Answer: It prioritizes early account activation over complete setup, has overly specialized teams, and lacks automation in high-volume areas.
5	***Why*** prioritize early account activation, and over specialized teams over focusing on complete submissions and automating high-volume tasks? Answer: Weak process management, poor prioritization, bad workflow design, and lack of innovation hold the bank back.

[5 Why's Description]

IV. Impact-Effort Matrix

Table 3. Impact-Effort Matrix Model

	Low Effort	**High Effort**
High Impact	**Quick Wins**	**Major Projects**
	Implement mandatory document completeness check before account activation *Prevents billing issues caused by missing or incomplete forms.*	Integrate AI-based client categorization system *Reduces human error, speeds up invoice processing, and lowers fines.*
	Auto-reminder emails for missing client documents *Speeds up onboarding by prompting clients automatically.*	Automate full billing workflow (from invoice creation to payment matching) *Minimizes manual input and reduces processing delays.*
	Standardize client intake templates and naming formats *Avoids confusion and errors in client profiles.*	Implement real-time dashboard for billing and document status *Improves monitoring and proactive issue resolution.*
Low	**Fill-Ins**	**Time Wasters**

Impact	Cross-train staff to handle peak workloads *Improves flexibility without hiring more staff.*	Manual double-check of all invoices before submission *Reduces errors but increases workload and contradicts no overtime policy.*
	Update internal FAQs and process documentation *Helps staff quickly resolve common issues.*	Redesign entire workflow for client onboarding and billing *Potentially improves efficiency but requires significant time and resources.*
	Minor tweaks to billing templates and email formats *Enhances clarity without major changes.*	Develop custom reporting dashboards for management *Provides insights but requires development effort and maintenance.*

The Impact-Effort Matrix was used to categorize potential solutions based on their expected impact and the effort required to implement them. By mapping process improvements into four quadrants (Quick Wins, Major Projects, Fill-ins, and Time Wasters) we were able to prioritize changes that offer the best return on effort.

For example, implementing a mandatory document completeness check and auto-reminder emails for clients are high-impact, low-effort "quick wins" that can significantly reduce delays and improve data quality. In contrast, full automation of the billing workflow or AI-based client categorization are high-impact but also high-effort "major projects" that require system development and integration. Meanwhile, low-impact ideas like minor template tweaks or extra manual checks were deprioritized to keep the team focused on changes that truly improve efficiency and accuracy.

V. Value-Add Analysis and Waste Analysis

Table 4. Value-Add Analysis and Waste Analysis Model

Process Step	Performer	Classification	Waste Source	Explanation
Initiate Client Meeting	Client Onboarding (KYC) Team	VA	N/A	Provides value to the customer as the initial touchpoint with GNB through the CBD; ensures that the customer's needs are known and able to be met
Create Client Profile	Client	BVA	N/A	Necessary for keeping track of

	Onboarding (KYC) Team			GNB's clients
Document Processing (Request for Additional Physical Documents, Check Received Documents, Process Documents, Prepare Client Set-Up Form and GNB Clearance Form, etc.)	Account Completion Team	BVA	N/A	Needed in compliance with regulatory requirements. Essential to preventing fraud and initiating subsequent tasks in the process model, when handing over to ABD
Wait for Additional Documents	Account Completion Team	NVA	Waiting	Wait time causes delays; physical documents may be held up in post
Activate Client Account	Account Completion Team	VA	N/A	Allows the client to transact
Hand Over Available Documents for Scanning	Account Completion Team	NVA	Unnecessary Transportation	Takes an unnecessary amount of time and manpower for to scan and send physical documents for no value to GNB or the customer
Follow-Up on Missing Requirements	Requirements Follow-Up Team	NVA	Defects	Correction for an error that can be eliminated, adds three hours of further processing time later in the process
Wait for Missing Requirements	Requirements Follow-Up Team	NVA	Waiting	Wait time causes delays; physical documents may be held up in post
Document Handover to ABD (Prepare Documents for Scanning, Scan Physical Documents, Send to ABD)	Requirements Follow-Up Team	NVA	Unnecessary Transportation	Takes an unnecessary amount of time and manpower for to scan and send physical documents for no value to GNB or the customer
Assign and Input Client Code	Client Categorization Team	BVA	N/A	Necessary for keeping clients organized and adjusting the the pricing in the clients' billing as per their industry categorization

Wait for System Pricing Adjustment	Client Categorizatio n Team	NVA	Waiting	Performs a valuable task, but wait time causes delays
Send Account Pricing Information	Client Categorizatio n Team	BVA	N/A	Adjusted pricing is necessary for the Client Billing Team to send accurate invoices
Verify Amount Against Prior Records	Client Billing Team	BVA	N/A	Maintains consistency and helps minimize the risk of sending the incorrect invoice
Type and Input Details in Playbook	Client Billing Team	BVA	N/A	Keeps track of transactions, ensures integrity of records and used for cross-referencing accounts later
Send Invoice	Client Billing Team	VA	N/A	The client receives the invoice of their transaction as per the billing arrangement and pays the required amount for the services rendered
Input Payment Details	Client Billing Team	BVA	N/A	Maintains record of transactions
Match Payment to Account	Client Billing Team	BVA	N/A	Minimizes risk of errors
Send Payment Confirmation	Client Billing Team	VA	N/A	Notifies client of successful payment and closes the transaction for the month

The Value-Add (VA), Business-Value Add (BVA), and Non-Value Add (NVA) classification of process steps in GNB's client onboarding and billing process highlights a crucial insight: while many tasks are essential to business operations or compliance, a significant portion of the workflow is burdened by waste—particularly in the form of waiting, unnecessary transport, and defect correction.

Process Improvement [Name of Process]

I. Changes in Methodology

Having performed the different analysis methods on GNB's case, the following process improvements will be implemented, and focuses on (1) reduces incorrect billing, (2) streamlines

operations to avoid overtime, (3) improves client experience with faster processing, and (4) manages risks with proper controls.

1. **Digital Client Requirement Portal.** A portal is now used to send and collect required documents from clients, replacing manual collection and follow-ups. This automates reminders and ensures only complete sets of documents proceed, solving delays due to incomplete submissions.

2. **Mandatory Document Validation with OCR.** Submitted documents are automatically checked using OCR (Optical Character Recognition) for completeness and accuracy. This reduces human error and ensures that only validated inputs enter the system, improving billing accuracy and compliance.

3. **Centralized Document Upload to a Database.** After account activation, all documents are uploaded into a centralized document database. This eliminates the need for scanning and physical handling, enabling faster retrieval and more secure storage.

4. **Minimal AI-Assisted Client Categorization.** Instead of fully automating categorization, the system uses a rules-based engine as the first layer, and minimal AI to suggest category matches based on past categorization decisions. Human analysts remain in control, simply confirming or overriding the AI's recommendation. This reduces decision time and inconsistency while maintaining transparency and manual validation.

5. **Automated Pricing System Adjustment.** After categorization, the system initiates a pricing adjustment workflow without manual data entry. This speeds up the invoicing process and ensures consistency in billing rates tied to client profiles.

6. **Workflow Streamlining Across Departments.** By introducing connected digital systems and automating data handoffs, the process reduces the need for fragmented manual handovers between the KYC, Account Completion, and Categorization teams. This minimizes delays and improves accountability. Additionally, the system design supports a real-time tracking dashboard. Internal teams can monitor the progress of client onboarding and documentation, reducing internal inquiries and improving coordination.

7. **Auto-Generated Invoices.** Manual invoice creation has been eliminated. Once client documents are validated and categorized, the system generates invoices automatically using pre-set billing rules. This cuts down preparation time and virtually eliminates data entry errors.

8. **Automated Reconciliation.** Instead of matching payments manually, an algorithm now reconciles payments to invoices using transaction data. This removes delays and ensures up-to-date account status with minimal intervention.

9. **Real-Time Notifications.** The onboarding system now pushes live updates to clients and internal teams through notifications and dashboards. This solves issues caused by disjointed emails and lack of visibility, allowing both sides to monitor progress and act faster.

10. **Continuous Process Monitoring and Feedback.** A new performance dashboard tracks every step of the process against KPIs. If delays, feedback, or SLA violations occur, automated alerts notify the right teams. This ensures real-time responsiveness and ongoing improvement.

II. Feasibility

The proposed changes to the current processes of GNB's CBD and ABD necessitate a degree of internal restructuring and requires the development of digital infrastructure to support the automation and streamlining initiatives that form the core of the process improvement. Once the proposed changes have been implemented, and the improved process is in place, there will be no need for additional manpower, compulsory overtime, and there will be no reliance on the services of any external parties. The improved processes will make no compromises on the integrity of the service, keeping critical tasks intact while implementing new digital infrastructure to support these tasks and reduce the possibility of error where touchpoints between brokers and key data objects existed in the current process.

The CBD and ABD already have a degree of automation present in their current processes, seen in the automated billing adjustment system already in place. The proposed changes expand on this existing infrastructure, and extend it to other parts of the process where it is sorely needed. Given that GNB already has experience with creating and deploying proprietary digital automation systems, the proposed changes are not outside the scope of what GNB is currently capable of with the organization's current knowledge and resources. Furthermore, taking into consideration the level of automation at which GNB's competitors operate at present, there is evidently considerable headroom for the implementation of digital automation as the process stands.

III. Impact

The implementation of the new process model delivers measurable improvements across GNB operations, particularly within the CBD and the ABD. By shifting to a digital intake portal and automated document validation, the CBD eliminates delays from incomplete submissions and follow-ups, allowing brokers to spend more time on client engagement. On the ABD side, automation of client categorization, pricing adjustments, invoicing, and payment matching reduces manual workload and significantly lowers the risk of errors which addresses one of GNB's most costly operational issues. These improvements reduce processing times from weeks to hours, streamline workflows, and remove reliance on overtime or additional manpower, directly responding to GNB's business constraints. In addition, real-time dashboards and monitoring systems enhance process transparency and accountability, while clients benefit from faster onboarding, instant billing confirmation, and better service quality. Overall, the process overhaul supports GNB's strategic goals by boosting efficiency, reducing compliance risks, and improving client satisfaction in a highly competitive banking environment.

Conclusion

The detailed review of Goliath National Bank's client onboarding and billing processes revealed several important challenges in the current manual and fragmented workflow. Issues such as inconsistent document handling, subjective client categorization, and manual invoice processing have led to longer cycle times, increased errors, and lower customer satisfaction. These problems not only raise operational costs but also create risks around compliance and the bank's reputation.

By carefully analyzing the root causes and involving key stakeholders, the proposed To-Be model offers a clear path toward automation, digitization, and better integration. Recommendations like introducing a digital client portal, using OCR for document verification, applying AI for client categorization, and automating pricing and billing aim to reduce manual work, improve accuracy, and speed up the process.

With defined workflow ownership and real-time monitoring in place, GNB can boost accountability and respond faster throughout onboarding. The goal of reducing account activation time to 60 minutes, along with automated billing and payment matching, will greatly improve efficiency and the overall client experience.

These changes will help Goliath National Bank grow in a scalable, compliant, and customer-focused way. The redesigned process not only fixes current issues but also lays the groundwork for ongoing improvements and staying competitive in a digital financial world.