IDC MarketScape: Worldwide Enterprise Mobile Application Development Platform 2016 Vendor Assessment — B2E Apps Alignment

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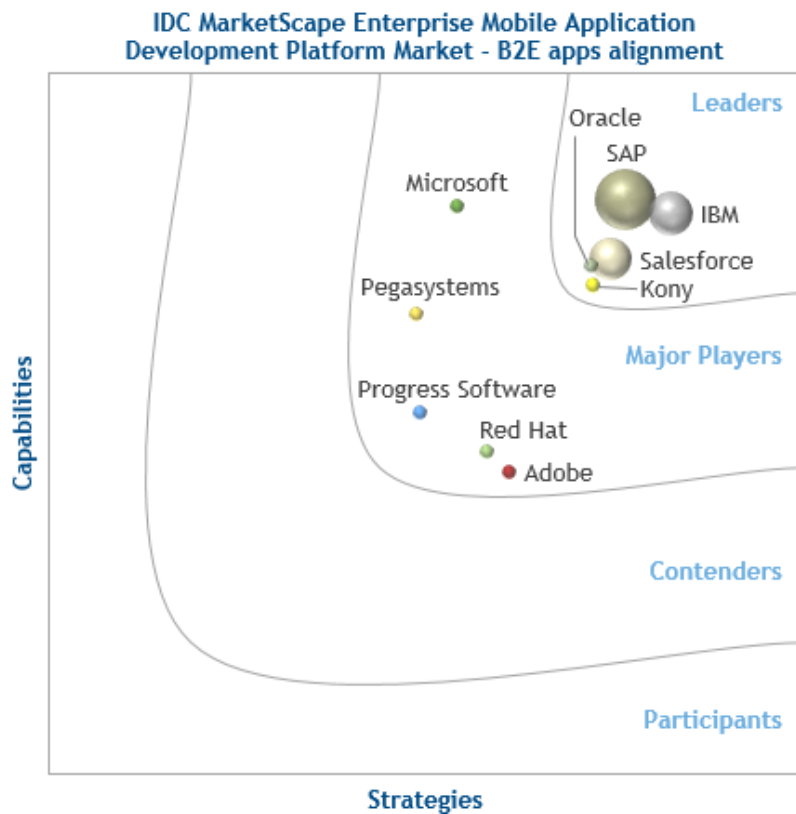**THIS IDC MARKETSCAPE EXCERPT FEATURES: SALESFORCE**

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape Worldwide Enterprise Mobile Application Development Platform Vendor Assessment — B2E Apps Alignment

Source: IDC, 2016

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

IN THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: Worldwide Enterprise Mobile Application Development Platform 2016 Vendor Assessment – B2E Apps Alignment (Doc # US41916016). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Essential Guidance, Vendor Summary Profile, Appendix and Learn More. Also included is Figure 1.

IDC OPINION

Mobile app development platforms are critical for businesses that are mobilizing their workforce, external marketing, customer interactions, operations, and business processes. The ability to create custom apps targeted for specific end users and use cases is a powerful capability and allows organizations to increase operational scale and efficiency while reducing costs. Mobile app development platform technology also allows businesses to put powerful and innovative services, such as location, intelligence, and analytics, directly into their mobile business processes and workflows via custom mobile app integrations. Mobile app development platforms are used for both business-to-consumer (B2C) and business-to-employee (B2E) scenarios. From the B2E perspective, a critical function of the mobile app development platform is the creation of powerful, productivity-driving apps for a company's own internal employees, customized to the business' unique operations, workflows, and operating parameters. To this end, mobile app development platform characteristics that are well aligned with businesses' B2E mobile app development needs include:

- **Optimized integration with the breadth of related mobile app deployment and management solutions that enterprises need to help ensure that employee apps are used successfully.** Achieving such optimized integration requires investment in mobile application management (MAM) and other such capabilities.
- **Breadth of front-end client-side mobile app development tools.** These tools help enterprises create mobile apps, including the ability to influence the road map of the development tools, the breadth of options to accommodate the wide range of developer technical expertise in-house and, most importantly, proven low-code tools that enable employees in the lines of business (LOBs) to actively participate in user experience prototyping without detracting from the security of the holistic mobile app being developed.
- **Proven expertise in understanding enterprise needs for back-office software, databases (DBs), and cloud services.** Well-entrenched enterprise software and services vendors bring with them a vision for scalable solutions that allow enterprises to leverage their prior investments as a deeply integrated jumping off point in mobile app creation.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

This IDC MarketScape looks at enterprise-focused mobile app development platform vendors, with particular attention to each vendor's alignment with enterprises' business-to-employee mobile app development needs.

The criteria for inclusion of vendors in this IDC MarketScape analysis are as follows:

- Vendors must offer a mobile application development platform that has a balanced focus on both front-end client-side and back end-as-a-service capabilities. Mobile front-end client-side runtime is one of the requirements in addition to mobile back end-as-a-service capabilities.

- Vendors must be cross-platform focused.

- Vendors must have a customer base currently developing 40%+ of their applications to business users.

- Vendors must have annual revenue of $10+ million from enterprise mobile app development platform offerings.

In this study, the mobile app development platforms are reviewed as they were in general availability as of November 2016.

IDC estimated recognized software revenue totaling $10+ million for calendar year 2015. Note: IDC's assessment of vendor shares for enterprise mobile app development platforms will be published as an update to *Worldwide Enterprise Mobile Application Development Platform Market Shares, 2014: An Evolving Market* (IDC #US40704415, December 2015), accordingly.

In addition to the companies that met the criteria for 2016's study, there are a number of other companies that play in this space that may qualify for future IDC MarketScape documents. These companies include Amazon, AnyPresence, Appcelerator, Appery.io, Apple, Built.io, Catavolt, Google/Apigee, Mad Mobile, Kinvey, and Sencha.

ESSENTIAL BUYER GUIDANCE

The vendors in this study are all worthy of consideration by enterprises looking to develop mobile apps, with strong emphasis on developing mobile apps for employees' use. These apps are commonly referred to as B2E apps. Note that all of the vendors in this study have platforms that are suitable for the development of not only mobile B2E apps but also apps that are targeting consumers (B2C) and business partners (B2B). Each vendor has strengths and challenges in its platform's approach, lending to the development of B2E mobile apps in particular. Enterprise buyers should consider the following major areas to help them make a decision that best meets their B2E mobile app development needs:

- **Platforms that target the line-of-business developer in addition to the technical developer:** Synergy across mobile app platform capabilities is desirable. LOB developers need to build complex mobile app experiences using little or no code because of time pressures to improve collaboration internally between employees and improve operational efficiencies internally when it comes to accessing and manipulating enterprise databases, CRM software, and/or technical expertise constraints. On the other hand, the IT team must securely and tightly integrate the mobile app experience with these server-side capabilities that allow for data to be synched, pushed, analyzed, and more. The IT team must also manage and monitor the usage of the ongoing mobile apps for the organization.

- **Platforms that have priority and unique focus on integration with key enterprise back-office software and processes:** Mobile app development platforms that are born from expertise in leveraging scalable, secure, and flexible enterprise software and services will suit the immediate needs of the enterprise. Employee-facing mobile apps are a significant area of focus for today's enterprises. Mobilizing existing enterprise software and processes is even more of a priority to today's enterprises.

- **Platforms with a clear vision of their future evolution:** Proven ability to set and meet frequent platform updates that are aligned with management's vision helps ensure that an enterprise's

selection in a mobile app development platform is the right one for the long run. Key areas to look for in a mobile app development platform are the vendor's commitment to serving major existing clients and the ability to efficiently build the platform road map and deliver on the platform road map by leveraging investments in services in the cloud.

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description in this section provides a summary of each vendor's strengths and challenges.

Salesforce

Salesforce is an IDC MarketScape Leader in mobile app development platform worldwide for enterprises looking to develop business-to-employee mobile apps. Salesforce App Cloud Mobile enables enterprises to use a variety of low-code or no-code tools to create mobile apps that are tied to its CRM software as well as to a variety of their back-end services through APIs. In addition, Salesforce makes an open source mobile SDK available and Heroku Kafka to enable enterprises that are so inclined to build native, hybrid, or web apps using any framework or coding language. Salesforce has brought an enterprise-grade MBaaS solution to third-party developers and enterprise developers by way of a combined Force.com and Salesforce mobile SDK solution. The recognition that enterprises are increasingly blending model-driven application development, which is historically used by business groups for employee apps, and deployment-centric PaaS technology, which is typically used as a back-end system for mobile customer engagement applications, is a key premise behind App Cloud and indeed Salesforce's investment in Heroku more than five years ago. App Cloud reflects Salesforce's vision that back-end systems are increasingly being developed to be consumed via mobile or desktop front ends and that developers are developing for both with equal priority. Salesforce has been actively developing and investing in its MADP portfolio, including acquiring Demandware for ecommerce capabilities, MetaMind for artificial intelligence (AI) and deep machine learning services, EdgeSpring for platform and big data and analytics, Toopher for sophisticated two-factor authentication, and a suite of AI tools called Salesforce Einstein to provide machine learning, deep learning, natural language processing, and predictive capabilities across the platform.

Offering Overview

Salesforce offers an enterprise-grade mobile app development platform to enterprises. The platform is oriented toward line-of-business and nontechnical developers on the front-end client side. It prioritizes speed to market when it comes to designing the mobile app user experience. Its mobile backend-as-a-service platform capabilities combine Force.com and the Salesforce mobile SDK solution. The Salesforce Mobile SDK provides libraries for data synchronization and the creation of custom user interfaces that are controlled by Salesforce metadata through components that can be used by Polymer, React, React Native, and other JavaScript-based frameworks. In addition to its optimized pre-integration with its own CRM software and services, Force.com APIs are available to the enterprise. These APIs include Salesforce Connect for live integration with external data sources from numerous enterprise providers as well as custom APIs. All of Salesforce's platform capabilities are aligned under the company's platform-as-a-service approach. App Cloud is where Salesforce has invested in bringing together elements of its desktop and enterprise mobile application platforms. App Cloud is an integrated platform experience that offers developers the ability to use aspects of Heroku and Force.com development functionality as well as the drag-and-drop Lightning App Builder and

Process Builder tools as part of one shared experience. The recognition that enterprises are increasingly blending model-driven application development, which is historically used by business groups for employee apps, and deployment-centric PaaS technology, which is typically used as a back-end system for mobile customer engagement applications, is a key premise behind App Cloud and indeed Salesforce's investment in Heroku more than five years ago. Salesforce has recently announced MySalesforce1, which allows companies to completely brand the Salesforce1 app with their name and logo while Salesforce will continue to manage all of the updates.

As part of the Salesforce PaaS, Force.com enables developer access to a centralized user and application security model, a customizable data model, cloud logic, external data integration/orchestration, and API services. Security capabilities include encrypted database, identity and security functionality, secure offline storage, enterprise identity and security, and social sign-on services. Salesforce continues to invest in optimizing its mobile app development platform for accessing enterprise data, putting the data in the context whereby insights can be drawn out, and analytics. Heroku Kafka will continue to be the Salesforce solution focused on compute and data services for enterprise mobile apps.

Strengths

Salesforce's installed base of CRM software clients is testament to the value of the company's approach to solving enterprise-grade software and scalability needs. Salesforce has invested significantly in its mobile app development platform approach to building mobile apps in a short time to market. While drag-and-drop tools are increasingly showcased, Salesforce offers coding capabilities through the Lightning Component Framework, SDK, and mobile packs or via Heroku's polyglot language support. Salesforce has prioritized the teasing out of services that enhance CRM data for employees' use. These services include the leverage of big data and other contextualizations.

Salesforce presents a clear vision for how its mobile app development platform will evolve to meet changing enterprise needs. Salesforce sees its mobile app development platform as increasingly being enriched with consumable data, analytics, and insights services within its broader suite of PaaS umbrella and the combination of sales, service, marketing, analytics, IoT, and commerce applications that it offers as part of its Customer Success Platform. Salesforce feeds and cares for its developer ecosystem – an ecosystem that serves as a major proof point that Salesforce has indeed advanced its mobile app development platform integrations with innovative back-end services.

Challenges

Salesforce has a fairly agnostic approach to integrations with MDM/MAM software, app development life-cycle tools, and other back-office software including ERP and business process management software. While this can be seen as flexibility in its mobile app development platform, it also can be seen as missing on what could otherwise drive mobile app deployment and usage effectiveness increases over time. Salesforce does, however, through the use of encryption and app policies afford Salesforce administrators the opportunity to enable a set of security and compliance features without a third-party device or app management solution's involvement.

Salesforce has such a strong brand that its ability to broaden the scope of its mobile app development platform outside of its priority CRM-related use case is limited. While this is not a limitation in the current market where enterprises are highly focused on mobilizing existing business processes, it may become a challenge to Salesforce as it looks to expand its discussions beyond current discussions. Salesforce's investments in Heroku Kafka will help the company overcome this challenge.

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of a review board of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

Enterprise Mobile App Development Platforms

IDC defines enterprise mobile app development platforms as an integrated set of technologies for the creation and deployment of mobile applications by the enterprise. Mobile app development platforms are made up of the integrated technologies of one vendor or the technologies of numerous vendors. The platform is a middleware solution that serves as the intermediary between mobile applications and enterprise systems and other services in the cloud. While platforms range on the solution spectrum from end-to-end front-end and back-end solutions to those that are more focused on either the front-end or the back-end mobile app development needs, this IDC MarketScape is focused on the end-to-end platforms. As such, these enterprise mobile app development platforms have front-end client-side mobile app development tools that are integrated with enterprise, mobile, and cloud back-end services. The capabilities of mobile app development platforms are defined as follows:

- The front-end client-side mobile app development approaches include mobile and/or enterprise cloud-native platform-as-a-service development approaches. These approaches include native development tools, rapid web tools, rapid low-code tools, no-code tools, hybrid development frameworks, templates, and open source plug-ins. Software development kits (SDKs) are often available as alternatives to client-side mobile app development approaches.

- Integration to back-end services is typically offered as APIs or microservices that can be shared and reused among applications. Available integrations to back-end services may include integrations to enterprise software and applications and mobile-specific services, such as authentication, push notifications, location, database access, and analytics, as well as integrations to the more enterprise-oriented cloud development tools commonly referred to as PaaS, such as location services, analytics, intelligent services, and marketing services.
- Mobile app development platforms incorporate mobile app management software and security solutions to varying degrees, such as enterprise mobile app stores, mobile application code hardening, or mobile security functionality plug-ins. Mobile app development platforms are available for deployment on-premise, in the private cloud, in the public cloud, or in a hybrid cloud.

LEARN MORE

Related Research

- *Market Analysis Perspective: Worldwide Enterprise Mobility Platforms and Security, 2016* (IDC #US41812916, September 2016)
- *Enterprise Mobility Survey Results: Strategic Imperatives* (IDC #WC20160908, September 2016)
- *IDC PlanScape: Integrated Mobile App Development Platforms* (IDC #US41672316, August 2016)
- *Exploring the Enterprise MADP Market Opportunity* (IDC #WC20160310, March 2016)
- *Two Sides to the Coin: Enterprise Rapid App Development Tools* (IDC #US41035516, March 2016)
- *Worldwide Enterprise Mobile Application Development Platform Market Shares, 2014: An Evolving Market* (IDC #US40704415, December 2015)
- *Worldwide Enterprise Mobile Application Development Platform Forecast, 2015-2019* (IDC #US40705615, December 2015)
- *Enterprise MBaaS: Differentiation in a Fragmented Market* (IDC #259428, November 2015)

Synopsis

This IDC study provides an assessment of 10 vendors providing enterprise mobile app development platforms. Mobile app development platforms are critical for businesses that are mobilizing their workforce, external marketing, customer interactions, operations, and business processes. The ability to create custom apps targeted at specific end users and use cases is a powerful capability and allows organizations to increase operational scale and efficiency while reducing costs. Mobile app development platform technology also allows businesses to put powerful and innovative services, such as location, intelligence, and analytics, directly into their mobile business processes and workflows via custom mobile app integrations. Mobile app development platforms are used for both business-to-consumer and business-to-employee (B2E) scenarios. From the B2E perspective, a critical function of the mobile app development platform is the creation of powerful, productivity-driving apps for a company's own internal employees, customized to the business' unique operations, workflows, and operating parameters.

"Vendors that continue to invest in their platforms' alignment with B2E mobile app development needs will bring enterprises great advantage," says Denise Lund, research director, Enterprise Mobility, at

IDC. "We expect enterprises will look for not only mobile app development platform vendors that deeply integrate with software and services critical to the business' operations but also vendors that have a proven stake in enterprise solutions at large."

About IDC

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