Embedded Analytics for Real-Estate Management Software Suite

intellicus

Overview

America's leading real-estate management solutions company uses Intellicus to optimize its customers' everyday operations.

The company offers cloud-hosted applications for a myriad of real estate management services; including renting, buying, or leasing property, account management, property maintenance, procurement, vendor management, invoicing, payments, bidding, documentation, and verification, among others.

The real-estate management software suite provides a collaborative interface for vendors, property managers, property owners; to manage the properties and the related operations for more than 7000 registered users, including 200 property owners who have more than 100 properties registered individually.

The company needed a platform that could help their end-users to perform unified analytics over all the data transactions collected through their applications. Their business depends heavily on everyday reporting insights they get with more than 2000 scheduled and ad-hoc reports.

They wanted a platform that could scale to process these requests promptly as these operations are time-critical. They were looking for a platform to tightly couple with their different applications, personalize the user experience and provide custom analytics.

With advanced analytics, their consumers need reports vis-à-vis maintenance updates, complete accounts information, vendor activities, customer transactions, procurement information, and more. It would help them monitor periodic reports at a prescribed time and plan their next actions accordingly.

Business Challenges & Requirements

One of the components in the customer applications is data analytics with automated reporting. They wanted to integrate a BI platform with their SaaS-based applications and give analytics over everyday transactional operations to their end customers. They were also looking for periodic performance and operational reports to check and analyse the overall business flow for C-level. They wanted to achieve this with a BI platform that could become an integral part of their applications and give personalized reporting to varied users. Their users needed reports to perform actions like budget analysis, track spending activities, monitor property maintenance schedules and updates, compare periodic sales, rent, and lease activities. Using these insights, the users wanted to optimize the overall operations and improve profitability.

They wanted to integrate more than three applications/ components to the BI platform. The process was complex. It required a single instance of the BI platform to connect multiple data sources, some private and some regular databases for all applications and users. Over this, the data access needed multiple validations to provide access based on applications and user preferences. Access had to be granted based on whichever applications the users' login and their access permission to respective databases. These validations were to be handled internally by the platform so end-users could effortlessly log in and view their reports.

The BI server was required to respond diversely to requests of various application users; in a personalized manner, with white-labelled themes, granted data access, reusable report templates etc. It needed a high-level integration architecture with strong security. It also needed a templated user-friendly interface, so as users interact with the platform in the way most suited to them.

They were looking for a platform that could:

- Provide overall operational reporting and analytics capabilities to real estate users
- Support multi-tenancy and multi-app environment
- Serve different applications users in a personalized way
- Integrate as a SaaS-based cloud-hosted solution
- Run more than 2000 report requests daily and scale as the user base increases
- Collate data from many data sources, at the same time grant data access based on application and user norms
- Provide a semantic layer so that end users can edit and create their reports, regardless of their technical expertise
- Run the same report template for different users by fetching data from respective user databases
- Provide portal themes based on the themes of various applications
- Personalize reporting and analytics experience for users based on the application as well as an organization the users belong
- Automate report run and delivery processes so as the information reaches the right person at the right time
- Timely notify their technical teams and other business users on report execution status
- Integrate with their enterprise security system to ensure data privacy
- Implement user and role-based data visibility, security and governance rules and policies
- Support multiple timestamps to ease the report scheduling process

Intellicus Solution

Intellicus has provided them with a SaaS-based architecture that is embedded seamlessly into their applications. A single instance of Intellicus supports all the applications and provides custom-themed analytics interface based on the applications preferences. Intellicus portal is completely templated based on individual applications. It means based on the application - the theme, user-experience and other components meet users' eyes. Their users generate a variety of reports for their everyday operations. Using these reports and insights, they plan and efficiently manage their overall processes.

Intellicus serves as a multi-tenant platform in the multi-app environment based on the complex architectural requirements. In this solution, when a user logs in into any application, Intellicus identifies the requesting application with a unique key. Based on this identification method, user access, the theme and other analytics components are displayed and managed.

Intellicus connects to hundreds of properties owners' databases that are usually MySQL and Oracle databases. Intellicus has enabled top-level security checks to provide relevant data access to numerous user requests. Based on the user, role and organization, data access permissions come into effect. The client has provided pre-built report templates to their users. Similar report templates execute with different databases for different users in the same environment. It requires verification at multiple levels which Intellicus handles seamlessly.

The applications users have gradually grown to more than 7000 users. To support this amount of concurrent user requests, Intellicus helped the client create a cluster of Intellicus BI servers. This cluster balances the load and speeds up the process to run reports when multiple users are using the platform simultaneously. They are using Intellicus scheduling feature to automate the complete reporting process so as users get timely access to everyday reports in their inboxes and can access them on-the-move from different devices.

Business Benefits

- Simplified reporting and analytics based on the complex architectural requirement
- Advanced analytics capabilities as a part of their application
- Automated generation and distribution of critical reports resulting in operational efficiency
- Application, user, and role-based data access
- Customizations enable them to provide a seamless user experience and user adoption