XTGLOBAL™

Modernizing Legacy Applications Using Oracle APEX and OCI

PROBLEM STATEMENT:

The client was using a **Microsoft Access-based legacy system** for managing critical business operations. They required a **modern, scalable, and secure solution** to replace the outdated system while leveraging their existing **Oracle Database license** we recommended Oracle APEX. The objective was to build a **new Settlement Application** efficiently using **Oracle APEX** and integrate it with other business systems via **APIs and Single Sign-On (SSO)**.

KEY CHALLENGES:

Migrating from Microsoft Access to a **modern web-based solution** without disrupting ongoing operations.

Integrating with existing **applications** using APIs and ensuring seamless data exchange.

Implementing Single Sign-On **(SSO)** for a unified authentication mechanism.

Ensuring security and **compliance** with industry best practices.

SOLUTIONS PROVIDED:

Oracle APEX-Based Settlement Application Development

○ Designed and developed a **Custom Settlement Application** using **Oracle APEX,** enabling faster deployment with a low-code approach.

○ Migrated data and business logic from the **legacy Microsoft Access system** to **Oracle APEX,** ensuring improved scalability and reliability.

API Development & Integration

- Built secure **REST APIs** to facilitate seamless data exchange between Oracle APEX and external systems.
- Integrated the application with **existing enterprise software**, ensuring real-time data synchronization.

Single Sign-On (SSO) Implementation

- Implemented **SSO authentication**, enabling users to access the new Oracle APEX-based application using their existing enterprise credentials.
- Ensured **role-based access control (RBAC)** to enhance security and manage permissions effectively.

Performance Optimization & Security Enhancements

- Leveraged **Oracle APEX's built-in security features** to **protect against vulnerabilities** and ensure compliance with **data security regulations**.
- Optimized queries and database performance for **faster processing and better user experience**.
- Managing OCI environment.

KEY BENEFITS:

50% improvement in system performance compared to the legacy Microsoft Access solution.

40% reduction in IT operational costs by utilizing Oracle APEX with an existing Oracle Database license.

Enhanced security and compliance, reducing risks associated with legacy systems.

Seamless integration with third-party systems using API-driven architecture.

Faster deployment and improved user adoption, thanks to the **low-code** Oracle APEX framework.