

WHITE PAPER

The Power of Mobile Enterprise Application Platform: Capabilities and Advantages

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IDC OPINION

Mobile enterprise application deployment is strategic for organizations today. The need for a mobile enterprise application platform (MEAP) has been brought to the forefront as companies seek a trusted advisor to assist them with the design, building, deployment, management, and ongoing support of their mobile applications. The following market trends characterize the MEAP market:

- ☒ Consumerization of IT and the growing adoption of consumer applications have raised awareness among organizations to deploy applications to internal employees, partners, and consumer-facing customers at an accelerated pace and with expanded design with improved user interfaces.
- ☒ Cloud-based computing provides customers an opportunity to deploy MEAP solutions more rapidly, without the large up-front cost barrier, yet creates a solution that is scalable for future expansion.
- ☒ MEAP solutions are not just about software; rather, they have many moving parts. Customers seek a trusted advisor that can deliver solutions and partner with best-of-breed providers that can address important software, hardware, and services requirements.

IN THIS WHITE PAPER

This white paper discusses the role of MEAP solutions in the enterprise. It discusses the key catalysts driving the adoption of MEAP, key features and primary benefits of MEAP, and the steps an organization needs to consider for a successful MEAP deployment.

SITUATION OVERVIEW

The Criticality of MEAP Today

For many years, organizations have sought ways to better extend mission-critical back-end system data and applications to mobile devices in a scalable, fast, and cost-efficient manner. In the earlier days of MEAP solutions, cost and time to market were two major barriers to entry, as price points of \$1 million or more of up-front investment were required for the most basic deployments across perhaps a few hundred

employees. Such a deployment could take at least six to eight months and would be hampered by technology changes in hardware and software. In addition, what was deployed was often a siloed solution that wasn't scalable across the company and across multiple applications. Such time, price, and scale concerns often deprioritized mobile application enablement in the enterprise. Some companies began to build on their own — an approach that often created some of the same scale and silo issues.

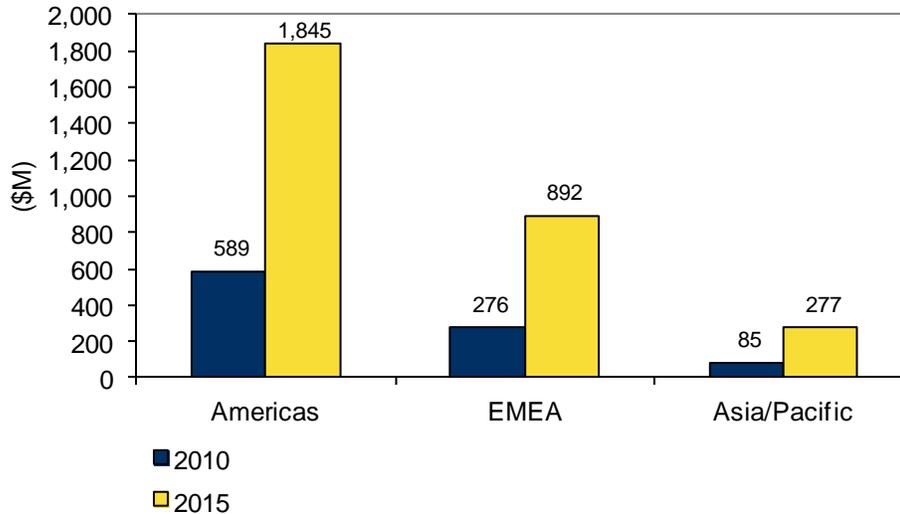
However, over the past year and a half, a number of factors have emerged to address these key challenges, and additional catalysts have pushed forward tremendous growth in MEAP where organizations have begun to embrace MEAP and move away from building their own mobile applications.

According to IDC, the MEAP market is expected to grow tremendously over the 2010–2015 forecast period — increasing to more than \$3.0 billion in 2015, representing a compound annual growth rate (CAGR) of 26.0% (see Figure 1). The following are key drivers in the increased growth in MEAP:

- ☒ **Consumerization of IT.** Not only are end users bringing their own devices into the enterprise, but enterprises themselves are embracing this trend. The smartphone market is exploding, growing over 62% in 2011, and smartphone shipments will reach the 1 billion mark in 2015. In addition, IDC expects that by 2015, 55% of all smartphones used for business will be owned by the employee rather than the corporation.
- ☒ **Consumer mobile application adoption.** The hundreds of millions of consumer mobile applications downloaded and consumed have changed the way organizations think about building and deploying applications. Organizations seeing employees leverage attractive devices and applications are seeking better ways to provide much-improved user interfaces for stodgier business applications. The concept of consumerization of IT isn't just about the device; it's also about how consumer applications can influence mobile enterprise application presentation.
- ☒ **Cloud computing changes the game.** As discussed, the two largest barriers to entry are cost and time to market. Mobile cloud-based deployments allow organizations to build and deploy applications in the cloud for a much lower up-front cost at a much faster pace. Cloud computing also provides organizations a way to enter the MEAP space with a smaller deployment and yet allows for broader scale for future deployments.

FIGURE 1

Worldwide Mobile Enterprise Application Platform Revenue by Region, 2010 and 2015



Source: *Worldwide Mobile Enterprise Application Platform (MEAP) 2011–2015 Forecast and 2010 Vendor Shares* (IDC #230175, September 2011)

Key Features and Primary Benefits of MEAP

The MEAP market consists of a software platform that includes server and/or client software that either extends the reach of existing IP or other mission-critical applications (including groupware, messaging, customer relationship management [CRM], sales force automation [SFA], enterprise resource planning [ERP], host, or B2C customer-facing applications) or offers the ability to develop new applications for mobile users leveraging a variety of wireless devices (including smartphones, ruggedized devices, media tablets, and mobile phones). MEAP may include the platform, development tools, and front-end applications as sold in a single offering. MEAP software offerings may be either delivered as an on-premise solution with a perpetual license or offered as a cloud service with a per user/month licensing model.

MEAP vendors offer such platforms to enterprise customers, mobile operators, device manufacturers, systems integrators, or other channel partners. They include pure-play mobile vendors, larger ISV and application providers, and device manufacturers that also provide software solutions.

Mobile users, including mobile professionals and mobile field workers, access these enterprise applications through a number of connections, including real-time wireless (through a wireless data network) and WiFi or a synchronization solution — or a combination of both. MEAP addresses the need to deliver corporate applications specifically to mobile and wireless environments.

MEAP represents the core platform for the enablement of mobile enterprise applications, whether they are native, hybrid, or mobile Web-based applications. Deployment of a MEAP solution provides organizations with a turnkey platform that delivers many key functions, including critical integration into a broad set of back-end systems, application development frameworks to build custom applications, and key synchronization technologies to enable accurate movement of data and robust rendering of applications across multiple networks and device/operating system types. Also, many MEAP solutions provide additional components that are critical to a mobile enterprise offering, such as ready-built packaged applications by industry or application type that sit on top of the MEAP platform, core mobile device management (MDM) functions, and mobile enterprise application stores.

A MEAP solution provides customers with a robust offering that enables valuable gains in a more affordable and faster time-to-market scenario than if organizations were to build their own offering. Recent survey data from IDC demonstrates that the key benefits from deploying such a solution include improved/enhanced worker productivity, increased sales/revenue, improved field service response time, and improved competitive advantage/market share (see Figure 2).

FIGURE 2

Benefits Expected from Mobile Solutions



n = 600

Source: IDC's *Mobile Enterprise Software Survey*, 2011

Choosing the Right MEAP Offering for Your Organization

When deploying a MEAP solution within your organization, you need to consider several key factors:

- ☒ **Having a mobile strategy: application and end-user segmentation.** One of the most critical considerations when deploying a MEAP solution is the cadence of your application rollout. Although your initial deployment will be tactical in nature (I need to get a mobile application to my sales force), your broader view should be more strategic. Thinking long term about who will get what applications when is a huge step in spacing out the building and deploying of applications across a broad set of new mobile users within your organization. A robust MEAP solution will be able to handle the scale of growing the size of your deployment as well as the multiple application and device types that you seek to deploy.
- ☒ **Application and deployment model considerations.** MEAP solutions should be able to provide your organization with multiple options when it comes to mobile application enablement.
 - ☐ **Cloud versus on premise.** Depending on your industry, application type, up-front cost concerns, time-to-market requirements, and current deployment, there are multiple considerations around a cloud-based or on-premise MEAP-based solution. Companies that have not deployed cloud solutions on any of their current systems, companies in highly regulated industries, or companies with application customization concerns may seek an on-premise offering. In addition, companies that have already deployed a cloud-based solution for an existing nonmobile deployment and that are seeking lower up-front costs and faster time to market may lean toward a cloud-based approach. With the rapid introduction of additional platform functionality, the cloud enables customers to capitalize on the latest release enhancements with speed and efficiency. Regardless, a robust MEAP platform can offer both solutions as the customer requires.
 - ☐ **Native versus hybrid versus mobile Web.** Depending on the application and user type, it is also critical to consider a native, hybrid, or mobile Web application. A native application provides a much more robust approach to building a mobile application but requires support across multiple device types and regular updates. A mobile Web application leveraging HTML5 technology can address a broader number of devices, but it will not have the device-level components of a native application. A growing compromise is a hybrid solution — a native application that runs within a browser and can be seen as a possible stepping-stone toward full mobile Web.
 - ☐ **B2E, B2B, and B2C applications.** Your application audience is also very critical. B2E applications are often the first focus for many companies looking at internal employees. However, in many industries, the B2C consumer-facing component is increasingly significant to companies seeking to reach a broader set of mobile customers. B2B deployments allow organizations to reach a partner audience. Organizations today are typically starting with one focus and then coming back to deploy another (for example, B2E first, then B2C). A MEAP platform should be capable of handling all three deployment types.

- ☒ **MDM, mobile security, and mobile enterprise application stores.** As companies look to deploy mobile applications, mobile device management, mobile security, and mobile enterprise application stores also come to the forefront as part of a comprehensive mobile enterprise application deployment. Some MEAP providers may also include these functions within the platform or otherwise offer adjacent products or partner to enable these functions.
- ☒ **Multiplatform integration and support.** As enterprises drive their mobile application strategy, they need to consider working with a vendor that brings together cross-platform expertise, integration, and management skills in a unified offering. A multipartner technology solution may burden internal IT with complex integration challenges, requiring the bridging of disparate vendor assets with internal corporate back-end systems. Ongoing enhancement support and management may create additional strain as feature upgrades are introduced by each vendor at different points in time.

CHALLENGES/OPPORTUNITIES

In any MEAP deployment, customers will face many challenges that must be met by the MEAP supplier. This section outlines key challenges, which are opportunities for the MEAP supplier to demonstrate its capabilities:

- ☒ **The moving parts of a MEAP deployment.** For a MEAP deployment to succeed, a supplier not only must recognize the multiple components of a deployment — software, hardware, professional services, and mobile operator services — but also must demonstrate the ability to be a trusted advisor and have best-of-breed partner solutions available as needed.
- ☒ **MEAP is strategic.** MEAP is a strategic deployment for organizations today. Customers seek advice on how to design, deploy, and support solutions, not just simply technology offerings. The focus is on solving industry- or business-specific problems. Many enterprises identify application user interface design expertise as a leading third-party capability they are seeking, with the goal of creating highly relevant, efficient, and innovative mobile use cases. Assisting a customer with mobile business case development and blueprinting advisory services is as critical as guiding customers through the challenges of a MEAP deployment.
- ☒ **Planning for the future.** A MEAP solution must be viable for today's need, but the scalability for future expansion and application building and deployment is just as important. Too many solutions look slick today but fail to deliver in larger deployments over time. Ensure that your MEAP supplier has a solution that can address the many technical, design, and management challenges ahead.

FUTURE OUTLOOK

MEAP solutions are the core technology offerings that enable mobile enterprise applications and are the basis for organizations that are building, deploying, and supporting mobile enterprise applications. MEAP solutions bring tremendous value to organizations and end users in the form of enhanced productivity, improved

organizational efficiency, increased revenue, and better customer care. Technologies for MEAP are vastly improved with an opportunity for cloud-based or on-premise solutions; native, hybrid, or mobile Web applications; and B2E, B2B, and B2C deployments. In addition, the promise of faster time to market and lower initial costs for mobile applications has allowed organizations to embrace MEAP solutions in a way they never have before.

Beyond technology, MEAP solutions are strategic to companies, and the suppliers providing MEAP offerings are trusted advisors that must deliver on the comprehensive approach of software, hardware, and services. End-to-end mobile application life-cycle capabilities (from strategy to design to maintenance) are highlighted across industry segments as a leading third-party requirement. Enterprises today are seeking providers that can assist with the design, building, deployment, management, and support of mobile enterprise applications. Savvy organizations are seeking MEAP providers as partners to expand and improve their mobile workers' daily tasks and enhance their company's operations.

AT&T MEAP SOLUTIONS

The AT&T Mobile Enterprise Application Platform (MEAP) is focused on providing IT organizations with the ability to build, deploy, monitor, and manage custom or packaged mobile applications leveraging existing back-end systems. With AT&T MEAP solutions, companies are able to design, build, and deploy applications across the entire business application spectrum, including B2E (internal employees), B2B (partners), and B2C (consumer-facing end users). AT&T MEAP solutions deliver multiple platform offerings that provide the core requirements expected in an enterprise-grade offering, including broad back-end system support, multidevice and multicarrier support, and full security at the device, application, and network levels. In addition, AT&T provides a cloud-based and on-premise offering and delivers a complete managed service offering to incorporate hardware, software, and services.

AT&T Mobility Solutions Services

A broader set of end-to-end life-cycle services are available from AT&T Mobility Solutions Services, extending from mobile strategy and architectural road map planning to integration, testing, hosting, kitting/staging, and life-cycle management. Mobile use case design, prototyping, process modeling, and visualizations are an integral part of AT&T's software development life cycle (SDLC) flow to clearly set client expectations and validate use cases. Development of mobile business cases and ROI analysis can help bring clarity to how an enterprise can increase operational efficiencies, improve accuracy and reliability of decision-making data, or expand upon new mobile or cross-channel revenue-generating opportunities.

AT&T MEAP Industry Focus

With the AT&T MEAP solution, customers can also look to a number of specific, purpose-built applications across key industries with flexibility to integrate mobile functionality with social platforms, location-based services, ecommerce, and sales force automation, among other capabilities. AT&T has invested in multiple solutions tailored for hospitality, consumer packaged goods (CPG)/retail, manufacturing, government, education, healthcare, and financial services, among other verticals. The following examples highlight the diversity of industry-specific MEAP solutions that AT&T has delivered to key customers:

- ☒ **Hospitality.** A large hotel operator and franchisor selected AT&T to implement, test, and manage a new mobile portal to serve its growing mobile customer base. 75 screens were optimized to work across multiple mobile operating systems (e.g., iOS, Android, BlackBerry). A common code base was developed for sharing across multiple brands, requiring only changes for each brand's mobile landing page, to drive cost savings and efficiencies. Designed for scale and efficiency, the AT&T MEAP solution is hosted by AT&T's Synaptic Hosting service.
- ☒ **CPG/retail.** A United States-based grocery chain engaged with AT&T to drive greater efficiencies and profitability into its supply chain and inventory control operations. Leveraging AT&T's MEAP solution, the organization rolled out an enterprisewide, mobile field service solution to support real-time linkages between customer demand and inventory consumption with service and supply chain requirements. Integration between the AT&T MEAP solution and internal retail database systems allows for reduction of in-store spoilage, improving inventory management while enhancing customer service and satisfaction levels.
- ☒ **Financial services.** A large national financial institution retained AT&T to enhance its retail banking customer experience by mobilizing access to select customer-facing financial portfolio products. The AT&T MEAP is serving as the foundational framework for helping the institution expand the scope and capabilities of its mobile channel, providing brand differentiation and enabling a new revenue channel while helping the bank respond more quickly and efficiently to changing customer needs and usage patterns. AT&T hosts the application, providing the bank with an unlimited enterprise license for B2E and B2C applications. This in turn provides the bank with mobile expansion opportunities into other parts of its financial portfolio for both internal and external use.
- ☒ **Government.** A U.S. government tourism group teamed up with AT&T to create a camping and recreation mobile locator application. The AT&T MEAP solution provides consolidated easy access to state park, visitor center, and calendar event information. This solution is helping outdoor enthusiasts enhance the quality of their park experiences while drawing more tourist dollars to the state.

- ☒ **Manufacturing.** A United States–based software and hardware manufacturer worked with AT&T to implement an enterprisewide, mobile field service solution to enable real-time access to work orders, customer information, parts, and inventory. The AT&T MEAP solution provides mobile application and middleware functionality that has been integrated with Siebel, SAP, and Servigistics back-end systems. Benefits include increased visibility into product performance, higher customer satisfaction, improved field service productivity, and optimized inventory management.

CASE STUDY

Cushman & Wakefield (C&W), a 95-year-old commercial real estate company with a global presence across 60 countries and 14,000 employees, specializes in a full range of services, including leasing, sales and acquisitions, property and facilities management, and capital funding for commercial buildings. C&W's brokers are a critical component of the company's relationship with customers and are a highly mobile employee base. Brokers require key data about buildings, such as history and availability, from C&W's proprietary database in order to instantly access information while they are in the field with customers and within various buildings and floors across both large cities and rural locations. C&W's proprietary database is a key gathering tool for brokers who access very data-intensive information through desktop- and browser-based applications. The company sought a simpler, lighter application for brokers to access just the key components they required remotely on smartphones and tablets.

C&W had an existing relationship with AT&T as a corporate customer for phone service, and AT&T brought strong experience combined with a robust strategy and set of ideas, recognizing C&W's requirements. AT&T's MEAP solution provided C&W with a device-agnostic, hosted offering with recognition of C&W's "bring your own device" (BYOD) policy. AT&T's MEAP solution enabled back-end systems that provided brokers a simplified mobile application, delivering key building data and information to their fingertips on Android, BlackBerry, and iOS smartphones as well as the iPad. C&W rolled out a pilot in November 2011 to its New York–based brokers and then began its complete U.S. rollout in December 2011. The application is currently being accessed by all 1,100 brokers in the United States. The deployment went very smoothly, and AT&T provided strong support that resulted in a very positive experience for C&W. In fact, C&W expects to continue expanding AT&T's MEAP solution globally.

C&W has already begun to realize a number of immediate benefits from the AT&T MEAP deployment:

- ☒ **Increased broker satisfaction.** Brokers did not have a strong comfort level with the existing system, and a PC-based offering was not ideal for the highly mobile broker. The C&W mobile solution increased brokers' satisfaction levels, productivity, and use of the application and data.

- ☒ **Increased customer satisfaction.** With instant access to data, brokers could be more responsive and answer inquiries from customers on the fly, providing better service to customers on key information regarding properties.
- ☒ **Competitive advantage.** In a competitive real estate environment, C&W brokers now have immediate access to key proprietary information and are considered thought leaders and more technically advanced than their competitors.

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