



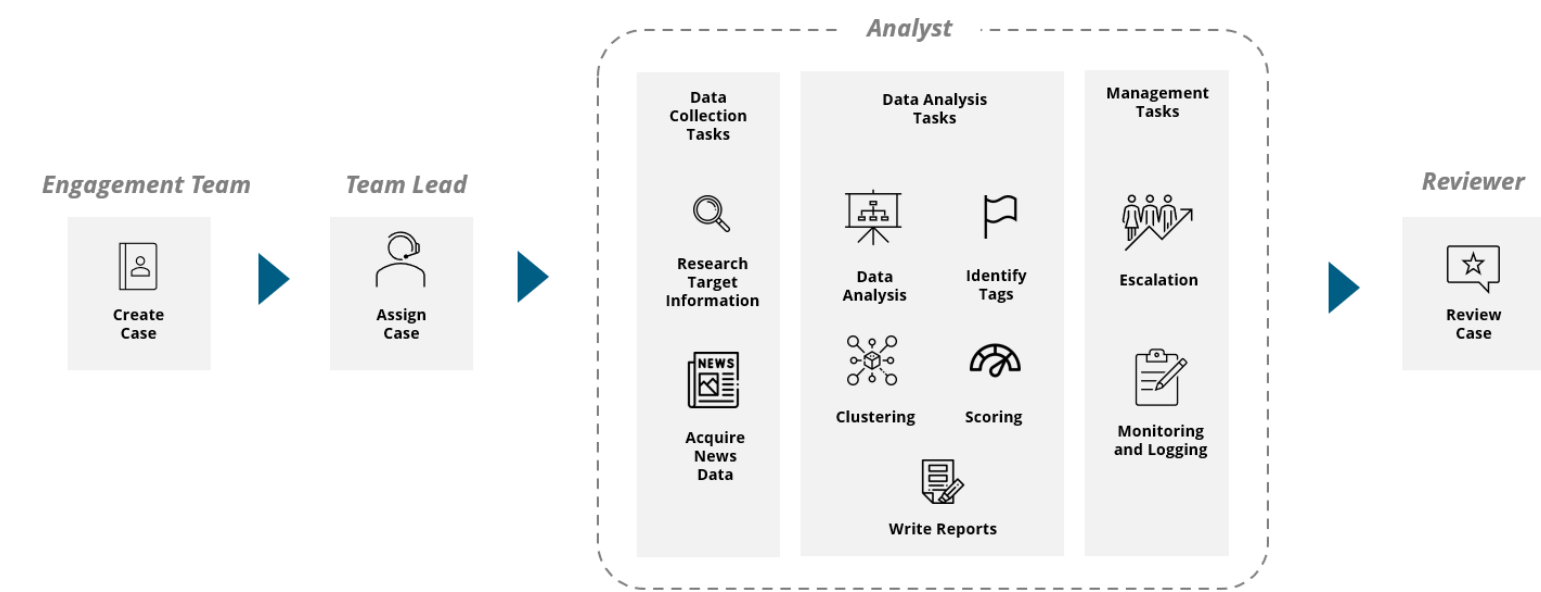
Diligence Insights: Streamlining Company Background Check Operations with an Integrated Management and Automation System

Natcha Karnsakultorn
Advised by Prof. YEUNG, Dit Yan
Supervised by Deloitte Advisory (Hong Kong) Limited



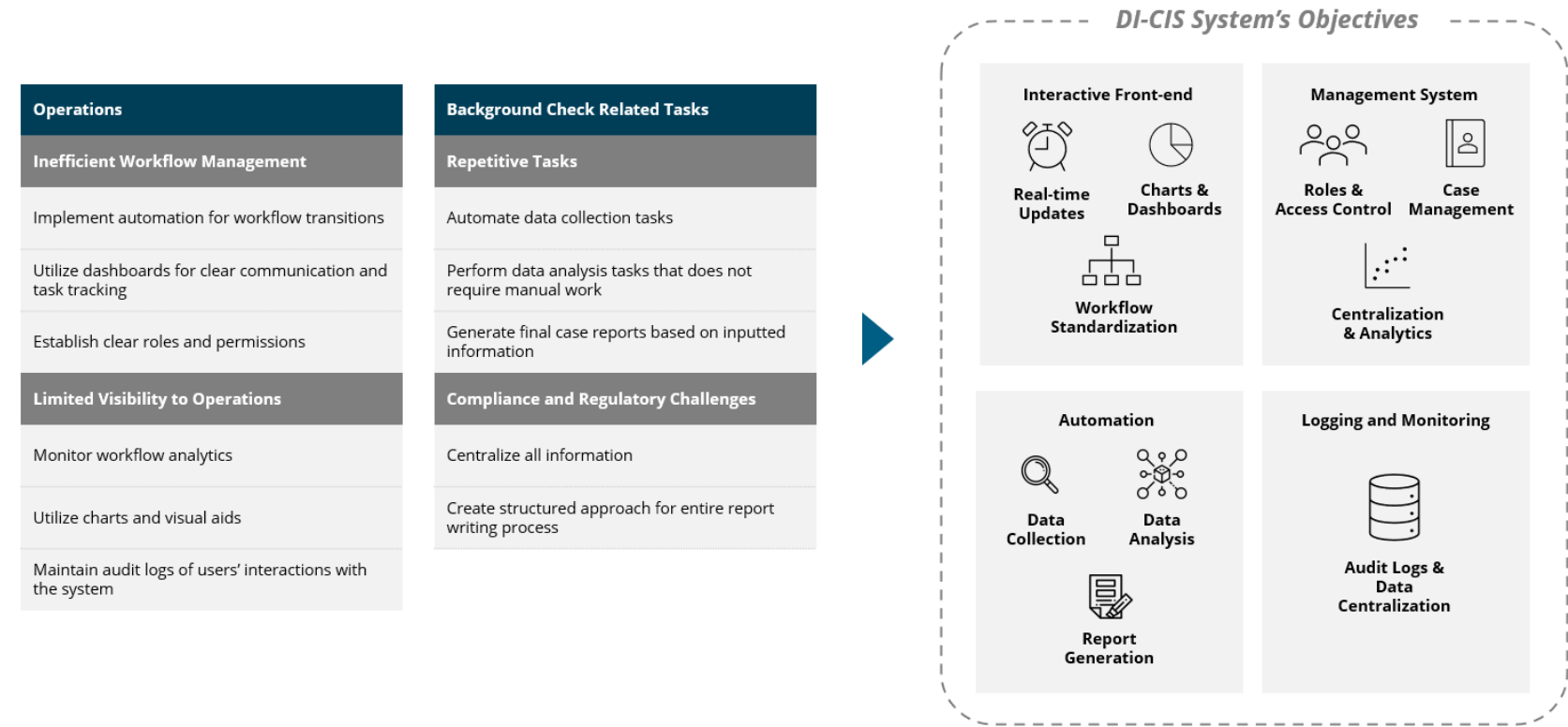
Project Overview

A typical workflow for a company background check within Deloitte's Corporate Intelligence Service (CIS) team involves collaboration among multiple stakeholders, various management processes, and performing repetitive tasks. Our project aims to streamline these processes, enhance communication, and automate repetitive tasks to improve overall efficiency and effectiveness.

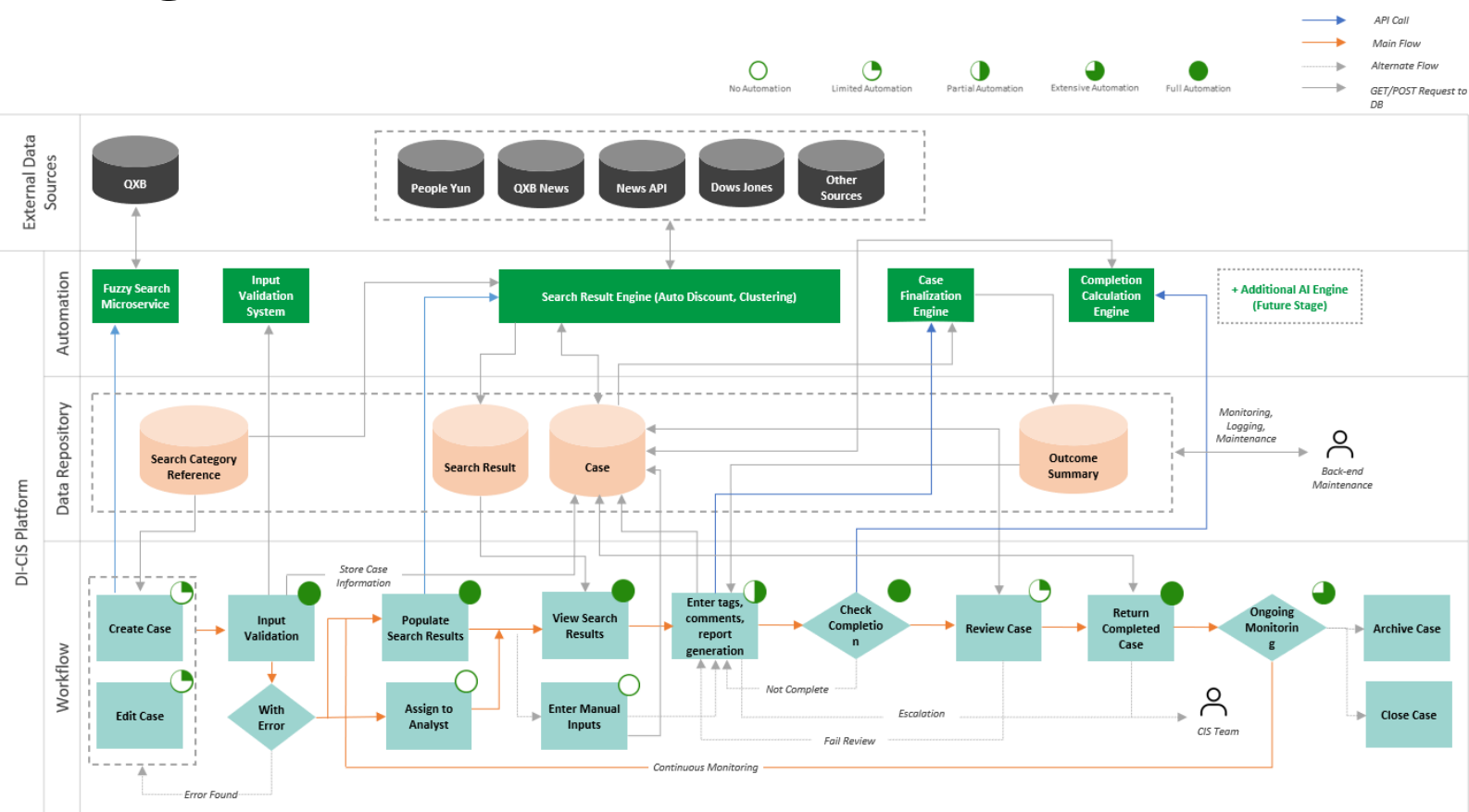


Objectives

The objective of our project is to address challenges in traditional workflows—including inefficient workflow management, limited operational visibility, repetitive tasks, and compliance and regulatory issues—by developing software that incorporates interactive front-end components, robust management systems, automation capabilities, and comprehensive monitoring and logging features.



Design



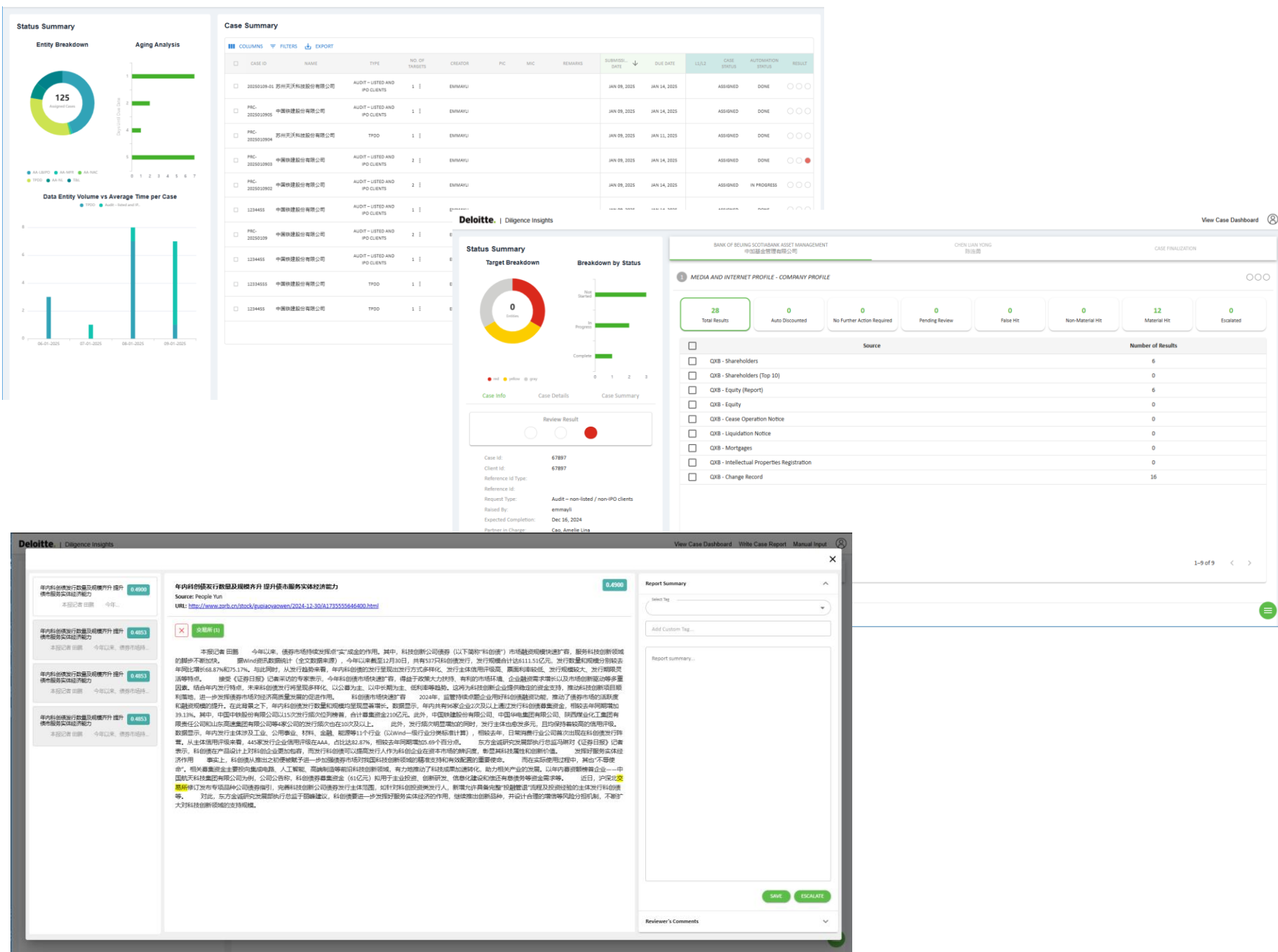
We have developed a comprehensive life cycle for managing cases, detailing how they interact with our databases and automation systems at each stage. Additionally, we have designed several automation systems to streamline specific tasks, including:

1. Fuzzy Search: Enhances search capabilities when filling in case information.
2. Input Validation System: Ensures data accuracy and integrity by validating user inputs.
3. Search Result Engine: Automates the process of extracting information from various sources and conducts data analysis.
4. Case Finalization Engine: Facilitates case completion by consolidating information into a structured format
5. Completion Calculation Engine: Accurately calculates metrics related to case completion.

Technology

Front-End: Next.js (Next-auth), Tailwind CSS, MUI Library
Back-end: Python (deployed as microservices)
Database: MongoDB (Mongoose, PyMongo)
Web Framework: Flask

Results



Conclusion

Accomplishments:

1. User Interface: Emphasizes ease of use, visual design, and responsiveness.
2. Automation: Ensures accuracy, reliability, and scalability.
3. Workflow Improvement: Increased throughput, collaboration, and performance

Improvements:

1. Security: Improve security features and implement AD sign in system
2. Logging & Monitoring: Monitor user actions to improve data-driven decision making
3. Generative AI Integration: Automatically suggest risk levels and write comments.