Overview

Emerging technologies have a way of quickly becoming conventional. Consider cloud computing. In the past few years, the cloud has reached a tipping point, with broad acceptance and adoption driving it into the mainstream. What began as a way to offload noncritical storage and compute cycles has evolved to include many critical components of corporate computing. Hardware and software that used to be installed and managed on-premises is rapidly moving to the cloud due to lower costs, less maintenance, proven security, and near limitless scalability.

Meanwhile, mobile technology is on a rapid trajectory as smartphones and tablets supplant PCs and TVs as the “first screen” in the modern world. The mobile experience isn’t limited to handheld devices. It is woven into the fabric of the digital economy—an economy that touches nearly every part of our daily lives. Daily time spent on mobile devices is now outpacing TV in the U.S., according an AdReaction study from Millward Brown.¹

How do today’s leading cloud and mobile trends intersect and what does this mean for enterprise IT professionals? How can you help your organization embrace these new technologies in an efficient, cohesive, cost-effective way?

Introducing Oracle Mobile Cloud Service

Developing simple mobile applications is commonplace. But connecting those apps to backend systems and services can get complicated. Most mobile analysts estimate that up to 80 percent of mobile app development efforts are devoted to securing and integrating front-end mobile functionality with back-end enterprise information systems.

Oracle Mobile Cloud Service streamlines these mobile development initiatives. It provides everything you need to establish an enterprise mobile strategy using innovative, persona-based tools and services. Designed to simplify enterprise mobility, Oracle Mobile Cloud Service helps developers define mobile APIs and build mobile apps that connect to enterprise systems quickly and securely while providing line of business managers the deep analytics needed to make smart, data-driven decisions.

As one of Oracle’s premier cloud solutions, it links mobile developers with enterprise data sources and empowers them to create engaging mobile experiences in a simple, straightforward manner.

A Comprehensive Set of Tools and Services

Demand continues to rise for mobile access to corporate data and services. As mobile apps become more sophisticated, the need to access various backend systems becomes more common—and more necessary. Complex apps require additional expertise in integration, document management, security, and other backend services. Because not all mobile app developers have this expertise they need a way to easily collaborate with other technology experts. This implies a platform that makes it easy to access backend systems as well as to coordinate front-end development activities involving Apple iOS, Google Android, HTML5, and other client platforms.

As mobile apps become more strategic to the overall success of the business, line of

business managers become more involved in needing to analyze and determine the success of their mobile strategies. For example, a marketing director might fund the development of a mobile app designed to reach customers with a new service. Her requirements go well beyond measuring how many times the apps have been downloaded. She needs the right data and analytics to gain insight into its adoption and success. Has the new app engaged the user community? How often are people using it? Has it had a measurable impact on sales? In-depth mobile analytics can help her make better business decisions.

Oracle Mobile Cloud Service brings a persona-based approach to application development, deployment, and management, with specific services for mobile app developers (who primarily focus on the user interface), server-side developers (who manage access to enterprise information systems), and line of business owners (who monitor the metrics that measure the success of the business).

Case in Point: An Integrated Service for the Entire Lifecycle

Oracle Mobile Cloud Service has been designed to unify the activities of several different types of stakeholders including mobile client developers, back-end services developers, architects, and business stakeholders. By way of example, consider a utility company that is developing a mobile app that permits field service reps to log incidents when they are onsite with clients. Here’s how Oracle Mobile Cloud Service assists these stakeholders.
DEVELOP, DELIVER, AND MANAGE YOUR APPLICATION INFRASTRUCTURE WITH ORACLE MOBILE CLOUD SERVICE

» Develop
Accelerate innovation and improve agility with rapid development of mobile apps and easy extensions to existing applications on a common platform

» Deliver
Drive efficiency and reduce costs by easily connecting new mobile applications to existing integration and security services

» Manage
Deploy apps publically or privately and monitor them in the cloud while diagnosing application performance and usage

Today, 1.6 billion people around the world access the internet using a mobile device; by 2018, there will be 2.5 billion mobile internet users. In developed economies, more than 90 percent of the population accesses the internet using a mobile device. IDC, 2015

1 – Mobile app developers build the front-end of this new app. They are mainly focused on the user interface. They want to provide a clean and efficient design for looking up service records, verifying customer details, ordering parts, and so forth. They may not know how to access and update data in all of the associated enterprise systems of record, especially since each of these systems may have unique security protocols and integration requirements. Oracle Mobile Cloud Service simplifies their work by presenting them with a library of mobile-ready APIs that can be easily consumed by their front-end apps. These APIs work interchangeably among Apple iOS, Google Android, and other mobile devices. Developers can create the front-end using their favorite development environment. Oracle Mobile Cloud Service can work with any mobile client that can make use of RESTful APIs. They don’t need to worry about how to connect with Seibel or PeopleSoft or any other application. They simply utilize the appropriate APIs from the service catalog. Common mobile services such as data storage, offline data sync, push notifications, and user management are standard services within Oracle Mobile Cloud Service.

2 – Backend services developers have the knowledge and expertise on specific backend systems. They can use the powerful API Designer within Oracle Mobile Cloud Service to build new APIs and access the necessary data via reusable services. Rather than forcing front-end developers to create connectors to the backend systems, Oracle Mobile Cloud Service exposes APIs that they can call directly from their client apps, using REST calls or the native client software development kits (SDKs). Service developers use the API Designer to build new APIs and access the correct data, so mobile app developers can stay focused on developing an elegant and efficient user experience.

Developers can also use the API Designer to describe the essential resources and methods, or upload a RAML document that describes the RESTful APIs that they need. For example, field technicians might need to consult a third-party data service to verify the location of gas lines prior to excavating. The service developer receives this mini-spec and creates the necessary service. Oracle Mobile Cloud Service generates a mock API based on sample data, so the mobile app developers can continue their work while the actual API is constructed. When the service developer is finished, the mobile app developers get a new API that they can use to create sophisticated mash-ups, without having to worry about the underlying data structures.
3 – Once the new mobile application is in production, line of business managers often need to know how the app is being used. The data that is gathered and presented by Oracle Mobile Cloud Service Analytics enables them to track adoption rates as well as determine how often discrete functions are utilized. Built-in analytics and dashboards enable them to sort, filter, and drill down into the data, from runtime events that are received from client applications to active mobile back-end systems. Which aspects of the app are the field service reps using? How many downloads have occurred? What times of day are their apps most widely used? How many people are using each API? Analytics also help the developers. Oracle Mobile Cloud Service lets them gauge performance and response time through charts and graphs so they can monitor performance and plan for future enhancements based on which functions are most commonly used, as shown below.

A Comprehensive Platform in the Cloud

Oracle Mobile Cloud Service leverages the same proven infrastructure shared by Oracle’s portfolio of cloud solutions. It has also been designed to work with any backend system: on-premises, in the cloud, or both. It is architected to work with Oracle’s ecosystem of cloud offerings such as Oracle Sales Cloud, Oracle Human Capital Management Cloud, and Oracle Service Cloud, with support for SaaS process extensions.

Oracle’s interrelated family of PaaS and SaaS solutions empowers mobile app developers to take full advantage of mobile-specific services that accelerate development and simplify access to backend resources, so they can focus on creating compelling mobile apps that engage customers and drive the business forward.

While other vendors talk about a “mobile first” strategy, that’s only the beginning. Oracle’s goal is to go beyond “mobile first” and offer a comprehensive strategy that brings together mobile, cloud, big data, and the Internet of Things (IoT).

Oracle Mobile Cloud Service simplifies the development, integration and management of mobile applications to any backend system—on premises, in the cloud, or both. For more information please visit cloud.oracle.com/mobile.