CASE STUDY

Forklifting an Oracle Database to AWS Cloud

How a company turned an IT bottleneck into a competitive advantage by forklifting their Oracle database to the cloud

"smartShift Technologies has been a great partner - there's no substitute for working with a partner that has done it so many times before and is committed to making your project a success."

David Willen

CTO, Global Mobile Application Platform Provider Company

Highlights

Customer

Hosts a platform for mobile applications in the real estate industry.

Project

Forklifting a mission-critical, B2B mobile application with an Oracle Enterprise Database to the cloud.

Key outcomes

- Consistently seeing average IO response times of less than 1 millisecond
- Total outage time for the migration < 2 hours
- Core Oracle database is stable and performs well under the load

Products / Services used

- Cloud migration strategy
- Oracle database and application transformation
- 24X7 cloud management and monitoring

Customer Overview

This global company is a mobile application pioneer that has created the first scalable mobile cascading Platform-as-a-Service (PaaS). It enables mobile device users to 'search and discover' by using native mobile applications on a wide variety of mobile devices, such as Apple iPhone®, Android™, Black-Berry®, Palm and Microsoft Windows® 8. Today, it powers more highly rated and downloaded real estate app titles in the Android, iPhone and Blackberry marketplaces than any other platform in the real estate market.

The Challenges

Limitations on scalability made IT a business bottleneck
The company's real estate mobile application was running on physical infrastructure. They had multiple application servers, which catered to a specific operating system/mobile device separately. The existing infrastructure would need to be upgraded to support the growing business.

Risk of investing in over-capacity
The nature of future business demand is unpredictable. Investing in physical infrastructure to prepare for the future poses a risk if the capital investment is not being used optimally. It would also add unnecessarily to the total cost of ownership (TCO).

The Goals

The company was dedicated to innovation and customer satisfaction. They wanted their platform to be fast and reliable, even when the number of users and the network traffic increases. The goal was to expand their existing IT infrastructure so that the capacity:

1. Sustains the increased traffic
2. Can easily handle the spikes in traffic
3. Is flexible to quickly adopt for the variable loads in the future, without disrupting the current service

What did smartShift Technologies do?

Cloud migration strategy – Analysis and Proposals:
smartShift performed Cloud Readiness Assessments (CRA) designed to help the company understand the business opportunities and technical feasibility of its migrating applications and Oracle database to the cloud. smartShift conducted multiple proofs of concept (POCs) and established a vision and goals, along with critical success factors to match the organization's needs. smartShift proposed 3 options for the cloud architecture.

Transformation to the cloud:
The company chose to go with a pure cloud transformation rather than the Hybrid approach. This "Forklift" involved a complete, one time migration of the application servers, as well as the database, into AWS. smartShift's cloud solutions created a scalable environment to implement the transition.

In the process, smartShift was able to implement the following improvements:

• **Configured** the application in an auto-scaling array, which can automatically scale the server resources up or down depending on the volume of traffic.

• **Distributed** scaling across multiple availability zones to ensure high availability.

• **Replicated** the Oracle database to a standby Oracle database for failover, using Oracle's data guard technology.

• **Enhanced performance** through load-balancing across the application server tier by using HAProxy load balancer instances.

24X7 cloud management and monitoring:
smartShift now manages the company's cloud application around the clock. smartShift's health-check monitoring allows the company to receive warnings and notifications when issues arise and when they are resolved.

"smartShift Technologies provided the heavy lifting of building our base instances, setting up backups, building deployment scripts, implementing the security groups, and providing 24x7 monitoring after a detailed onboarding process, as well as sys admin and database administration on an ongoing basis.

We've worked with other outsourced DBAs and we are continually impressed by smartShift's performance in this area."

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Benefits

Free up resources for strategic IT initiatives:
Since smartShift takes care of all the operational responsibilities of the cloud management, the company's resources and talent are able to focus on developing innovative IT solutions to support their strategic business initiatives.

Make IT the competitive advantage:
Their IT has now become their major selling point. Since the inception of this cloud journey, they have doubled the number of daily unique visitors and added tens of thousands of real estate agents to the system. The company's IT is not only flexible to adapt to the changing needs, but is also instrumental in ensuring customer satisfaction.

Executive buy-in:
Systematic processes and analysis that smartShift offers for designing a roadmap for cloud adoption helped their IT team receive buy-in from the executives.

Contact a smartShift Transformation Consultant Today to Get Your Analysis Started

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