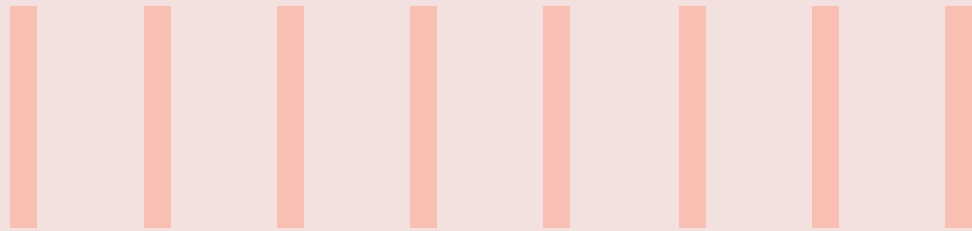




# API ARCHITECTURE SIMPLIFIES REPORTING

INFOSYS AUTOMATES WORKFLOW AT A UNIVERSAL BANK



A global universal bank, offering investment and retail banking, treasury, and wealth management services across USA, Asia, Australia, and Europe, wanted to simplify regulatory compliance. The full-service financial firm operated via multiple legal entities spanning several lines of business across regions.

The existing custom-built desktop application was constrained to address the dynamic management and regulatory reporting requirements of all legal constituents within the bank. Further, the inflexible system and manual processes resulted in sub-par reporting.

Raw data for various products / businesses was accumulated from multiple sources at different time intervals. As a result, business teams worked overtime to gather data, undertake complex calculations, generate reports, and validate data to meet the deadline of regulators.

## Migration to a digital framework

Infosys designed and developed an automated solution that standardized regulatory and management reporting while providing the flexibility to meet ad hoc requirements. Our team of business analysts and developers collaborated with IT and business users at the universal bank to understand functional requirements. Infosys proposed a bespoke reporting tool underpinned by a robust architecture (Figure 1).

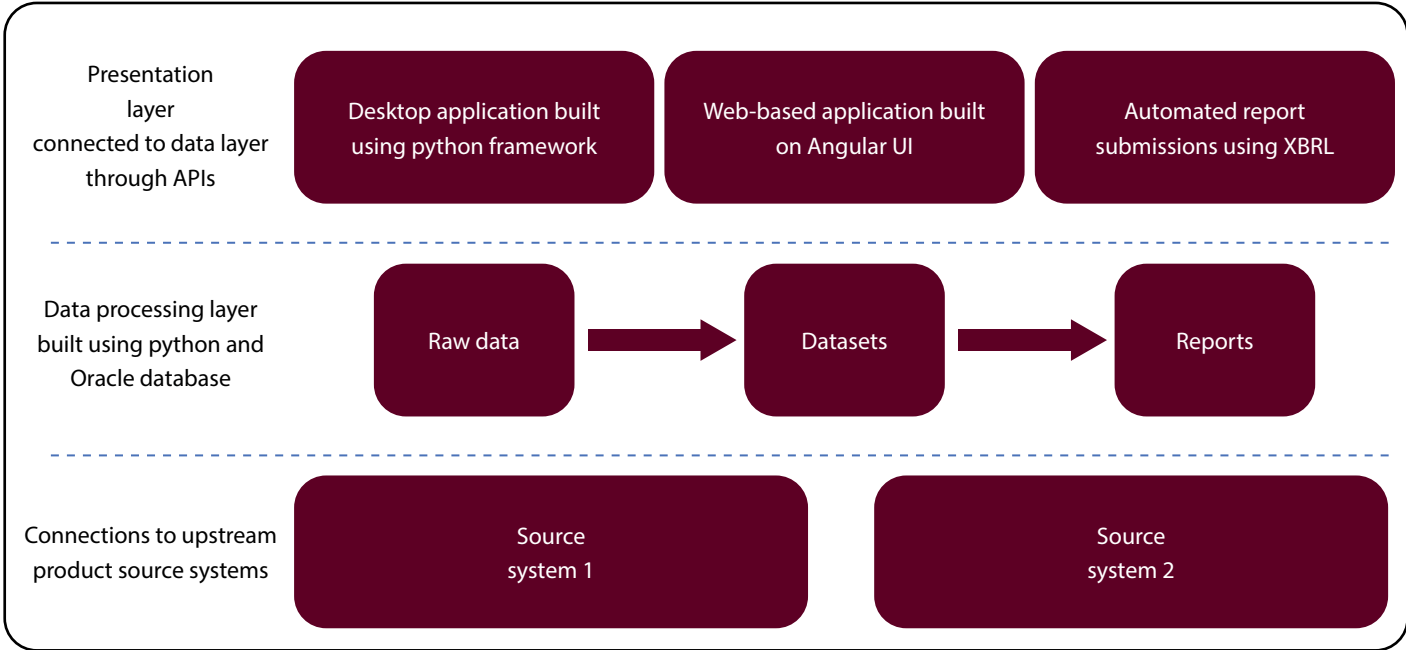
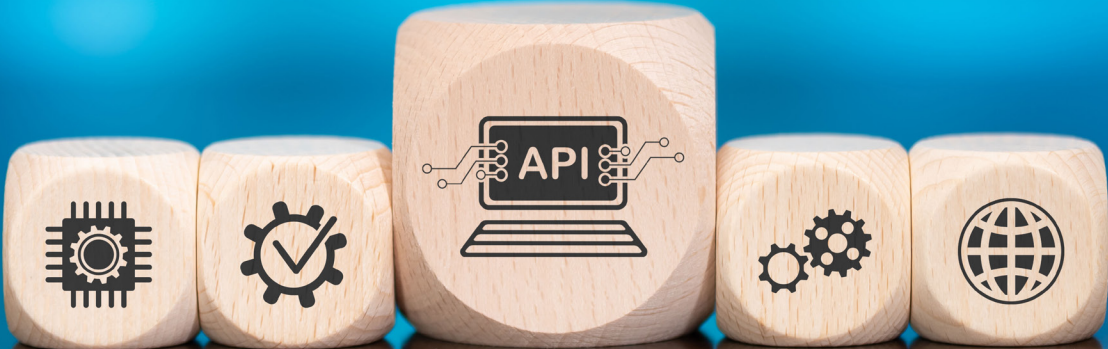


Figure 1: High-level solution design

Infosys developed a centralized platform with rich functionality to enable prompt and accurate liquidity management-related reporting by all legal constituents of the bank.



## Automation

The Infosys team created a repository of templates and streamlined workflows – from creation of reports to approval and submission. It enables users to readily generate reports by using specific templates for various regulators. We incorporated a ‘scheduler’ that triggers automated report generation at pre-specified time schedules based on pre-defined feed-related information and the latest available data. Workflow automation accelerates approval, and ensures that reports are shared promptly with the regulator after internal approval. Notably, we adopted the eXtensible Business Reporting Language (XBRL) format to facilitate data interpretation and analysis.

## Flexibility

The platform allows users to configure variables in the system and make minor design changes to reporting formats without involving the IT team. This accelerates ad hoc report generation. In addition, business users can create and maintain multiple versions of a report to fulfill regional requirements. An approval system tracks modified report formats. The automated solution offers the flexibility to use historical data when the latest data is unavailable. Further, it supports advanced analysis and report optimization.

## Reusability

Our approach to generate reports by leveraging baseline templates provided by regulators minimizes the time taken to design new

report formats. Users can easily configure reports by reusing sub-components of a report. The Infosys team developed data holders to define and hold small datasets as well as variables for diverse products and timeframes. These datasets and variables can be reused across multiple reports.

## Accessibility

Infosys developed database schemas in Oracle for transitioning the source data to structured formats. We enhanced the legacy desktop system, and implemented Python-based application programming interfaces (APIs) and an Angular-based web UI. Our team migrated system functionalities to the Angular web application. Significantly, we ensured parallel running of the desktop and web applications until all functionalities and modules were migrated to the automated platform.

## Efficiency

The Infosys team developed a dashboard to help users monitor status of report generation, validate data, and rectify errors. The dashboard allows users to view and download reports. A ‘feed manager’ enables the reporting team to view, monitor and manage incoming data feeds used across reports. Infosys created ‘report folders’ to classify and store management and regulatory reports based on region, regulator and business function. In addition, we incorporated a search widget to simplify retrieval of reports.



Infosys' end-to-end services spanning application design, development, testing, production deployment, and support accelerated roll out of the automated regulatory and management reporting solution. The application empowers the treasury reporting team and business users at the universal bank to –



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