



# **Oracle's Application Foundation: Your Path to Extreme Performance**

**An Oracle Applications  
White Paper  
June 2010**

# Oracle Application Foundation: Your Path to Extreme Performance

## **IT'S TIME FOR EXTREME PERFORMANCE**

*"We can handle a huge amount of data but we can crunch it down to one number: was it better today than yesterday? And more, we can tell why and how... it's impressive. It gives us a whole new insight into how the structure is performing." - Ian Burns<sup>1</sup>*

Ian Burns isn't a Fortune 500 CIO discussing the benefits of his newest business intelligence solution. Rather, he's the design lead for BMW ORACLE Racing, talking about a revolutionary new laser wind sensing system that helped the *USA 17* trimaran capture the 2010 America's Cup race by the biggest margin in twenty years.

To achieve extreme performance on the water, the team at BMW ORACLE Racing modernized the traditional design of the *USA 17* with cutting-edge technologies to increase the boat's speed and agility. Companies looking to drive extreme performance in today's fast-paced global economy must adopt a similar strategy: modernize their application foundation with the latest service-enabled technologies, to eliminate the IT complexity that creates a drag on the business and prevents organizations from performing at peak effectiveness.

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<sup>1</sup> Silva, Daniel, "America's Cup showcases latest sailing technology," Yahoo! News, February 13, 2010.

## **ORACLE'S APPROACH: ATTACK IT COMPLEXITY**

**“This industry has a long history of building systems in a very manual, labor-intensive way. That’s why it’s so expensive to implement and maintain these systems. We had a different idea. Do that work upfront, and completely engineer these systems at the factory so that the customer doesn’t have to.”**

**—Charles Phillips, President, Oracle Corporation**

Rigid, labor-intensive legacy systems are at the heart of IT complexity, costing organizations 4 percent of their annual revenues – *or \$40 million for every billion dollars in revenue* – to maintain their IT infrastructures. Up to 65 percent of that spend goes toward integration and labor costs, as companies try to manually stitch together disconnected processes and make sense of the islands of data existing in redundant systems. Less than 20 percent of IT budgets today are allocated toward strategic projects that can drive innovation, differentiate your business, and deliver sustainable profitability.

Oracle’s strategy to attack IT complexity is simple: provide you with a single, unified application foundation that will dramatically change the economics of your IT spending mix. Oracle’s Application Foundation combines the best functionality from Oracle’s world-class portfolio of business applications, middleware, and information management systems into a single, unified application foundation with components that come pre-integrated, out of the box. Standardizing on Oracle’s Application Foundation allows you to minimize the cost and complexity of deploying, maintaining, fine-tuning, and upgrading your applications portfolio, so you can invest those resources in new, value-added technologies that can differentiate your business and drive value for your entire organization.

This white paper will review each of the unique components of Oracle’s Application Foundation, from its unified user interface to increase worker productivity and collaboration; to the standard business process integration tools and hot-pluggable business services you can deploy right now to drive immediate value for the business. You’ll also learn how standardizing on Oracle’s Application Foundation can help you future-proof your technology investments going forward, especially as you move to uptake next-generation business applications such as Oracle Fusion Applications.

Finally, you’ll understand why Oracle’s Application Foundation has built from the ground up with customer choice in mind, providing you with the broadest choice of business applications, industry solutions, middleware tools, and deployment options that allow you to execute an application modernization strategy built around your unique requirements and time line.

## **ORACLE'S APPLICATION FOUNDATION: ENGINEERED FOR EXTREME PERFORMANCE**

According to McKinsey’s Business Technology Group, IT complexity is nothing less than a tax on the business, resulting in slower product introductions, poor customer interactions, costly and cumbersome order-to-cash processes, and M&A synergies that remain a pipe dream. McKinsey expects IT complexity and fragmentation to increase, as organizations move beyond an ERP-centric, transaction-processing model, to a more flexible IT model that enables business user interactions and collaboration using Web 2.0 applications and new delivery mechanisms like cloud computing and software-as-a-service (SaaS).<sup>2</sup>

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<sup>2</sup> Sarrazin, Hugo, “Leveraging IT in the New Normal,” speech given at Oracle CFO Summit, April 8, 2010.

## THE FUTURE IS AN INTEGRATED STACK

“In the new world that will come about in the next three to five years, you’ll buy the entire stack....It is the industrialization of IT.”

—Brent Bracelin, Senior Research Analyst,  
Pacific Crest Equity Research<sup>4</sup>

Organizations best poised to avoid increased IT complexity going forward are those that have replaced their rigid, labor-intensive legacy systems with flexible, service-enabled IT environments that allow application components to be deployed as needed by the business, and switched off and on using SaaS, cloud computing, and other pay-as-you-go delivery channels. Because a service-based architecture is based on open standards, companies can quickly uptake the latest technology advances - from business process management and Web 2.0 tools, to predictive analytics - to adapt business processes quickly and easily in response to shifting corporate priorities.

Rather than focusing precious IT resources on stitching together application components themselves, leading organizations are increasingly standardizing on an integrated solution stack that brings together middleware and business applications from a single vendor. According to industry analysts, Oracle is one of the few large technology vendors today that can compete effectively based on the depth of our integrated application suite, and the internal cohesiveness of our technology platform.<sup>3</sup>

Since 2005, Oracle has invested over \$50 billion in organic R&D and strategic acquisitions to provide customers like you with the competitive advantages of an integrated application foundation. Oracle’s design approach has been consistently guided by our strong industry commitment to open standards, which allows you to uptake the latest technology advances from any source, to meet your unique business requirements.

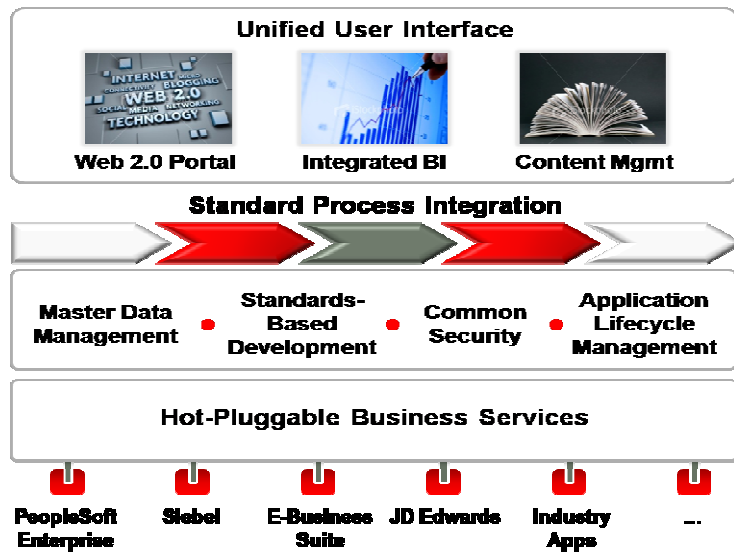
Oracle’s Application Foundation incorporates a number of industry-leading technologies designed to increase the productivity, adaptability, and manageability of your enterprise:

- *A unified user interface*, designed to replace the clunky user interfaces that limit worker productivity and collaboration
- *Standards-based process integration*, designed to eliminate hard-coded point-to-point integrations between business systems that reduce business agility;
- *Hot-pluggable business services*, designed to deliver immediate value and help you differentiate your business
- *Integrated infrastructure and application management systems*, designed to replace today’s ineffective management tools that impact downtime, hinder user performance, and increase security and compliance risks

<sup>3</sup> Krill, Paul, “Are you stuck with Oracle’s and IBM’s middleware control?” *InfoWorld*, February 23, 2010.

<sup>4</sup> Hempel, Jessi, “Clash of the technology titans,” *Fortune Magazine*, January 13, 2010.

Figure 1. Oracle's Application Foundation



**ORACLE'S APPLICATION FOUNDATION: ENGINEERED FOR COMPLETE CUSTOMER CHOICE**

The trimaran built by BMW ORACLE Racing began life differently in August 2008, with a soft sail and other components similar to those found in the defending champion, a traditional catamaran. Over the next 15 months, the team at BMW ORACLE Racing strengthened the core design of the *USA 17* to increase its speed and agility, automating manual sailing tasks, employing light-weight composite materials, and replacing its soft sail with a solid, adjustable camber wing. By strategically adding new features and functionality to the boat's existing architecture over time, the team at BMW ORACLE Racing was able to achieve the extreme performance required to bring home the America's Cup after 23 years.

Oracle's Application Foundation has been designed with this type of strategic flexibility in mind, allowing you to select your own path to application modernization by offering you a choice of *which* solutions you want to implement, *when* you choose to implement them, and *how* you choose to deploy them.

## MOVE FORWARD AT YOUR OWN PACE

**"I'm excited by the steps Oracle is taking to prepare its customers for the future of Oracle Applications. It is providing customers with numerous choices for moving forward through Oracle Fusion Middleware, Oracle Applications Integration Architecture, and the upcoming Oracle Fusion Applications. At the same time, Oracle is providing a means for customers to move forward at their own pace by protecting current application investments through the Oracle Applications Unlimited and Lifetime Support programs."**

**—Floyd Peter, Systems Engineer, Jet Propulsion Laboratory<sup>5</sup>**

The key to Oracle's customer-centric strategy is Oracle Fusion Middleware 11g, the leading application infrastructure software on the market today and the technology foundation for Oracle's Application Foundation. Customers are using Oracle Fusion Middleware 11g to seamlessly extend the business value of their applications today, adopting open standards, retiring customizations and hard-coded integration points, and developing the appropriate IT and operational skill-sets needed to work with the next generation of enterprise software.

Customers are also using Oracle Fusion Middleware as part of their evolutionary path to Oracle Fusion Applications, Oracle's next generation of enterprise software. Oracle Fusion Applications incorporate the revolutionary advances in middleware provided by Oracle Fusion Middleware to lower software costs, increase business agility and improve user productivity.

The first step in building a future-ready foundation is to stay current on Oracle's Applications Unlimited line of product suites, since the latest releases of Oracle Applications are certified to work with Oracle Fusion Middleware. Then you can use Oracle Fusion Middleware to add new features and functionality to your existing applications when and where you need them most, at a pace that makes sense for your organization.

Ultimately, Oracle's goal is to help customers like you transform their businesses into high-performing organizations that enjoy *more productive people, more adaptable business processes, and more manageable systems*. The next sections of this white paper will examine what strategies you should consider to achieve the next-generation adaptability, productivity, and manageability that are fast becoming the hallmarks of success for the 21<sup>st</sup> century organization.

## NEXT-GENERATION PRODUCTIVITY

According to new research by *CIO Magazine*, CIOs overwhelmingly voted to increase funding in 2010 for IT projects that improve end-user productivity – more than any other category, in fact.<sup>6</sup> Those projects can help CIOs address user productivity challenges they face across the board, such as *knowledge workers* who spend a third of their day searching for information across unstructured content; *decision-makers who* rely heavily on their IT groups to access and report on business data; and *Millennials who* are putting new technology demands on corporate networks through their use of instant messaging, social networking, and other new collaboration tools.

Over the past six years, Oracle has spent 4,000+ man-hours doing in-depth usability testing with over 1,000 customers to build applications that allow users to work smarter with intuitive, intelligent, and collaborative applications. We've focused our development efforts on the needs of the knowledge worker: What do you need to know? What do you need to do? Who do you need to know or reach? And how do you get it done?

<sup>5</sup> Matelski, John, "Middleware's Business Value," Profit Magazine, February 2008, p. 10.

<sup>6</sup> *CIO Magazine*, "The State of the CIO," January 2, 2010.

Oracle's Application Foundation can eliminate much of the complexity knowledge workers face today by delivering what Oracle calls *next-generation productivity*. We recommend that companies adopt the following strategies to achieve next-generation productivity and empower their knowledge workers in the process:

- ✓ Unify the user experience
- ✓ Provide rich, accurate, and timely information for decision makers
- ✓ Enable business users to build reports without IT involvement
- ✓ Adopt enterprise search
- ✓ Manage your documents electronically
- ✓ Ensure end-user adoption

## A NEXT-GENERATION EXPERIENCE FOR CUSTOMERS

**"We chose Oracle WebCenter Suite, Oracle Enterprise Content Management Suite, and Oracle SOA Suite to provide customers with a next-generation experience along with the goal of seamless collaboration between customers, their peers and SMEs at Alcatel-Lucent Enterprise Products Group. This integrated stack gives us one unified, content-centric collaborative environment across the enterprise for partners and customers."**

**—Saeed Hosseinivar, CIO, Alcatel-Lucent –  
Enterprise Products Group<sup>7</sup>**

### Unify the User Experience

According to a new report by Accenture, the millennial generation of workers (born between 1977 and 1997) is rocking the foundation of IT in many ways that CIOs may not have considered.<sup>8</sup> Used to instant communications and lightweight Web 2.0 applications, Millennials and even Baby Boomers have become increasingly frustrated with the clunky user interfaces found in existing enterprise applications. They're tired of working with multiple systems and passwords, toggling in and out of different screens to access information, and waiting for reports to come back from IT. Daily challenges like these not only de-motivate workers, but can have a massive impact on productivity and costs in terms of more help desk calls and higher support costs.

Leveraging the power of Oracle Fusion Middleware, Oracle has blended applications and enterprise social computing services into a single user interface – Oracle WebCenter 11g. Oracle WebCenter 11g captures everything workers need to do their jobs more efficiently and effectively, while shielding them from the many different applications and databases running underneath. Oracle delivers this unified user experience within the context of key business processes which improves user productivity, lowers operating costs and streamlines business execution.

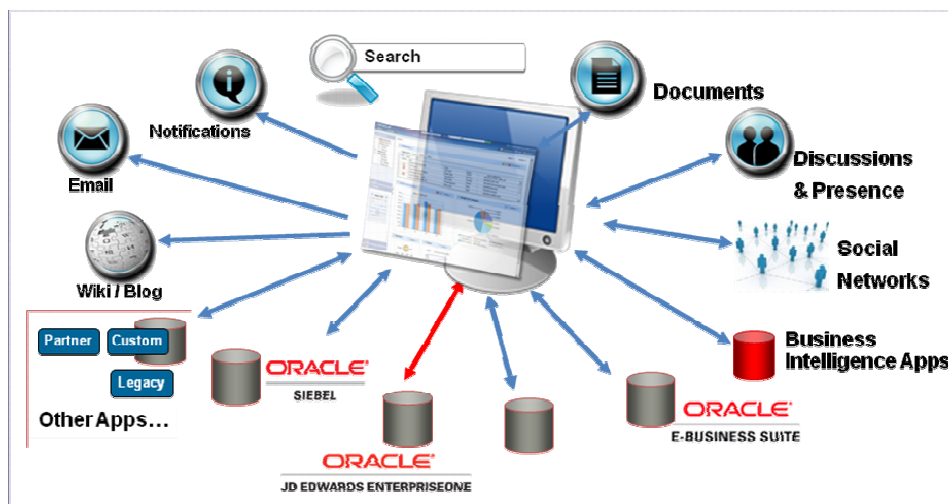
Employees can use Oracle WebCenter 11g to more effectively find information, connect and collaborate with colleagues, and share their knowledge internally and externally. Integrated Enterprise 2.0 services like wikis, blogs, RSS, and discussion forums allow people to more easily interact with one another, and do their jobs more efficiently and effectively, without having to move through multiple screens or applications. And role-based dashboards with embedded analytics provide highly visual and actionable analytical information in the context of the transaction.

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<sup>7</sup> Oracle Press Release, "Leading Organizations Worldwide Choose Oracle® Fusion Middleware 11g," Oracle OpenWorld, San Francisco, Calif. – Oct. 12, 2009

<sup>8</sup> "Jumping the Boundaries of IT: Millennial Generation is Rocking the Foundation of IT," Accenture, 2010.

Figure 2. Unify user interactions and empower information workers with Oracle WebCenter



## BUSINESS INTELLIGENCE AT ORACLE

“We’ve had great success with our enterprise reporting initiative, which is based on the Oracle Business Intelligence Suite, Enterprise Edition (OBIEE) analytic applications. For example, I now have on my desktop a dashboard showing every dollar of travel and entertainment expense spent in the company, by person and by department. I can review what we spend overall, what we spend in North America versus Europe, and so on, and drill down all the way to what an individual spent last month. We’re disseminating this throughout the organization so managers can understand the investment they’re making in travel and entertainment and decide whether it’s worthwhile.”

—Jeff Epstein, EVP and CFO, Oracle

## Provide Rich, Accurate, and Timely Information for Decision Makers

Oracle recommends that customers consolidate their disparate business intelligence (BI) tools and standardize on an enterprise BI platform. Whether you’re running Siebel CRM, Oracle E-Business Suite, PeopleSoft, JD Edwards, or third party applications such as SAP, Oracle can provide you with a single BI platform and broad set of analytic applications that can deliver greater visibility and insight into every aspect of your business.

Oracle Business Intelligence Suite Enterprise Edition (OBIEE) is an enterprise-class BI platform that can access data from any heterogeneous source, and support all modes of reporting and analysis – including enterprise reporting, dashboards, and ad hoc queries. Users can consume information from standard web browsers, Microsoft Office applications, enterprise portals, mobile devices, search bars, and even within ERP and CRM applications.

OBIEE is based on a modern architecture that highly scalable, secure, and easy to manage and maintain. Metadata is centrally managed in a Common Information Model that ensures all reports, views, metrics, and calculations are always accurate and consistent. The Common Information Model also provides a semantic layer that insulates business users from having to understand the underlying data sources, enabling end user self service with minimal reliance on IT.

Business Intelligence (BI) Publisher (formerly XML Publisher) is an enterprise reporting solution for authoring, managing, and delivering all your highly formatted documents, such as operational reports, electronic funds transfer documents, government PDF forms, shipping labels, checks, sales and marketing letters, and much more. Oracle BI Publisher, which is included with OBIEE and also can be purchased separately, is the

## **OPERATIONAL ANALYTICS AT WORK**

***McDonalds uses Oracle Business Intelligence Supply Chain Analytics to improve forecasting, reduce out-of-stocks, and improve efficiency of regional promotions***

***Charles Schwab uses Oracle Business Intelligence Sales Analytics to get better visibility into its sales performance and pipeline***

***British Telecom uses Oracle Business Intelligence Financial Analytics and Siebel CRM to improve forecasting and customer segmentation***

reporting tool that has been adopted by all Oracle Applications Unlimited products and Fusion Applications. Oracle BI Publisher is tightly integrated with Oracle E-Business Suite, PeopleSoft Enterprise, and JD Edwards EnterpriseOne.

For extended “what if?” scenario modeling, management reporting, and advanced analytic reporting, organizations can also leverage Oracle Essbase, the market leading OLAP server. Essbase is ideal for forward looking analytic and performance management applications, such as sales and revenue forecasting, financial and demand planning, customer and product level profitability analysis, and “speed of thought” interactive analysis.

Oracle Business Intelligence applications integrate with E-Business Suite, PeopleSoft, JD Edwards, and Siebel to address analytic requirements across a wide range of functions—from sales and marketing to finance and human resources, order management and fulfillment, supply chain, service, and contact center analytics.

Oracle Business Intelligence applications are also tailored to meet the unique needs of different industries, addressing important industry issues such as customer-churn detection in telecommunications, fact-based selling and trade promotion performance in consumer goods, customer value and “share of wallet” in financial services, or physician and product opportunity identification in pharmaceuticals. Based on best practices, these solutions help organizations gain greater insight and value from a variety of data sources and applications, including Oracle E-Business Suite, Oracle’s PeopleSoft, and Oracle’s Siebel, as well as other systems, such as SAP R/3.

Oracle’s Hyperion Performance Management applications support a broad range of strategic and financial performance management processes to deliver more predictable results, improve transparency and compliance, accelerate the close and management reporting processes, and increase business alignment. Hyperion Performance Management applications integrate with all Oracle Applications, such as E-Business Suite and PeopleSoft, as well as with SAP and other third-party systems.

### **Adopt Enterprise Search**

According to IDC, companies waste \$2.5 million annually per every 1,000 workers due to an inability to locate and retrieve information.<sup>9</sup> Employees have become used to public search engines like Google and Bing to access information, and expect a similar search experience within their enterprise applications.

Oracle Secure Enterprise Search (SES) provides a familiar user interface to internet search users and gives secure access to all of your organization's data sources—Web sites, file servers, content management systems, enterprise resource planning and customer relationship management systems, business intelligence systems, and databases. Oracle Secure Enterprise Search provides better access to enterprise information, while protecting sensitive data from unauthorized users.

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<sup>9</sup> “The Evolutionary Path: Things You Can Do Today to Prepare for Oracle Fusion Applications”, Oracle Corporation, January 2009.

## CONTENT MANAGEMENT DELIVERS ROI

*The Home Depot uses Oracle ECM with Oracle EBS to process 250,000 invoices per week, storing over one billion documents and reducing document retrieval from days to seconds*

*Coca-Cola uses Oracle UCM to manage multiple websites, corporate knowledge and partner and employee updates*

*Allstate lowered document management costs by 70% across its 57 mission-critical business applications*

*Harvard Business Magazine uses Oracle Information Rights Management to control and secure access to its online articles*

Oracle Secure Enterprise Search is used extensively in Oracle Fusion Applications, as well as selectively in the latest releases being delivered under the Oracle Applications Unlimited program, including Oracle E-Business Suite Release 12.1.

## Manage Your Documents Electronically

The continuing growth of both structured and unstructured content presents complex information management challenges for organizations as they seek to reduce costs, increase productivity and minimize risk by aligning content with enterprise applications.

Oracle offers a rapid return on investment through a cost-effective and complete enterprise content management platform that is recognized by analysts like Gartner and Forrester Research as an industry leader.<sup>10</sup> A component of Oracle Fusion Middleware, Oracle Enterprise Content Management Suite is a manageable, usable and hot-pluggable enterprise content management solution on a single platform.

Key offerings in the Oracle Enterprise Content Management Suite include Oracle Universal Content Management, a unified enterprise content management platform; Oracle Imaging and Process Management, to automate document routing and access and display imaged content; and, Oracle Universal Records Management, a scalable, certified electronic and physical records management solution.

Oracle has adopted content management functionality for both Oracle Fusion Applications and Oracle Applications Unlimited, with pre-integrated solutions available for Oracle E-Business Suite, PeopleSoft Enterprise, JD Edwards EnterpriseOne, and Siebel.

## Ensure End User Adoption

Today, every technology investment must deliver results, yet user adoption is one of the biggest barriers to enterprise application success. Oracle User Productivity Kit (UPK) accelerates user adoption and mitigates project risks to make you productive on day one.

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<sup>10</sup> The Forrester Wave™: Enterprise Content Management Suites, Q4 2009; Gartner ECM Magic Quadrant, October 2009.

## TRAINING USERS WORLDWIDE AT UNISYS

“Oracle User Productivity Kit enables us to efficiently develop and deliver high-quality IT training courses and materials to our employees worldwide. Leveraging the tool’s online environment, we have increased training options for our employees and gained significant cost and time savings – reducing our reliance on resource-intensive classroom training by 98 percent.”

—Eileen Ernstberger, Training Consultant,  
Unisys

Oracle UPK provides a simple and comprehensive content development, deployment, and maintenance platform specifically designed for project team members and line of business owners. With these tools, the project team will dramatically reduce the time to deployment and ensure end user adoption - the single biggest barrier to enterprise application success. Supporting applications from Oracle, SAP, and Microsoft as well as all other enterprise applications, Oracle UPK will help you achieve the highest return on your enterprise application investment.

Oracle UPK is the end user adoption solution for all Oracle Applications, and just in time performance support is packaged for all Applications Unlimited products. Similarly, Oracle UPK is being incorporated in the help and performance support for Oracle Fusion Applications.

## NEXT-GENERATION ADAPTABILITY

As new ways to create value arise from technology breakthroughs, business models based on static information architectures won’t be able to keep pace.<sup>11</sup> Static information architectures also can’t handle rapidly changing corporate structures, as companies downsize, divest, acquire, and expand in response to the relentless pace of today’s global economy. Organizations that rely on static ERP systems with proprietary toolsets can’t keep up: business process change is slow and expensive, as cross-application business flows must be hard-coded, and customizations must be re-coded in an upgrade.

A modern application foundation can drive strategic value across your entire enterprise by delivering what Oracle calls *next-generation adaptability*: the ability to rapidly create flexible and efficient processes across your enterprise, and seamlessly integrate your processes and applications to support business agility and growth. Oracle recommends that customers adopt the following strategies to achieve next-generation adaptability:

- ✓ Upgrade to the latest releases of Oracle Applications certified with Oracle Fusion Middleware
- ✓ Adopt a SOA-based approach to integration
- ✓ Future-proof your customizations

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<sup>11</sup> Chui, Michael, Markus Loffler, and Roger Roberts, “The Internet of Things,” *McKinsey Quarterly*, No. 2, 2010.

## **SIMPLIFYING THE MIGRATION PATH AT COX COMMUNICATIONS**

**Cox Communications is an example of a company that understands the value of keeping current on its PeopleSoft HCM applications as it prepares for an eventual transition to Oracle Fusion Applications.**

**The cable television leader has been continually upgrading its PeopleSoft Enterprise HCM applications for the past seven years, to unify its HR systems across the employee lifecycle and drive employee engagement. Following an upgrade to PeopleSoft HCM 8.9, Cox is now deploying Oracle Business Intelligence Enterprise Edition to consolidate its business reporting tools to improve end user efficiency and effectiveness.**

**“By streamlining all of our processes onto Oracle software, we’re now on a simpler migration path to Fusion. Our future path is much clearer.”**

**—Erin Govednik, Executive Director,  
Human Resources, Cox Communications<sup>12</sup>**

## **Upgrade to the Latest Releases of Oracle Applications Certified with Oracle Fusion Middleware**

Through the many customer advisory boards and user groups we engage with, Oracle has learned that customers are upgrading to the latest releases of Oracle Applications not only to get on the evolutionary path to Oracle Fusion Applications, but also to: 1) get access to the latest release functionality; 2) deliver increased automation to more end users; 3) retire customizations with new functionality; 4) improve end user productivity; and 5) reduce their total cost of ownership.

Oracle has designed both its Fusion Applications and the latest releases of Oracle Applications with these goals in mind. Oracle E-Business Suite Release 12.1, for example, helps companies achieve rapid value by offering both stand-alone and industry-specific solutions that complement existing Oracle E-Business Suite 11i and Release 12 environments. PeopleSoft Talent Management 9.1 allows PeopleSoft HCM customers to take advantage of new business process enhancements on that module while retaining their existing HCM implementation.

Oracle Applications -- including the latest release -- are certified with Oracle Fusion Middleware to enable customers to migrate to future releases by helping them standardize on open standards, retire customizations, adopt SOA, and develop new IT and operational skill-sets. Customers can use Oracle Fusion Middleware to launch a new business initiative quickly, deliver integrated analytics, or comply with new regulations by adapting their existing software to meet these new business requirements.

## **Adopt a SOA Approach to Integration**

To achieve greater business agility and re-use of existing systems, Oracle recommends that companies adopt a SOA approach to integration, by using Oracle Data Integration Suite for data centric integrations and Oracle SOA Suite 11g for process-centric integrations. Both are designed to enable rapid design and assembly, deployment and management of highly agile and adaptable integrations across business applications.

Through Oracle Application Integration Architecture (AIA), Oracle offers a jumpstart kit which provides standardized, pre-built SOA based integrations that include pre-packaged Foundation Packs of commonly used integration components and methodology; and Process Integration Packs (PIPs), designed for specific Oracle Applications, business processes, or industries.

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<sup>12</sup> “Cox Communications Transforms Human Resources Processes to Boost Efficiency and Engagement,” Oracle Customer Case Study, August 2009.

Figure 3. Oracle's Application Integration Architecture

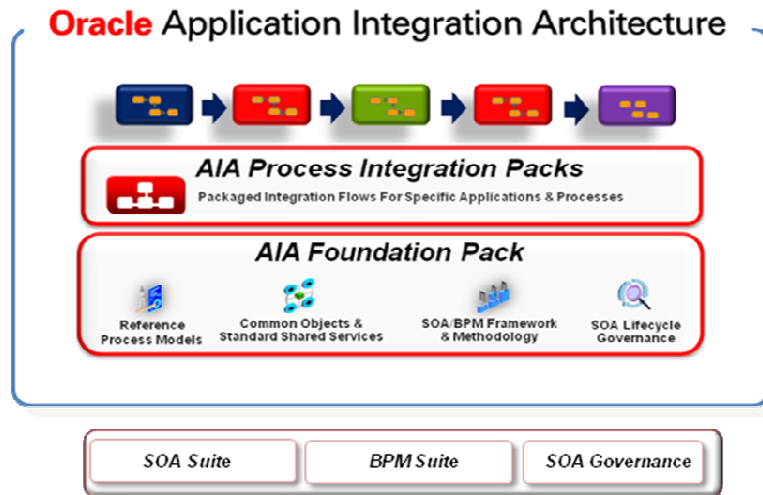
**AMWAY KICK-STARTS  
ITS MODERNIZATION  
JOURNEY WITH ORACLE  
SOA AND AIA**

Amway Corporation is one example of a company looking to Oracle SOA and Oracle AIA to help modernize its application foundation, and support the doubling of its \$8 billion business by 2012. Oracle AIA and Oracle SOA Suite allow Amway to standardize integrations across a front-end "Global Web" e-commerce system with its back-end Oracle E-Business suite R12 applications, as well as numerous third-party legacy systems.

The ability to create common methodologies and standardize its top ten global business processes will enable Amway to roll out technology changes quickly to all 60 countries in which it operates.

"Our choice of standardizing on Oracle has been a huge win for all of our constituents, and we are already reaping the benefits. Working with Oracle has been an amazing kick-start for our SOA journey to save time and cost and accelerate our growth with a strong, flexible technology foundation to meet future needs."

—Tina Abdoo, Manager, Enterprise Development, Amway Corporation<sup>13</sup>



Built on Oracle's SOA foundation, Oracle AIA enables you to more easily transition to a SOA environment, while establishing a business process platform that can be re-used with Oracle Fusion Applications. Foundation Packs provide a new approach to business process integration across disparate applications, combining the power of Oracle Fusion Middleware with a set of best-in-class objects and business services that together form the building blocks for a new generation of composite applications.

**Future-proof Customizations**

While the latest releases of Oracle Application Unlimited solutions provide a welcome opportunity to retire costly customizations, in some cases customizations may be needed to fit a very specific business requirement. If you're planning to extend or customize your applications and add new functionality, think about your customization strategy and the tools you're currently using. Customizations often slip through the cracks during upgrades or changes, especially hard-coded ones that tightly couple a specific data source with business logic, like a workflow trigger. Adopting an SOA approach to customizations can help eliminate those issues.

<sup>13</sup> Oracle Press Release, "Amway Corp. Deploys Oracle® Applications, Oracle SOA Suite and Oracle Application Integration Architecture Foundation Pack to Support Growth Strategy," January 26, 2010.

## MODERNIZING WITH SOA

**Rabobank** has one of the world's largest Siebel implementations. It uses Oracle SOA Suite to orchestrate its multichannel customer interactions with an 18 minute response time.

**Belgacom** uses Oracle BPEL to orchestrate 15,000 DSL service provisioning transactions each day.

**Xerox** runs Oracle EBS and Siebel. It leverages Oracle SOA Suite for multiple cross-apps business processes including its web services for order status tracking.

**Tesco** uses Oracle SOA Suite to maximize the value of Retek and Oracle EBS for its unique procurement systems.

Oracle Fusion Middleware development tools like Oracle Application Development Framework (ADF) can help. Oracle ADF is a single, Java-based development framework for building internet applications. It provides a metadata layer that describes the behavior of the application, such as business logic, user interface, business rules, and business processes, all of which can be modified by a business analyst. And because these changes are made to metadata rather than code, customizations are protected during an upgrade.

Oracle ADF also enables you to develop one application and deliver it to multiple devices, such as web browsers, email or mobile phones. With this single set of tools, your customization strategy can become modern, user-friendly, and easily adapt to change, yet remain compliant with requirements from operations, central architecture committees, security reviews, and other stakeholders in your enterprise.

For example, a health care payer organization wanted to improve customer service and reduce support costs by streamlining the claims management process. The provider built a claims processing application that automated file transmission to and from healthcare clients. Oracle SOA Suite was used to implement their business rules and policies, orchestrate the claims management processes, and manage caseworker workflow. Oracle ADF and Oracle WebCenter were used to create a caseworker user interface as well as a customer-facing web site for submitting claims and checking their status.

## NEXT-GENERATION MANAGEABILITY

In addition to cost savings and improved resource efficiencies, a modern approach to managing your enterprise applications and data can help you drive strategic value across your entire enterprise. As the leader in Master Data Management (MDM), grid computing, applications management, and data security, Oracle is the only vendor that can bring together these capabilities to deliver *next-generation manageability*: a reliable and unified foundation to manage all of your applications at a lower cost, while effectively securing your applications and data to minimize business risk.

Oracle recommends that customers adopt the following strategies to achieve next-generation manageability:

- ✓ Consolidate Your Master Data
- ✓ Consider Grid Infrastructure
- ✓ Manage Your Applications Centrally
- ✓ Secure Your Global Enterprise

## **CLEAN, CENTRALIZED DATA AT SYMANTEC**

Security software leader Symantec standardized on Oracle Product Hub and Oracle Customer Hub to address a number of data issues resulting from multiple acquisitions, from duplicate records and too many customer masters, to data errors and loss of revenue. Standardizing on Oracle MDM allowed Symantec to achieve clean, centralized data that would allow the company to achieve easier upgrades to future releases of Oracle E-Business Suite, as well as provide a SOA-based foundation and strategic path to Oracle Fusion Applications.<sup>14</sup>

## **Consolidate Your Master Data**

Gartner reports that through 2010, 70 percent of Fortune 1000 organizations will apply MDM programs to ensure the accuracy and integrity of commonly shared business information for compliance, operational efficiency and competitive differentiation purposes.<sup>15</sup> Now is the best time to invest in consolidating and cleansing your master data, especially as you prepare to uptake next generation technologies like Oracle Fusion Applications.

Oracle MDM includes a large portfolio of purpose-built master data management applications, including solutions to manage customer, product, site location, supplier, and student/constituent information as well as specialized applications to improve data quality and financial data. By using Oracle MDM products these together with Oracle Fusion Middleware, customers can create a quality data foundation for application deployments, business process optimization, and SOA initiatives.

## **Consider Grid Infrastructure**

Today most organizations have underutilized servers with little or no resource sharing from one application to another. Due to an inflexible IT infrastructure, buyers have sized their servers to support peak capacity. As a result, IT organizations now manage inflexible silos of servers, software, and storage dedicated to individual applications, and organizations must manage their infrastructure at a lower cost.

Imagine instead an infrastructure of standard, inexpensive, reusable components with a central management console to automate hardware, software, and storage procedures and policies. Such an infrastructure simplifies the IT environment, reduces cost, and frees up staff to focus on value-added activities. Oracle Grid Computing provides the solution, allowing customers to consolidate their business applications onto low cost database and application grids to achieve better scalability, reliability and high availability within a SOA architecture that can be fully monitored and serviced with Oracle Enterprise manager.

Oracle Grid Computing enables groups of networked computers to be pooled and provisioned on demand to meet the changing needs of business. Instead of dedicated servers and storage for each application, grid computing enables multiple applications to share computing infrastructure, resulting in much greater flexibility, cost, power efficiency, performance, scalability and availability, all at the same time.

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<sup>14</sup> Krishna, Rama, "Master Data Management at Symantec," September 24, 2008, Oracle OpenWorld Presentation.

<sup>15</sup> Oracle MDM Executive Overview, Oracle Corporation January 2009, p. 1

## **ENTERPRISE MANAGER DELIVERS MAJOR SAVINGS AT GE INFRASTRUCTURE**

**General Electric (GE) Infrastructure uses Oracle Enterprise Manager's Application Management Pack for Oracle E-Business Suite (EBS) to manage its global Oracle E-Business Suite environment. The \$183 billion industrial manufacturer runs a complex Oracle EBS environment, spanning 17 production instances and more than 200 development, upgrade, and performance environments.**

**"Implementing Oracle Application Management Pack for Oracle E-Business Suite has enabled GE Infrastructure to serve our customers 84% faster with cloned instance availability," notes Benjamin Cabanas, Program Manager for GE Infrastructure. "We're also saving US\$200,000 annually in operations costs because of a 75% reduction in resources required."**

**—Benjamin Cabanas, Program Manager, GE Infrastructure<sup>16</sup>**

## **Manage Your Applications Centrally**

A key goal of Oracle Applications is to deliver a superior ownership experience in application manageability, both for the current set of Oracle Applications and Oracle Fusion Applications. Oracle Enterprise Manager is Oracle's flagship applications management product, and is the base platform for building Oracle Fusion Application management tools.

Oracle Enterprise Manager offers a complete set of advanced management tools that include application performance management, configuration management, service-level management, event management, job management, diagnostics, patching, and provisioning. Oracle Enterprise Manager is also the leading solution for managing custom applications that run on the grid, helping align IT and the business around services, and identifying and resolving application performance problems before they can impact the business.

Oracle Enterprise Manager provides specially designed Application Management Pack solutions for managing Oracle E-Business Suite, PeopleSoft Enterprise, JD Edwards EnterpriseOne, and Siebel applications. Oracle Enterprise Manager also delivers capabilities that specifically address SOA management challenges. Oracle's recent acquisition of AmberPoint will strengthen our SOA management capabilities, enabling companies to adopt policies that help improve application performance and security, and to diagnose transactions not only within a composite application, but also across different applications.

## **Secure Your Global Enterprise**

Security solutions in use today are based on application-specific tools and technologies that were developed years ago, when there was a lack of enterprise security standards. Today's applications deal with multiple facets of security ranging from user provisioning to identity governance, from fine-grained authorization to federation, from industry standards to government regulations – and so on. Traditional security solutions work well when the application lives in its own silo. But once applications are integrated into an enterprise environment, these silos quickly break down resulting in integration nightmares for organizations.

To overcome these challenges, Oracle Identity Management delivers "Service-Oriented Security" architecture - a revolutionary approach that drastically simplifies application security by making identity functions available as discrete web services. This enables centralized security infrastructure to be woven into applications instead of being bolted on, resulting in faster development lifecycles, better IT agility and dramatically lower integration costs.

That's why Oracle recommends that Oracle Applications customers start leveraging Oracle Identity and Access Management, an integral part of the Oracle Fusion Middleware product family. Customers can start the process of externalizing and

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<sup>16</sup> Oracle Customer Spotlight, "GE Infrastructure Cuts Clone Cycle Time by 84% and IT Management Requirements by 75%," October 2009.  
Source: <http://www.oracle.com/customers/snapshots/general-electric-enterprise-manager-spotlight.pdf>  
[www.oracle.com](http://www.oracle.com)

centralizing their security today with Oracle Identity and Access Management, and be ready for Oracle Fusion Applications.

Oracle also provides a comprehensive portfolio of data privacy solutions through [Oracle Database 11g](#). Oracle database security protects your critical application data and enables compliance with Sarbanes-Oxley and similar global directives that require separation of duties and other preventive controls to ensure data integrity and data privacy.

With [Oracle Database Vault](#), organizations can pro-actively safeguard application data stored in the Oracle database from being accessed by privileged database users. Application data can be further protected using Oracle Database Vault's policies that control access based on built-in factors such as time of day, IP address, application name, and authentication method, preventing unauthorized ad-hoc access and application by-pass.

[Oracle Audit Vault](#) reduces the cost and complexity of compliance and the risk of insider threats by automating the collection and consolidation of audit data. It provides a secure and highly scalable audit warehouse, enabling simplified reporting, analysis, and threat detection on audit data. In addition, database audit settings are centrally managed and monitored, reducing IT security costs.

## **ORACLE'S APPLICATION FOUNDATION: THE FOUNDATION FOR NEXT-GENERATION APPLICATIONS**

According to *BusinessWeek*, the design team at BMW ORACLE Racing took advantage of a "wide open" set of design rules for the 2010 America's Cup to produce one of the most staggering and ambitious vessels ever seen on the water. The sailing technology breakthroughs incorporated in the *USA 17* trimaran promise to revolutionize sailing technology for years to come, bringing wings, ultra light hulls, and computers to the next generation of sailboats.<sup>17</sup>

The investments that Oracle is making in next-generation technologies that form the foundation of Oracle Fusion Applications will also shape the world of enterprise software for years to come. Oracle Fusion Applications go beyond combining the best-in-business functionality found in our existing applications portfolio. The true functional differentiation in Oracle Fusion Applications comes from the significant investments we've made in redesigning and improving almost all of the business processes you use to run your business. More than 75 percent of that investment was focused on redesigning the user experience components of our existing applications to make them easier to use, faster to deploy, and less expensive to maintain.

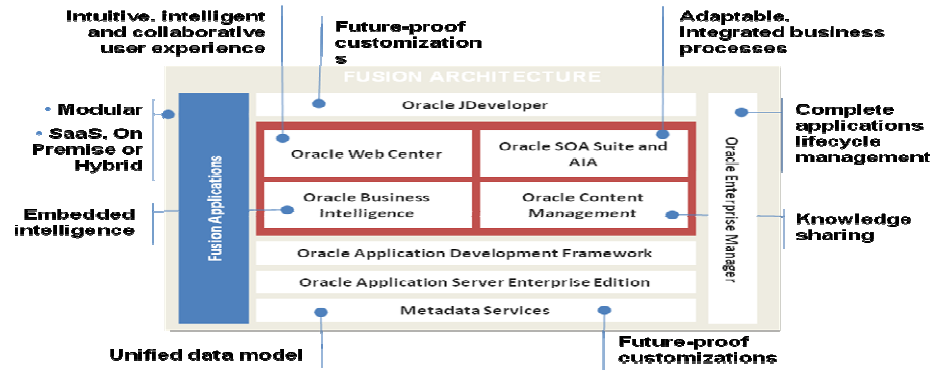
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<sup>17</sup> Blain, Loz, "BMW Oracle's Revolutionary America's Cup Yacht" *BusinessWeek*, January 10, 2010.

## FUSION APPLICATIONS DESIGN TENETS

- Complete automation of more business processes
- Rich packaged functionality and data model to unify isolated functional islands
- Applications designed to evolve with customer needs
- Applications can be customized while protecting ability to upgrade
- Business processes designed to respond to change
- Model driven business process platform with process integrity
- Effective management decision capabilities built-in
- Integrated, cross-organizational intelligence unified with EPM system
  - Intuitive user accessibility pervasive throughout applications
- Human interfaces designed for individual users and social computing
- Rapid ROI and low barriers to introduction
  - SaaS and on-premise deployments, modular deployment, self-service zero setup
- Business transformation through application use, while exploiting needs driven by globalization, BPO, regulatory compliance

Figure 4. Fusion Applications Design



Oracle Fusion Applications are functionally distinct because they incorporate the revolutionary advances in business process management, business intelligence, performance management, unstructured content management, identity management, and Enterprise 2.0 provided by Oracle Fusion Middleware. Oracle Fusion Applications are also designed to evolve with customer needs, protecting your ability to customize applications, and upgrade those customizations as needed.

When combined with functional advancements in enterprise structures and application extensibility, these innovations will not only help organizations lower software costs and increase business agility, but will truly revolutionize how workers use and benefit from enterprise software.

BMW ORACLE Racing took advantage of open design rules to not only build a boat designed for extreme performance, but one that will set the standard for racing technology for years to come. With the move toward open standards and new service-oriented technologies, customers can take advantage of this critical inflection point in the enterprise software industry to create a modern application foundation that can deliver competitive advantages today, and set the standard for extreme performance in your industry for years to come.



Oracle's Application Foundation: Your Path to Extreme Performance

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