A green and white logo

Description automatically generated

**Solution Requirements**

A black background with white text and red squares

Description automatically generated

Contents

[Introduction 3](#_Toc150525407)

[Overview 3](#_Toc150525408)

[Objective 3](#_Toc150525409)

[Scope 4](#_Toc150525410)

[RFI Response 5](#_Toc150525411)

[Functional Requirements 7](#_Toc150525412)

[Non-Functional Requirements 9](#_Toc150525413)

Introduction

Most financial companies today must grapple with challenges in the AML sector. A variety of events concerning TD recently have brought to light the need to improve AML process at TD bank. This is due to many reasons, including the bank’s desire to expand in the US market, mergers and acquisitions, and regulatory compliance. This project proposes three solutions to improve the existing process at TD. We have combined the requirements for these solutions in this document.

Overview

TD Bank has significant investments in Canadian housing with variable mortgage rates. Currently, this is a time of inflation with rising interest rates. TD stocks have seen an increase in short bets by speculators in the US due to their stake in Charles Schwab, an American firm that has recorded significant losses at 47 million USD, as well as a failed acquisition of another American firm, First Horizon, due to concerns from regulators such as the Federal Reserve and Office of the Comptroller of the Currency (OCC). US Department of Justice later ordered a probe into the bank’s AML processes in the American division, which signifies the need for this project. The bank needs to improve its AML processes and find ways to improve relationships with US regulators to expand into the American Market.

Objective

The project plans to improve AML compliance at TD by using technology-based solutions and providing detailed training to employees to equip them with transaction monitoring and processing tools. There are many ways to approach this problem, such as by building AI-based solutions for transaction monitoring, report generation, customer due diligence, fraud detection, and data security. This solution will combine the best AI algorithms and practices in the AML domain and provide regular and customized employee training. Generative AI is still a very new technology that can be integrated with other AI and machine learning algorithms to make a comprehensive, robust AML system, which has the potential to make TD a pioneer in this sector. The alternative is to use the services of a well-established AML software vendor who is already a market leader and cooperate with them to integrate the existing AML process at the bank with vendor software and best practices.

Scope

The solutions will have real-time transaction tracking and monitoring with timely detection of money laundering activities. The solution chosen should seamlessly integrate with the bank’s existing processes. The solution should help the bank comply with strict US rules and regulations. The AI solution will improve the efficiency of detecting fraud transactions, generate reports faster, improve data management processes, ensure a faster information flow across the system, and improve the bank’s anti-money laundering and anti-terrorist financing process. The in-house team will develop a new solution combining generative AI with modern machine learning algorithms. Significant investments will need to be made into data infrastructure and solution architecture.

There are already many market leaders present in this domain that offer their services as AML software vendors. They have a software or combination of multiple software tools for various aspects of AML. Refinitiv, Idenfy, Fiserv, Trulio, Jumio, Oracle, to name a few among the many options.

Training will be provided to employees regardless of the solution chosen because there is a need to improve compliance. One of the best ways to do that is to encourage the current employees to follow best practices in the existing processes. Employees must be regularly assessed after training sessions to evaluate their understanding of the AML system and its various processes. Based on their roles and responsibilities, different levels of employees will receive different types of training in this space to better handle transaction data, flag illicit activity, and data reporting. Employee needs such as accessibility will be considered during training to accommodate them and provide training in multiple languages to better serve the needs of every employee, as TD values diversity and inclusion.

Scalability is crucial for the solution so it can accommodate future expansion and increasing transaction volume. AI processes require large amounts of data which is used as training data sets for the learning algorithms to learn from and make better and informed predictions.

RFI Response

| **Question** | **Response** |
| --- | --- |
| 1. Is there any reference you would like to make from any other bank that has made a successful AML solution? | None |
| 1. What are the training and services expected for your staff? | TD places a high level of importance on training. |
| 1. Do you have any suggestion about the modes of the solution? | We will look to our Consulting Team to provide suggestions. |
| 1. Do you want the solution to scale up or down based on the user volume in near future? | Scale Up |
| 1. What is the SLA of timeline for the system to report any suspicious activity? (Eg: The AI solution should report any suspicious activity within 10 seconds of occurrence) Have you encountered challenges in monitoring and detecting suspicious activities involving cryptocurrencies within the current AML framework? | Within one second …. |
| 1. Do you think it would be useful to provide more training on AML in relation to cryptocurrencies? | Yes |
| 1. How does the AML team interact and work together with other offices or outside parties like regulatory or law enforcement bodies? | Excellent working relationship and we ensure we are aware of changing regulations at all times. |
| 1. Can you give examples of successful outcomes or difficulties the AML team has encountered? | Team is extremely successful and build strong working relationships. |
| 1. Do you think there are any areas of risk assessment that need more frequent evaluations or modifications? | Risk is of great importance and suggest a thorough review is executed. |
| 1. Can you describe the significance of customer due diligence (CDD) in AML compliance and how it has changed as a result of technological advancements? | AML opportunities are on the increase due to technology. |
| 1. What financial services or products are most prone to the risks associated with money laundering, and what steps might be taken to lessen these risks? | We would prefer to not target specific services and products as all are of equal importance. |
| 1. From a risk assessment perspective, what specific areas within transaction monitoring or customer due diligence should the solution focus on, and how frequently should these assessments be updated? | All areas of the process require significant focus and monitoring must be daily. |
| 1. Can you provide any examples of best practices or achievements from financial institutions that have excelled in AML compliance? | Not aware of examples. |
| 1. What training and educational resources do you believe would be most effective in ensuring the AML team's proficiency in dealing with cryptocurrency-related AML issues? | Training is key and we need to ensure programs are intuitive and interesting. |
| 1. What lessons have been learned from past acquisitions and how does the bank plan to address regulatory concerns in future expansion? | No expansions on the radar. Key is to know the company we are purchasing and ensure all regulatory processes are followed. |
| 1. What steps have been taken by the bank to address the recent increase in short interest in the stock? | All FI’s understand we are in a period of inflation, and we need to ensure profits remain high and support our customers. |
| 1. What level of customer support does the vendor offer? Is support available 24/7, and what is the typical response time? | 24/7 with response times under 2 minutes. |
| 1. What performance metrics does the solution provide to measure the effectiveness of the AML program? How are these metrics presented and analyzed? | Reduction of AML occurrences, reduction in lost funds and increase in profits. |
| 1. How does the solution incorporate ethical considerations in its AI algorithms? For instance, how does it ensure fairness and avoid bias in its decision-making processes? | We need to ensure our AI model incorporates fairness, ethics in the decision making process. |

Functional Requirements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Requirement ID | Requirement Description | Priority | Dependencies | Acceptance Criteria |
| FR01 | Real-time transaction monitoring and detection of suspicious activities | High | None | The system must detect and alert on any suspicious transaction within 5 seconds. |
| FR02 | Categorize money laundering activity based on severity and priority | High | None | The system must categorize suspicious activities in a structured manner for further action. |
| FR03 | Integration with the current system to access transaction and customer data | High | None | The system must seamlessly integrate with the existing bank systems without disrupting operations. |
| FR04 | Generate a detailed activity report and share it with the desired team | High | None | The system must generate and share a detailed activity report when suspicious activity is confirmed. |
| FR05 | Data breach protection measures | High | FR03 | The system must have safeguards to prevent data breaches |
| FR06 | Generative AI interface and ML algorithms trained on company data | Medium | FR03 | The system should incorporate generative AI and ML models using relevant company data. |
| FR07 | Personalized training based on employee roles | High | None | The system should identify employee roles and provide role-specific training. |
| FR08 | Update training modules based on recent activity | Medium | FR07 | The system should update training materials when new money laundering activity means are identified |
| FR09 | Access employee knowledge with assessments, quizzes, and simulations | Medium | FR07 | The system should evaluate employee knowledge through assessments, quizzes, and simulations based on the training. |
| FR10 | Maintain records of employee training programs and assessment scores | Low | None | The system must keep records of training programs and associated assessment scores |
| FR11 | Adherence to AML laws and regulations in the U.S. | High | None | The training modules must fully comply with AML laws and regulations in the U.S. |
| FR12 | Selection of a highly successful AML vendor | High | FR11 | The bank must select an AML vendor known for its success and reliability. |
| FR13 | Scalability to handle increasing volume | High | None | The system must be scalable to accommodate growing transaction volumes. |
| FR14 | Vendor maintains audit trails | Medium | FR04 | The selected AML vendor must maintain audit trails for compliance and accountability. |

Non-Functional Requirements

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Requirement ID | Requirement Description | Priority | Dependencies | Acceptance Criteria |
| INFR01 | Alert any suspicious activity within 5 seconds | High | FR01 | The system should promptly alert of any suspicious activity within 5 seconds. |
| INFR02 | Retrieve customer details of suspicious activity within 10 seconds | Medium | FR01 | The system should access and provide customer details for suspicious activity within 10 seconds. |
| INFR03 | Accessibility according to WCAG 2.1 standards | Low | None | The solution must adhere to WCAG 2.1 standards to ensure accessibility for employees with disabilities. |
| INFR04 | Multilingual training modules with subtitles | Medium | None | The training modules should be available in multiple languages with subtitles. |
| INFR05 | 24/7 vendor support | High | FR12 | The selected AML vendor should provide 24/7 support for assistance and issue resolution. |