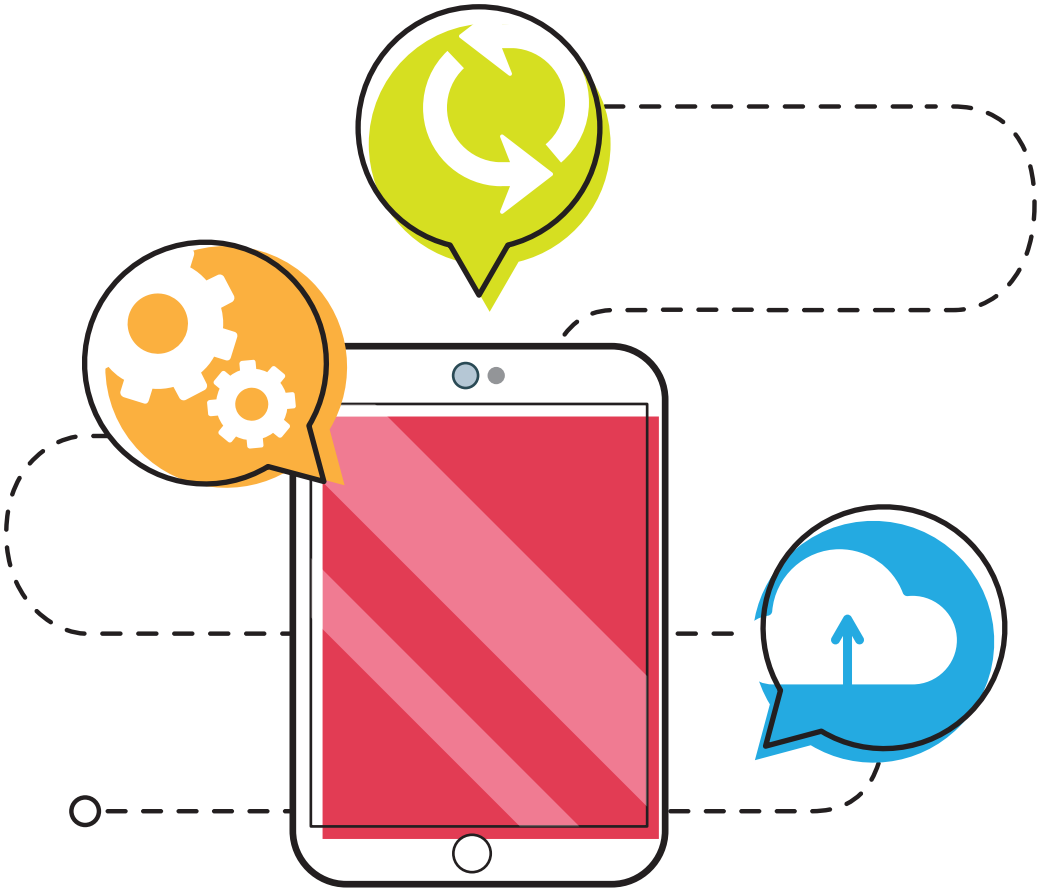
info@auraplayer.com www.auraplayer.com



Three Steps That Work!

MOBILIZING ORACLE EBS

without redevelopment cost or risk

AURAPLAYER
BE AGILE, GET CONNECTED, GO MOBILE

Table of Contents

Executive Summary

To survive, much less grow, organizations must successfully execute a realistic business mobility transformation strategy. For Oracle E-Business Suite™ customers, this strategy must include a product to bridge the gap between desktop-bound Oracle EBS and the next generation mobile and AI User interfaces because the business logic is essentially trapped, inaccessible to modern development tools. In this whitepaper, AuraPlayer, a business mobility market leader, presents the proven 3-step strategy organizations are using to improve employee productivity for higher net operating margins, to seize market advantage for increased revenue with highly available applications and defend market share with better customer facing user experiences via mobile devices and chat interfaces. The whitepaper will provide a working business transformation strategy and an overview of the Oracle mobility tools available to assist on your digital journey.

A Note About Definitions

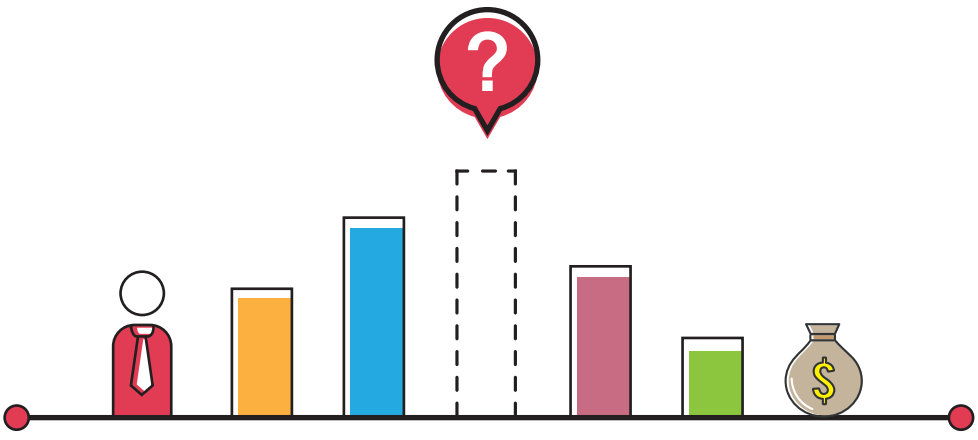
A business transformation strategy is an organizations concrete action plan to enter the digital economy with their existing applications, a clear path forward, and a vision for the future. Mobility describes a capability of core business operations. It suggests the business can transmit and receive data signals from any mobile computing platform. Mobile devices are more than simply smart phones and tablets. Mobile devices include tracking devices such as hospital security bracelets, wearables like Fitbit, smart watches, and internal health monitors. Oracle E-Business Suite™ or Oracle EBS as it is often known, is a suite of enterprise resource planning, customer relationship management and supply chain management applications. Developed over 20 years ago, Oracle Forms is the front-end system of many Oracle database applications. Oracle E-Business Suite, Oracle Utilities, Oracle Clinicals are packaged iterations of Oracle Forms and contain, at their core, Oracle Forms technology. The AuraPlayer tool generates APIs (SOAP,REST) to expose underlying business logic and screens in Oracle EBS without the need to redevelop or insert any code within Oracle EBS. The generated APIs are consumed within the latest integration or front end tools to support new business initiatives and improve business productivity without the cost or risk of redevelopment.

Oracle EBS & Mobility: The Big Gap

The volume of opportunity suggested by business mobility is hard to fathom. More mobile devices are in use than are people on the planet. Markets are full of people who expect to engage with organizations via a mobile device.

The problem is that organizations' business logic is trapped in desktop-bound applications such as Oracle E-Business Suite (EBS). Organizations simply can't discard the critical back-office systems or spend the millions of dollars and many years to redevelop them to make them viable in the market, nor can they afford to ignore the market's mobility requirement. Which brings us to the EBS mobility challenge: the big gap. On the one side, we have Oracle E-Business Suite. PC-centric Oracle EBS is a huge part of the organization's success. The desktop interface to its routines and business logic are their competitive advantage, honed to a fine internal efficiency. On the other side, we have people who are accustomed to using a device in their pocket both to consume and provide information. However, their enterprise applications are currently not supported on these platforms.

No organization can afford to be stuck on the wrong side of this gap. Organizations must shift their business processes to mobile devices. The market demands it. Business opportunity wants it. Money is made (or lost) in the field, so the field is where the business must operate. Until now those two opposing behemoths, mobility and Oracle EBS, seemed irreconcilable.



Use-case Imperatives

While most organizations have a priority-status assigned to mobility projects, they encounter big technology obstacles. Why? Heavy investment in legacy infrastructure, legacy technologies of their enterprise applications and business logic portability make the mobility strategies baffling. Translation: "slow and risky."

How should organizations convert their business logic that works great for internal applications to meet mobile demand? Within this question, we must consider that tablets and phones are now considered "traditional mobile"; there are now wearables that can create, send and receive data: GPS and AIS devices, home kit applications, IoT devices, etc. Which should be considered when devising any future mobile strategy. Some usecases to consider:

How can a hospital use those innovative new devices to collect and monitor patient information when its back-end is its existing Oracle Forms system?

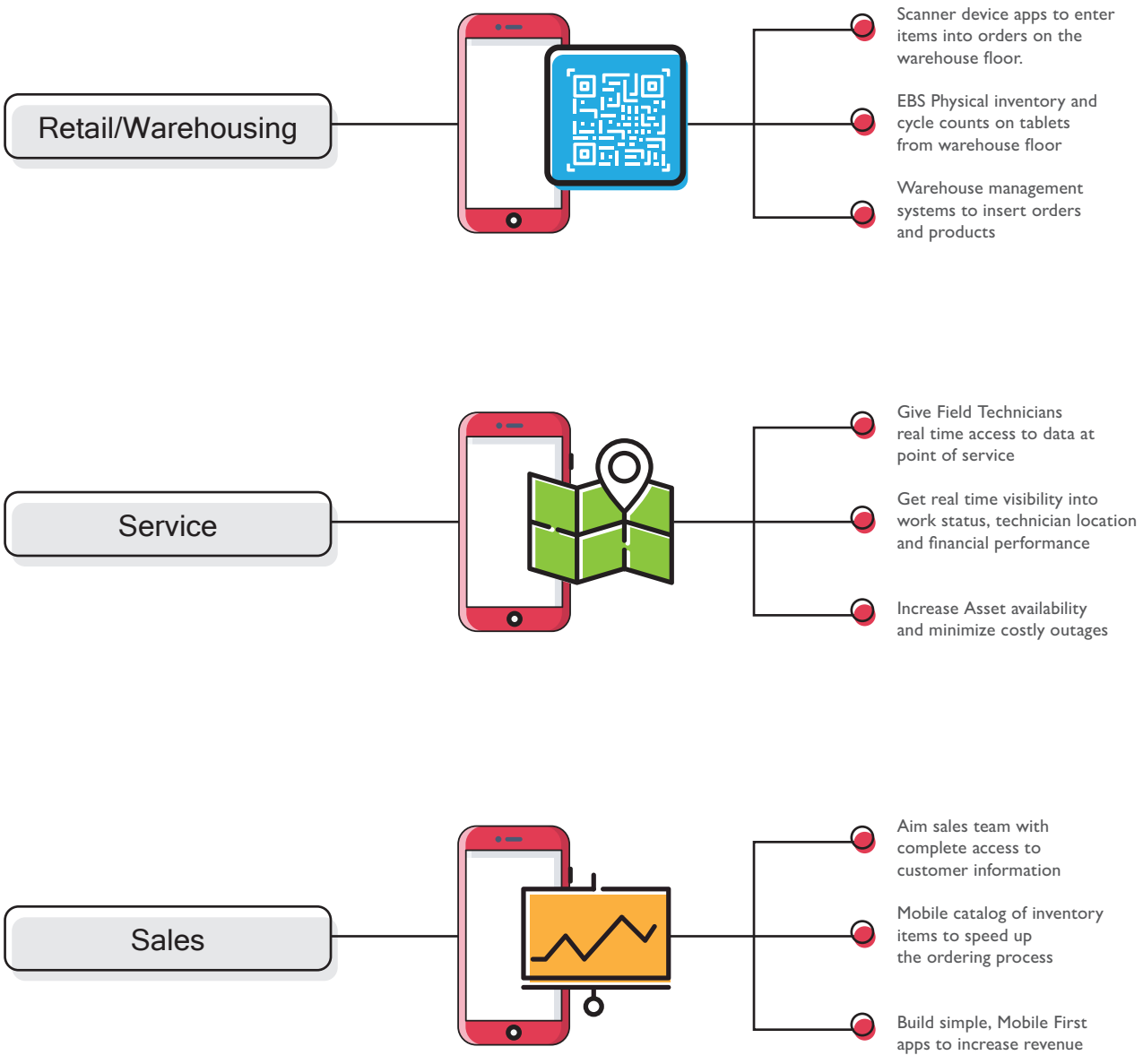
How can customers ask for service and get responses over Facebook Messenger or WhatsApp about order status from the back office EBS systems

How can a retail operation manager audit inventory on the floor in real-time using the current Oracle EBS without re-keying hand-written notes several hours later?

How can billion-dollar construction projects utilize field-based devices to stay on budget and on time?

How can field workers report and close service requests in real time on location Mobility can take immediate advantage of any number of general use-cases. Bar codes and QR codes are simple, low-hanging fruit. Mobility empowers quickness by accepting digital signatures, field reports and requests. The implication for POS and HR applications are staggering. For one example, consider the hundreds of hours that could be saved by pushing down to new hires their employee onboarding and benefits package administration or time reporting scenarios.

The good news is that there are tools to leverage existing Oracle EBS installations for business mobility solutions. Some are much better than others.



Mobility & Oracle EBS: More than just an app for that

To set mobility imperatives, experts like to throw out verbs like “pivot” and adjectives such as “agile”. Good words. They suggest that the actions needed are more strenuous and vigorous than “turn” or “quick” and require the attention of Chief Officers (CxO). The business mobility transformation strategy requires the full resources of the Chief officers of modern organizations and must focus on a discrete set of objectives, with a precise “to do list” that considers the obligation of an enterprise.

Oracle offers some limited pre-built mobile applications, out-of-the-box, to help transform EBS forms and reports to mobile. For example, these applications allow customers to convert EBS approvals, expenses, inventory inquiries and even some procurement. With Oracle’s simple tools, users can perform limited modifications to the new front-end components such as the application icon, the splash screen, and some of the images. The applications also allow minor formatting. But typically, Oracle EBS users want more than those limited applications can deliver. They want support for older EBS versions, for example. They want more engaging applications that pinch, swipe and pull. They want the next generation of front-end applications that can use cloud resources and they want to move or remove fields.

Modern organizations need to go beyond simple conversion. They need to combine business intelligence data from Oracle EBS and HR applications from Siebel and Peoplesoft on a single pane of glass. They need notifications, sync, and location-based services embedded with their business logic. Oracle’s apps allow only minor and superficial edits to the EBS forms and reports. Typically, this constraint leads organizations to seek a solution that accommodates broader needs. By extending the Oracle EBS front-end to mobility-enabled system, organizations can seize potential from interesting and valuable tools, such as Google Maps, social media networks, CRM, HR systems, and many others. This puts organizations beyond where they need to be, it puts them where they want to be. It gets them to agility.

Mobilized Oracle EBS

The important thing to know is that mobility does not require the full business logic of Oracle EBS, it simply requires pieces of it. For example, a mobile user doesn't need to perform extensive inventory routines, but rather a simple sub-inventory transfer, or create a new inventory item, or do a simple A/R look-up. There is no need to run the entire EBS, and try to jam it into a small screen. We would simply require certain portions of the business logic from its own web service. Fortunately, there is now a solution that can create automated EBS API's in minutes without big consultancy fees, without redeveloping chunks of database code and without synchronizing that code and data to multiple places. This is the power of AuraPlayer's API generator.

Organizations require AuraPlayer for all but the simplest EBS mobility initiatives

For most Oracle EBS deployments on the path to mobility, AuraPlayer brings a significant advantage to the mobility infrastructure. AuraPlayer bridges the gap between Oracle back-ends such as Oracle Forms, E-Business Suite, JD Edwards, Primavera and next generation front ends. It unlocks the business logic trapped in these desktop-bound applications without redevelopment cost or risk. It doesn't touch a single line of Oracle code. AuraPlayer is a smart application that exposes business applications as web services by recording user actions to create a SOAP or REST web service that serves as the backbone for any mobile application.

AuraPlayer can mobilize the EBS process in 5 minutes or less.

No other product on the market allows users of Oracle EBS (or other packaged versions of Oracle Forms) to transform their business applications to mobile using any development tool.

Implications of Mobilizing EBS

At the most basic level, AuraPlayer's mobilization of Oracle EBS creates the web services. Once the business processes are recorded and available as a web service, they are consumed in any mobile front-end. This unlocks the business rules to any developer and consumer of the process. The same business process that runs through Oracle EBS now runs through the mobile application via webservices.

Users run the EBS component without running the desktop screen. In Oracle EBS parlance, that translates to users running the same Form: They run the same code as at the EBS desktop computer only on the server side with no desktop client side. The triggers, business logic and validations, all run as they should, just not on the desktop. There is no "new converted EBS", but a new, single business process on the Oracle application server or web logic server running from your mobile devices. There is no need to run another instance of EBS.

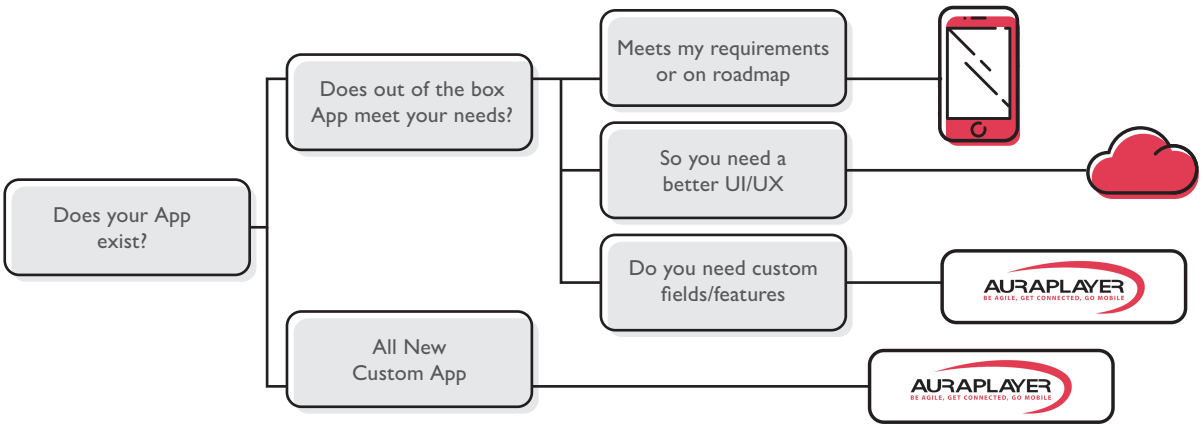
Such enablement to have "head-less" EBS opens a new world of digital opportunities where the sky's the limit!

Organizations can extend their Oracle EBS to any front-end using any development tool

Determining if a custom application is needed

The decision tree below is helpful for determining the best path forward. In some cases, if a pre-built application already exists, such as simple mobile expense entry, you may be content with going that route. While in other cases, if the application does not exist, we can extend the Oracle EBS business processes using AuraPlayer's API generator and use rapid mobile develop tools to create customized mobile user experiences in a matter of days! Many common usecases will require very little modifications, as they are already available in AuraPlayer's EBS templates library so they would only require branding and perhaps negligible customization of the input and output fields. Organizations must have a mobile platform to support the technological demand. Just as organizations need a database to manage all its data and all its business logic, they need an infrastructure to begin managing its mobile strategy. The infrastructure needs to have a secure window to the data, no matter where it is, with special abilities. It needs to support principal functions:

The ability to access mobile applications to run critical APIs
The ability to register users who download the mobile apps
The ability to manage services provided to those mobile apps such as push notifications
The ability to store data and signature files.
The ability to provide analytics. (Who is using the system, when are heavy load times during the day or month? How performant is the system? What are the error messages and what should be done about them? Is it crashing?)



Anybody can make an application these days, but it takes a professional approach to make a mobile application for responsible organizations. The application must provide accurate inputs and outputs, it must be secure, it must be manageable. Oracle's Mobile Cloud Service includes the framework and rapid development tool – with license – to make all this happen.

Strategic Mobile Transformation in Three Steps

Just as drivers must keep their eyes on the road well in front of them, so must CxO's set the strategic objective to putting the enterprise on mobile. The strategy should not be simply to put the Oracle EBS on a mobile device. To do so would be short-sighted and set the organization up to fail at the next turn of events.

Mobile First = Extending the user interface beyond desktop, tablet & phone

The objective is for portions of the Oracle EBS business intelligence to work from all touch points without degradation in terms of security and performance. The path to that position has three primary milestones.

Laying the track before you run the train. Choose the specific use case / business process you wish to enable to your mobile devices. (This is the painful part.)

Create the mobile components. (This is the easy part.)

Build the app. (This is the fun part.)

1 The use-case as the REAL use-case

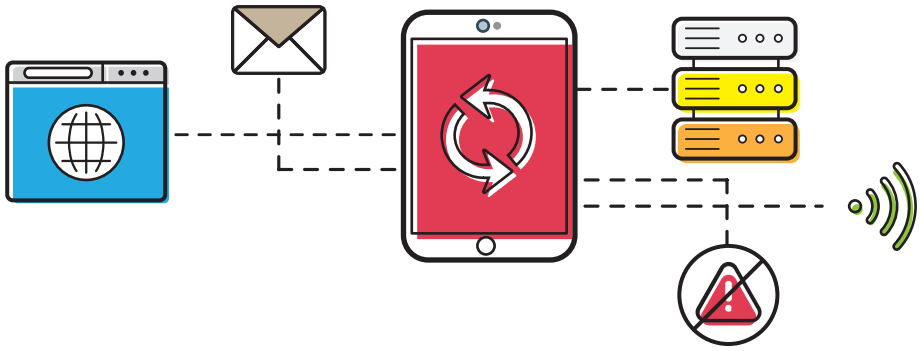
Do not allow distortions to set important initiatives up to fail. Resist the urge to sit comfortably in a conference room and dream up the use case or let some staffer to pull it out of thin air. The only way to know the true use-case is to know your users, to understand the business from the users' perspective. To do this, observe users doing real work. Discover answers to questions such as:

- Where are they currently using the application?
- Where are they getting the information they need to enter into the system?
- How is that information being collected now, and what better ways are there to collect it?
- What productivity enhancements are noticeable? Can we use camera, GPS, signature panel to enhance the user's productivity?
- How can we enhance data gathering, either by capturing it or providing it?
- Does the system need to have offline capability, or is internet access readily available at all points?

In our experience, organizations who take the time to do this right gain incredibly valuable insight into their business process, and make speedy progress towards game-changing business mobility. With a solid understanding of how the business process is happening on location, and how it functions, the process must be diagrammed. The diagramming will reveal ways in which the mobile application should present the information, and how data should be collected. The diagram will facilitate the mobile UI/UX design wireframes, or rough sketches of screens and I/O flow.

2 Creating the mobile components without touching the code

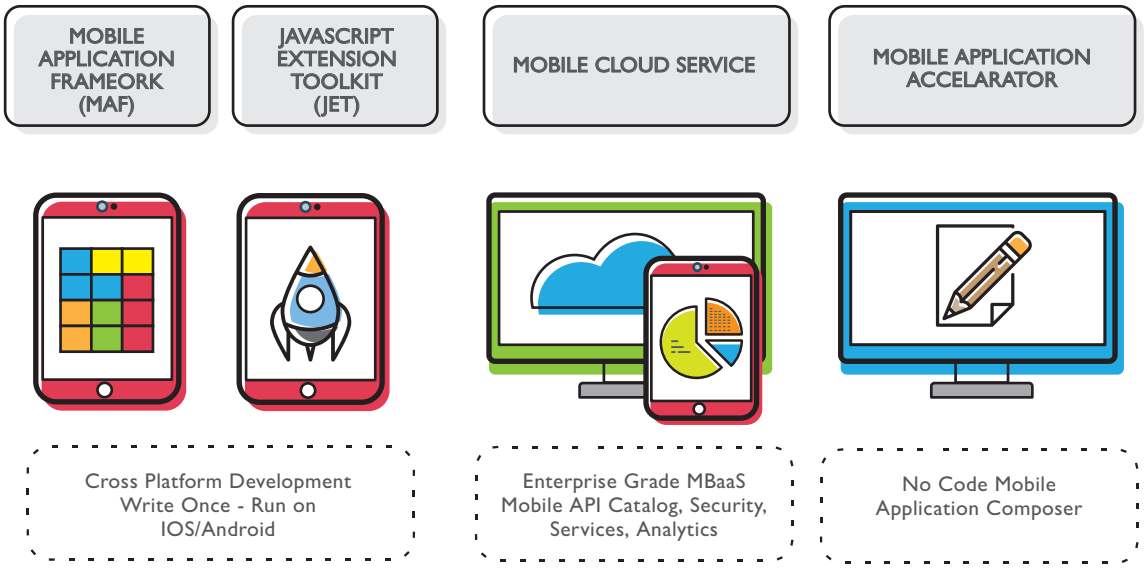
Once the use-case is clear, and the relevant EBS forms and screens are scoped, the services for the mobile app must be created. For simple routines and forms, a standard transformation from Oracle may work. This can include using existing database API's or SOA Suite packages. However, more likely AuraPlayer will be needed to capture the inputs and outputs of your custom business flows without risk and redevelopment costs. Without touching any code, or requiring consultation fees or redevelopment costs, AuraPlayer generates the API's that any mobile developer needs by recording user inputs and activities, as well as field names, labels, values, even error messages and pop-ups from Oracle EBS. The process and data flow are stored, allowing developers to manage key parameters.



The advantage of using AuraPlayer is that developers now have access to all fields and functions in EBS, everything they need to leverage – not replace, not risk, and not redevelop – Oracle EBS. The web service can receive inputs, credentials with user name and password, where submissions will perform the same actions as it would if at the native Oracle EBS screen, from any device and without running the EBS canvas. Without developing any new code or triggers, developers now have an API / web service (SOAP/REST/JSON) with the ability to run EBS business process (or part of one, a sub-set) on a mobile-ready device. The service could run off-line because the transfers could be stored on the device; when back online those transfers' web services will fire to synch back to EBS.

3 Mobile application

Organizations have a broad and deep selection of development tools at their disposal. But, as with all tools, the value of Oracle EBS mobility tools comes from using them properly, with the proper objective and for the most effective result, not the most immediate result. A hammer will insert a screw, but that job is best left to the screwdriver. Oracle has taken much time and effort to provide several business mobility development tools that enable frequent updates. HTML and Java programmers can find the tool set most familiar to them. There is even a solution for non-technical staff such as CxO's!



Oracle Mobile Application Framework (MAF). This tool allows Java developers to quickly become mobile developers. MAF is a Java development tool inside JDeveloper. It provides deployment options to iOS, Android and Windows. Oracle Javascript Extension Tooklit (JET). Oracle developed this open-source toolkit, complete with libraries and templates, to allow HTML developers to build applications for HTML and Javascript.

Oracle Mobile Application Accelerator (MAX). This is a low-code development tool made with Oracle Forms developers in mind. It offers rapid development tools. Users can develop mobile apps with little or no prior coding experience by simply using drag and drop elements to create a mobile application.

The Path Forward

As we have shown, no longer is Oracle EBS destined to be a "back-office" application chained to the desktop. It can now be part of the foundation of business growth with mobility transformation.

For the Oracle EBS establishment, although the existing business logic was getting the job done, the new development tools were here, and the market demand to go mobile is here. Until now the only missing component was the bridge to create the needed EBS API's web services without risk and without redevelopment. AuraPlayer can, without touching the back-end code or jeopardizing its stability and performance, completely transform any Oracle EBS front-end screen for use in modern digital applications and on mobile devices. It eliminates risk and redevelopment costs, making for an agile solution for pressing business challenges. Business mobility transformation may be the single most demanding imperative for established Oracle EBS users. The strategy requires an accurate use-case and it should include the means to leverage existing business logic and other EBS services to extend them to applications that support enterprise-grade security and analytics. And today, there are no longer insurmountable challenges to mobilizing Oracle EBS

Let us help!

The next step is to develop a mobilized Oracle EBS Proof of Concept in 1 hour or less using AuraPlayer. A working concept suggests the path forward to market opportunity, improved margins, and customer loyalty.

See how AuraPlayer does more than mobilize Oracle EBS, **at www.auraplayer.com**

AuraPlayer puts your business in tomorrow's market.

About the author

Mia Urman, CEO of AuraPlayer, is an Oracle ACE Director and recognized Oracle Forms expert. A frequent keynote speaker for Oracle, business leaders all over the globe seek Mia's counsel and expertise.

Mia founded AuraPlayer, Inc. in with Yossi Nakash, a Java development expert of 15 years to bring this Oracle mobility transformation product to market. AuraPlayer began by bridging the gap between Oracle enterprise apps and mobile platforms. The company now offers products to extend any enterprise user interface connected to any back-office, legacy or packaged cloud application The company also sells a testing and automation product called AuraTester to bring stability to Oracle front-end developers.

To learn more about AuraPlayer and enterprise mobility transformation, browse to **AuraPlayer.com.**

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About AuraPlayer

AuraPlayer transforms any back-end data source, legacy or cloud application to any digital experience, mobile application or Chatbot in minutes WITHOUT redevelopment. AuraPlayer's mission is to provide flexible, real-time solutions that enable Oracle customers to protect, integrate, modernize and manage their business data to maximize efficiency and profit.

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