Company: Colab Consulting Pty Ltd

Location: Sydney, Australia

colab.com + cel-mobile.com

Industry: Software Development

Oracle Products & Services:

- Oracle JDeveloper 11g
- Oracle ADF / ADF Mobile
- Oracle Database
- WebLogic Server 11g
- Oracle E-Business Suite R11.x R12.x

Project Scale:

- 40 pages
- 27 Task Flows
- 7 ADF Libraries
- 80 Business Entities
- 5 developers / QA
- Time to complete (elapsed): 6 months

Metrics:

- Concurrent Users: 8,000
- 4 sites, Australia-wide

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GOLD PARTNER

Credits:

Colab Consulting Pty Ltd: Simon Canil, Ian Keyworth, Gavin Harris, Tom Lutton, Georgia Sarris, James Stocks

Oracle Product Management – JDeveloper/ADF

COLAB + ECHO ENTERTAINMENT GROUP

"Oracle ADF Mobile allowed us to create a cross-device application that reconnected our customer's workforce to their enterprise system, with the convenience of anytime, anywhere processing, empowering them to manage their own information on their mobile devices. As the workforce reconnects, a natural increase in data accuracy and optimization of workflow process response times occur. " – James Stocks, Managing Director at Colab Consulting

Executive Summary

COLAB provides consulting, solutions and support for Oracle E-Business Suite (Human Capital Management & Financial Management) and develops, hosts and supports applications built on the Oracle Fusion Middleware framework, delivering high performance solutions for their customers that bring competitive advantage through creative innovation.

Engaged by Echo Entertainment Group (Echo), an existing Oracle EBS customer, as part of their extensive Workforce Optimization Program, Colab was tasked to mobilize key Oracle EBS processes and integrate third party applications through the provision of a single access point and enterprise mobility platform.

Colab delivered the Cel Mobile application which provided key business processes via smartphones, tablets and desktop with seamless integration to their Virtual Roster application.

Organization

Echo owns a number of casinos, hotels and conference facilities across Australia with more than 8,000 employees across six sites Australia-wide.

"Oracle ADF Mobile allowed us to provide our customers with access to their enterprise systems, enhancing their ability to streamline processing, reduce administrative overhead and free up their workforce to concentrate on strategic initiatives. From a development perspective, our existing skills with Oracle ADF provided a natural transition with Oracle ADF Mobile where we were immediately productive with rapid development of our mobile solution. System processing is executed faster and with greater accuracy bringing the customer's organization increased agility; critical for adapting to today's ever changing market environment" - Simon Canil, Director at Colab Consulting

The Business Issue

Echo's self service functionality is delivered to employees through multiple systems and interfaces; and due to the nature of their business, the majority of Echo's workforce is in the field, with no direct access to the corporate network and limited access to kiosk solutions. The mission was to mobilize key, high-volume processes and establish a common platform that is suitably robust and scalable to serve the enterprise's future mobile expansion.

Challenges / Solution

The key challenge faced at Echo was to architect a solution that allowed data and services from highly restricted and secured internal systems, that were currently available only to those connected within the corporate network, by either being onsite or connected through a VPN. Oracle WebLogic Server was utilized with a standards-based security approach. Web Services were written using the REST protocol to expose EBS functionality which provided the performance required for the mobile application.

A solution to authenticate and authorize users was a challenge that was

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overcome through the implementation of the Oracle EBS SDK for JAAS authentication.   As Echo did not currently consolidate security through a Single Sign On (SSO) system, nor did they have the capacity to quickly implement an SSO application, the ability to secure against user credentials (including UMX Role Management), allowed the team to overcome this significant challenge.

From an organizational perspective, there were varied technical capabilities across the organization. Many users did not have English as their first language, and many users could not access or did not have smartphones or tablets and were unfamiliar with the general concepts, navigation and the user interface. This demanded that the Cel Mobile user experience be highly intuitive with an easy to use interface that adopts common design patterns found in consumer applications. Additionally, Cel Mobile was rendered for desktop so that those users that did not have a smartphone or tablet could still access the system from a home computer.

Oracle ADF, with its MVC architecture, was the framework selected for the web-based application and this made the transition to ADF Mobile a seamless process where the experienced developers were able to reuse their existing Oracle ADF skills and apply them to Oracle ADF Mobile development. Naturally, Colab Consulting was more productive and this led to a shortened development effort in their multi-channel solution.

Project Description

Echo tasked Colab to provide solutions that would drive benefits through the achievement of the following objectives:

- Expand self-service including the enablement of mobile access to the broader workforce across HR, Payroll and Rostering domains.
- Deliver this capability to both controlled and uncontrolled devices including smartphones, tablets and desktops.
- Provide a technical architecture to support Echo's future mobile strategy.
- Provide a consistent look and feel across the application suite, both from a user interface (UI) and corporate branding perspective.

The following standard Cel Mobile functionality was rolled out:

- My Profile - View and update personal information. Scroll through supervisor hierarchy. Perform direct action communications to phone, email or SMS within contact record. Google maps workplace location.
- My Absences - Enter absence requests, view accrual balances, perform what-if calculations, view absence calendar.
- My Pay - View historical pay advice. Full payroll balance drill-down. Send PDF pay advice to email.
- Worklist - View and approve Notifications across all EBS modules including HCM, Finance and Purchasing.
- Directory - Search for people, view by hierarchy and perform direct action communication to phone, email or SMS

The 3rd party function, Virtual Roster, was integrated using remote iFrames and reverse proxy configuration for the ADF application (embedded within the Cel Mobile platform).

Business Value

- **Reduce Administrative Costs:** Reduce the centralized administrative effort for manual entry of transactions by empowering employees to enter transactions directly under a self-service model, regardless of location and device being used.
- **Reduce Printing Costs:** Reduce the number of manual pay slips printed

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and posted to employees.

- **Improve Transactional Efficiencies:** Improve the delivery times of information to employees, the entry of transactions and required approvals. This is particularly important in improving the submission and approval time when directly related to the billing cycle of organizations.
- **Facilitate a Broader Mobility Strategy:** ADF allowed for easy integration with third party applications using a Service Oriented Architecture (SOA). This allows organizations to utilize the framework to deploy mobile applications that span across the existing application footprint.
- **Facilitate BYOD:** The combination of the ADF Mobile (device application) and the ADF Faces (web application) provides a mechanism for employees to utilize their existing mobile hardware across phones, tablets and personal computers. This 'Bring Your Own Device' (BYOD) strategy reduces the capital expenditure required for organizations to deploy mobile applications.
- **Employee Engagement:** Highly intuitive and easy-to-use interface that adopts common design patterns; meets expectations of the workforce, increases employee engagement and removes training requirements.
- **Empower Field Staff:** Provides access to key EBS processes for staff working off-site.
- **Increased Accuracy of Data:** By moving the point of entry to the source of the transaction, employees and managers have visibility and control over the accuracy of data maintained within EBS.
- **Provide Greater Transparency:** Provide real-time information to employees and managers to view and initiate operational transactions within the business.

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Application Architecture

The following diagram shows the system architecture of CEL Mobile.

CEL Mobile Architecture
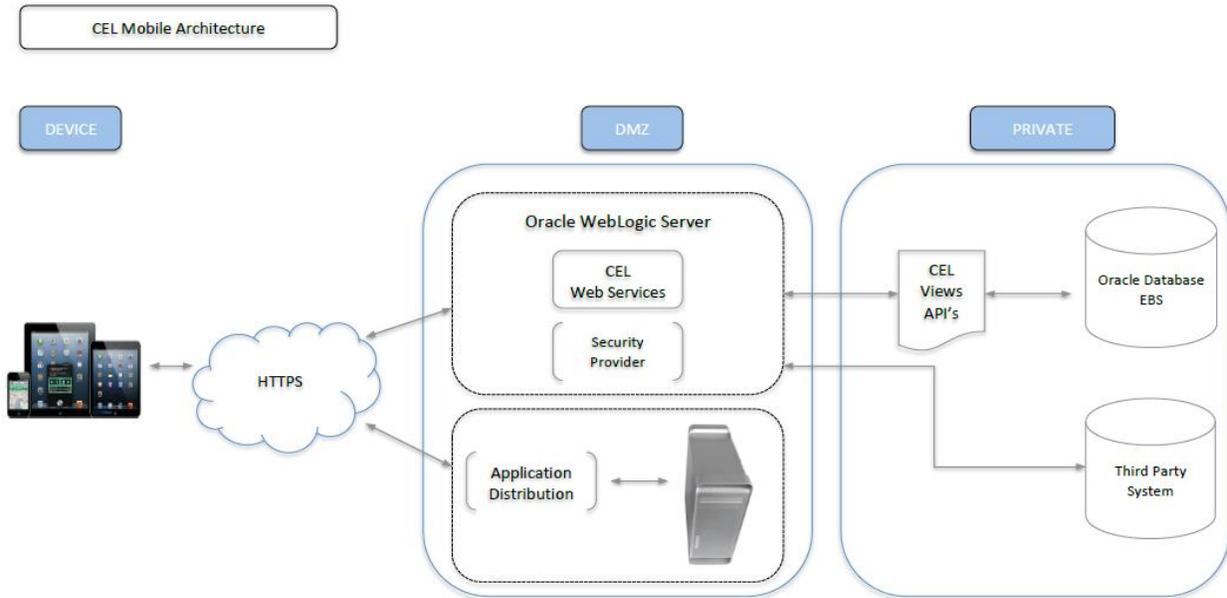
Application View

Mobile Screenshots of Cel Mobile Applications.

My Profile: View and update employee information

My Absences: Enter absence requests and view absence accruals

My Pay: View historical payroll data

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My Time: Create timecards and submit for approval

Worklist: View and approve Oracle Workflow generated notifications

Directory: Search for people, view by hierarchy, communicate with direct actions

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