Self-Service BI (Business Intelligence)

ORGANIZATION

Our client is a multinational financial services conglomerate operating in 56 countries, specializing in commercial lending and leasing.

The company manages millions of dollars daily, serving thousands of business units, guaranteeing business unit commitments to customers, collecting funds from business units, and facilitating payments to banks internationally for letters of credit.
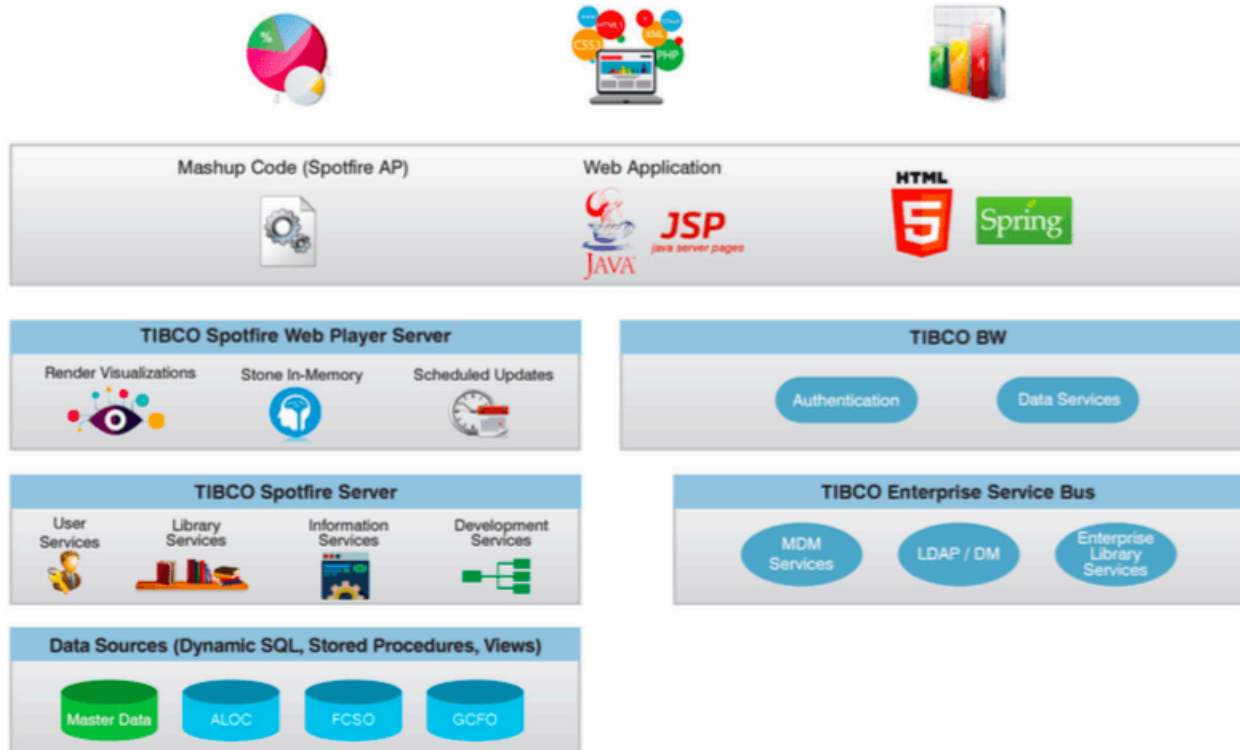
CHALLENGE

- **Global Business Units lacked visibility of costs associated with Letters of Credit (LOC) for their projects:** There was no visibility into LOCs across multiple Business Units, resulting in localized deals that were not in the best interest of the overall company. Business Units were unable to leverage financial institutions worldwide to obtain the most favorable LOC terms. A reporting solution was required for an Automated Letter of Credit web application that facilitates the request, review, bid, and issuance of Bank Guarantees and Letter of Credits by third-party banks. This solution needed to support complex filtering criteria and the ability to export report data to Excel and ZIP files, based on user roles.
- **Reports needed to be accessible through the BI Dashboard and other delivery channels without compromising the consistency of information:** Users required the ability to create new reports in the BI Dashboard, ensuring they were available to different users via the Web Application.
- **Consistency across all reporting channels was critical:** As multi-million dollar business decisions were made based on the information presented in these reports. Enterprise data governance was essential to ensure the security of the information.
- **The existing reporting system was manual and relied on ad hoc reporting:** The current process involved writing SQL to retrieve data from heterogeneous data sources and merging them together in Excel for further manipulation. This process resulted in data accuracy and consistency errors. Key data required for effective reporting was often unavailable due to data ownership and governance concerns. Data was scattered across multiple Oracle databases, with restricted access due to security concerns. Additionally, data was distributed in flat files, necessitating numerous import and export routines. The end solution was unreliable and could not scale to support 1,400 concurrent users.

TECHNICAL SOLUTION

- **XTIVIA leveraged a Self-Service BI (SSBI) framework for a quick turnaround on the ad hoc reporting solution:** The TIBCO™ Spotfire® based self-service BI solution delivered information through Business BI Dashboards and the BPM Web Application. The solution ensured that reports and analytics were driven from a real-time Enterprise Data Warehouse (EDW) as well as transactional databases that were not integrated with EDW. XTIVIA implemented real-time Data Warehousing by integrating the BPM Solution and other Enterprise Systems with EDW in real-time. The self-service BI was embedded within the BPM

solution using mash-up technology to ensure consistent reporting both inside and outside the transactional system.

- **XTIVIA's framework allowed users to select the required columns and apply report filter criteria:** Data from heterogeneous sources was joined at the reporting layer, presenting a unified data model for users to customize. TIBCO™ Spotfire® Information links were created for each data source, ensuring seamless access to data from various sources. User experience features, such as drill-downs, on-demand tables, and alternative row colors, were implemented to enhance the usability and effectiveness of the information.

- **The "Insert column from external data" feature facilitated data joins within Spotfire, eliminating the need for joins at the database level:** Spotfire was integrated with XTIVIA's SSBI Framework to maintain a consistent look and feel with other canned reports. On the transaction web application, users were presented with a list of reports they were authorized to view. The same filter criteria available through the BI platform were accessible through the Web Application. The SSBI mashup code (JavaScript API) embedded Spotfire reports directly into the web application, ensuring data consistency and a unified user experience across all channels.

- **The solution implemented provided the ability to share data through Excel:** SSBI utilized the Apache POI API to export data into Excel format. The reports were embedded into the Java application using the Spotfire Web Player JavaScript API. Client-specific application fonts, color schemes, layout, and design were used to maintain a consistent and customized reporting solution.

BUSINESS RESULT

- **Visibility of Deals Across All Business Units**: Enabled bundling of deals, resulting in multi-million dollar savings globally.
- **Data consistency and risk mitigation**: Achieved through reliable and consistent data, eliminating bank penalties and reducing compliance risks.
- **Security and Data Governance**: Enforced across all channels with integration of single sign-on, ensuring consistent data protection.
- **Consistent Look and Feel**: Maintained between the web application and reporting solution, providing a unified user experience.
- **Reduced IT Costs and Involvement**: Enabled through self-service ad hoc reporting, allowing end users to focus on business activities without needing extensive IT support.
- **Automated Reporting Solution**: Facilitated business users to concentrate on their core functions rather than spending time manipulating data in spreadsheets.

KEYWORDS

Multinational financial services, commercial lending, leasing, Letters of Credit (LOC), automated reporting solution, self-service BI (SSBI), TIBCO™ Spotfire®, Enterprise Data Warehouse (EDW), transactional databases, mash-up technology, real-time Data Warehousing, reporting layer, heterogeneous data sources, data governance, security, drill-downs, on-demand tables, data joins, Spotfire Web Player, Apache POI API, JavaScript API, single sign-on, consistency, multi-million dollar savings, compliance risks, automated reporting, IT support, unified user experience, business intelligence (BI), Data Engineering

SOFTWARE

XTIVIA SSBI (Self-Service BI), Spotfire® Professional 4.5, Spotfire Web Player 4.5, Spotfire Server 4.5 , Spotfire JavaScript API, Apache POI API, Oracle® 11g

ABOUT XTIVIA

At XTIVIA, we've provided IT solutions and consulting services for over 30 years. We offer a wide range of services, including technology assessments, IT service and asset management, software development, data analytics, cloud migration, DevSecOps, ERP, and enterprise content management. Our team of experts is dedicated to each discipline, ensuring that our clients receive the best possible service. We've partnered with industry leaders to bring our clients the latest solutions. Through strategic acquisitions, we've acquired talented people who are experts in their industries, passionate about what they do, and committed to providing exceptional service to our clients. Whether you need to improve your IT infrastructure or implement new software solutions, XTIVIA is here to help you achieve your business goals. Contact us today to learn more about our services.XTIVIA has offices in Colorado, New York, New Jersey, Texas, Virginia, and India. www.xtivia.com