Why Oracle Fusion Middleware is the best middleware for Siebel Applications

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EXECUTIVE OVERVIEW
The scope and depth of choice offered to Siebel customers has exploded with the introduction of Oracle Fusion Middleware 11g and it can be confusing to see the strategic direction and areas that can deliver most value for customer solutions due to the dizzying array of choice.

The paper aims to set the context of Siebel application within the Oracle Fusion Middleware landscape, show where and how Siebel interoperates with FMW components today and outline the strategic future direction.

INTRODUCTION
Traditionally, the Siebel application has remained steadfastly neutral with respect to other Enterprise product solutions.

Following the acquisition of Siebel systems by Oracle in March of 2006 this view has been modified a little. Siebel continues to support integration with the widest possible range of solution partners through a wide array of different means. However there are specific functional areas that have received the attention and focus of the Siebel Application team. The Siebel Application Suite has made significant strides towards leveraging the power of the Oracle family of solutions to provide customers with best-of-breed solutions that can address critical business need.

Central to this strategy is the option for customers to adopt Oracle Fusion Middleware 11g as the delivery platform for integration by uptaking the Siebel Fusion EAI product in any current Siebel product when it is released later this year. This solution allows customers to move the administration and development of integration solutions from the Siebel architecture into Fusion middleware 11g, giving access to the full range and power of Oracle SOA solutions.

Adopting the solution, helps customers ensure that their customer data is fully available at the heart of any SOA development and are well placed for any future strategic pathway involving Oracle Siebel CRM and Oracle Fusion applications.

A number of Siebel customers already use a significant number of Fusion Middleware components but do not identify them as such given that it was available under a variety of different banners. Oracle Business Intelligence Enterprise Edition (OBIEE), Oracle Business Information Publisher (BIP), Oracle Identity Management (IDM), Oracle SOA Suite, Oracle Business Process Management Suite, Oracle Application Development Framework (ADF), Oracle WebCenter and Oracle Enterprise Content Management (ECM) are all products that many Siebel customers are very familiar with, as part of the Fusion middleware family they provide key functional additions to the scope of a true enterprise
solution and help those customers who have adopted them the ability to drive significant returns from their investment.

The Siebel Product Development team works closely with the Fusion Middleware Product Development team in order to develop innovative business solutions that deliver real and measurable value for customers. This close partnership is evidenced by the rapid certification of Siebel with Fusion Middleware applications. In many cases the applications and middleware team work together to ensure the two products are certified “on launch”.

**ORACLE FUSION MIDDLEWARE**

Oracle Fusion Middleware is a comprehensive and cohesive application platform suite built with a pre-integrated portfolio of software spanning portals and process managers to application infrastructure, developer tools, and business intelligence. It includes industry-leading, open-standards middleware products such as a highly-scalable messaging and transaction processing platform, the leading application server, a comprehensive business process management suite, service-oriented architecture (SOA) infrastructure, and an Enterprise 2.0 user interaction environment. Oracle Fusion Middleware’s “hot-pluggable” capability lets customers “drop and deploy” products into their existing IT environments. Since its launch 10 years ago, Fusion Middleware has garnered over 90,000 customers.
INTEGRATING PROCESS AND DATA WITH SIEBEL

There are a number of mechanisms to integrate Siebel application modules with external applications. Siebel ships with a robust EAI capability that works in conjunction with Oracle SOA Suite through Web Services and JMS transports. Also the Oracle Adapter for Siebel provides access to Siebel at a Business Objects level using java APIs, and also to earlier versions of Siebel using COM APIs. And finally, coming this year is the new Siebel Fusion EAI component that makes huge strides in providing native Siebel web services on a java application server platform. Let us look at all three in detail.

Siebel Fusion EAI

The Siebel Fusion EAI solution includes new architecture for Siebel integration technology in order to drive functionality and performance through Oracle Fusion Middleware. It includes connection and session management solutions that are designed in order to complement the type of high volume, small message size integrations that customers considering enterprise composite application and RESTful services demands. Figure 1 shows the architecture of Siebel Fusion EAI.

Siebel Fusion EAI also addresses the business dilemma faced when developing Siebel SOA solutions; it moves all the moving parts of an implementation project out of the Siebel technology space and allows SOA developers to work exclusively in Oracle JDeveloper, deploying and making alterations completely independently of the Siebel development.
Oracle SOA suite

Oracle SOA Suite 11g is a complete, integrated, best of breed and hot-pluggable SOA platform, which has a comprehensive view on the entire software lifecycle process, providing everything needed from planning, to development, production and eventual requirement of all IT assets, whether they be applications, services or even hardware. SOA Suite 11g simplifies SOA development and management by implementing the following key standards, strategies, technologies and tools:

- Service Component Architecture
- Unified Design-time Environment
- Unified Runtime Environment
- Centralized Management and Monitoring

Integration with Oracle governance and service lifecycle management components gives one everything that is needed to be successful with a Service-Oriented Architecture. At the heart of the SOA Suite 11g philosophy is Service Component Architecture (SCA). SCA is a new standard that greatly reduces the complexity involved in integrating different systems by allowing the integrator to literally click and drag —wires between components to connect them. This in turn reduces integration time and contributes to the overall agility of any SOA.
Oracle SOA Suite includes a number of key components such as

- Oracle BPEL Process Manager (BPEL)
- Oracle Service Bus (OSB)
- Oracle Business Activity Monitoring (BAM)
- Oracle B2B (B2B)
- Oracle Adapter for Siebel

Let’s look into the benefits each of them provide to Siebel customers

**Oracle BPEL Orchestrates Human Workflow, Rules and Services**

Oracle Fusion Middleware’s Oracle BPEL Process Manager provides a comprehensive, standards-based, easy-to-use solution for creating, deploying, and managing cross-application business processes with both automated and human workflow steps—all in a service-oriented architecture. Oracle BPEL Process Manager consumes services from various applications and orchestrates them into a business process. This allows for the extending business processes that involve Siebel CRM across not only the entire organization but also across all of the business partners. Oracle Business Rules provides a high performance rule system that addresses the increased requirement for agility, business control and transparency and empowers business users to change their business policies and decisions more rapidly.

**OSB Integrates Siebel CRM Services with External Applications**

In an environment with lots of services and applications, including customer’s legacy applications needing to communicate with each other, integrating them in a point-to-point fashion quickly becomes unmanageable. Oracle Service Bus (OSB) makes this communication more efficient and more manageable. A Service Bus provides a messaging infrastructure which allows for communication in many different ways, synchronously (immediate response to a request) or asynchronously (maybe the reply to the request won’t come back for days or weeks), as well as
ensuring critical Quality of Service aspects such as a guaranteed delivery. OSB provides a common communications backbone.

**Oracle BAM Provides Real-time Insight into CRM Processes**

A component of Oracle Fusion Middleware, Oracle BAM enables the ability to define monitoring points to provide insight into business flows for reporting, analytic, and performance improvements. Oracle BAM offers a real-time dashboard that helps with the understanding of the complete business processes and key performance indicators. Business events underlie the use of Oracle BAM with Siebel CRM and other systems. When the notification about status changes is issued, it provides perfect monitoring points, already engineered within a business process. It can serve as the basis for metrics to examine and improve the company’s business processes by identifying when something of importance occurs. Events and transactions generated by Siebel CRM can be directly consumed by Oracle BAM to enable real-time visibility. Similarly, Oracle BPEL Process Manager provides information on running business processes and transaction status through BPEL Console. Using the capabilities of Oracle BAM and Oracle BPEL Process Manager, one can build operational dashboards.

**Oracle B2B Extends Siebel CRM to External Business Partners**

Oracle Fusion Middleware also provides facilities for Business-to-Business (Oracle Integration B2B) integration allowing organizations to automate communication and do business across all of the trading partners via a number of standard industry protocols. These B2B capabilities enable Oracle BPEL Process Manager to seamlessly extend processes beyond the walls of an organization, all in the same unified environment defining internal processes. These standard industry protocols are all supported within a common infrastructure allowing an organization to communicate with all their trading partners even if partners use different protocols for communication. This is quite common in most industries with small companies using basic file transfer, e-mail, and XML over HTTP methods for communication while large companies use EDI, RosettaNet or other more complex protocols for communication.

**Oracle Adapter for Siebel exposes Siebel EAI objects as SOA interfaces**

Oracle AS Adapter for Siebel provides bi-directional connectivity to Siebel EAI. It uses the Siebel COM and Java Data Bean API to synchronously invoke Siebel transactions - Siebel Business Objects and Business Services. It uses Siebel’s robust EAI framework to asynchronously receive events from Siebel in the form of Siebel Integration Objects. It supports more than one way of receiving events from the Siebel application namely Files, HTTP and MQSeries and ensures guaranteed delivery of Siebel events. It translates Siebel native data to standard XML format and back.
Why Oracle Fusion Middleware is the best middleware for Siebel Applications

The Adapter design-time tool enables dynamic browsing of the various Siebel Business Objects, Business Services and Integration Objects by interfacing with the Siebel Business Layer without any coding effort. The design-time tool exposes the Adapter Services as a JCA/Web Service in few simple clicks and enables rapid implementation. Since this introspection is dynamic, all custom written or extended Siebel interfaces and objects are available for use.

**Use Case: Oracle SOA Suite helps large jobsite scale globally**

One of the largest employment and jobs website in the world was looking to improve responsiveness to business changes, in light of growing customer needs, challenges of integration during M&A and ensuring efficient information flow between globally distributed ERP and CRM Systems.

Their aim was also to achieve the following technical goals of improved visibility, reusability, real-time processing (removing latency & batch), and a loosely-coupled integration architecture. Starting with a process of looking at opportunities for integration they identified business flows like Order to invoice, Global Integration Platform, real-time marketing, and multichannel as important areas to focus on using the best practices of Service Oriented Architecture (SOA). The key areas of investment and focus using Oracle SOA Suite technologies were –

- Creation of a Portfolio of Business and Utility Services
- Development of a canonical model
- Enterprise Service Bus as the layer for virtualization while providing reliable messaging, data transformations and routing capabilities
- Orchestration of the services using Business Process Execution Language (BPEL) flows
- Rich exception & fault handling throughout each integration layer
- Ensuring real-time visibility by providing actionable dashboards
- Providing secure, multichannel access to the business services
• Deployment on an architecture that allows scale on demand, high availability, and redundancy across layers to ensure business continuity

A key element in their day-to-day business processing is the Order to invoice process, which essentially integrates the Order processing business process between two different business applications such as Siebel CRM and Oracle E-Biz Suite. The deployment architecture includes SOA Suite components, for business orchestration, as illustrated below:

Immediate benefits seen were and not limited to the following

• Flexibility, Agility, Reliability....

• Faster time to market new services

• Multi channel support for existing services

• Higher customer satisfaction

• Real time visibility & reporting of Business Characteristics

**Building Mobile Apps using Oracle Mobile Platform**

Oracle Mobile Platform leverages Oracle Fusion Middleware infrastructure to expose enterprise applications and data as web services and restful API’s that allow easy integration between mobile apps and back-end systems. This means that the same platform that you use to develop and maintain your enterprise applications can now be extended to develop, integrate, secure, deploy, and manage your mobile applications.
This platform provides a robust, high performance and highly scalable architecture that can run both web and mobile apps, meeting the 24/7 requirements of mobile access with consistent management throughout the application lifecycle. Apps created with Oracle Mobile Platform integrate easily with each other as well as with third party applications based on Java and other industry-standard languages and protocols. This platform also protects API's to uphold corporate security and compliance policies, with comprehensive capabilities for mobile identity management and mobile application management.

Oracle Mobile Platform also supports a multi-channel, multi-device framework that allows you to build apps once and deploy them to iOS, Android and other platforms with web, native and hybrid delivery.

This whitepaper has additional details on how you can simplify enterprise mobility using the Oracle mobile platform.

**Oracle Business Process Management Suite**

Oracle Business Process Management Suite 11g simplifies process management by delivering both process modeling tools and a process execution platform, providing a complete solution to facilitate collaboration between business stakeholders and IT practitioners. By using a process-oriented approach to building applications, Oracle BPM 11g allows customers to craft solutions using visual business processes – processes which business users can understand and change themselves. Process management is simplified via a process engine and pre-integration of process subsystems. User-centric design facilitates process modeling and interaction. Social BPM interaction simplifies and extends collaboration by providing new ways to communicate and simplify work.

OracleAS Adapter for Siebel integrates seamlessly with Oracle BPM to facilitate Web service integration. Oracle BPM consumes adapter services exposed as Web
Service Definition Language (WSDL) documents, providing bi-directional connectivity to Siebel.

**ORACLE CONTENT MANAGEMENT FOR SIEBEL CRM**

In today's information-driven business environment, gaining competitive advantage starts with the ability to get the right information, to the right person, at the right time. Siebel CRM provides business users with a rich set of tools to access and share critical customer data in real-time, but the content that supports business operations — from sales proposals, to service contracts, to marketing briefs — can put business at risk if it's not accurate or up-to-date. Oracle Content Management offers an out-of-the-box integration with Siebel CRM to provide comprehensive management of Siebel business entity related content, reducing information silos and enabling quick web-based access and ease of distribution, so users have the right information to drive business— whenever, wherever they need it.

**The Business Value of Content Driven CRM**

“Unstructured” enterprise content such as Microsoft Office documents, PDFs and scanned documents, are integral to supporting the different stages of a sale. All too often, this content lags behind the rapid pace of daily operations and users are not sure that they are looking at the most recent version of a document, or if it was approved by the right person. Inefficient content management costs time and money, while business moves on — at times to the advantage of your competition, or to the dissatisfaction of a customer.

The Siebel Adapter for Oracle Enterprise Content Management offers a flexible, scalable and secure solution that allows users to access and contribute related content attached to Siebel business entities. The adapter integrates Oracle Enterprise Content Management (ECM) with Siebel CRM, to replace its native files store and provide an enterprise-class content management infrastructure for centralizing the management of all customer-related documents, and enabling the insertion of documents into workflows to drive process efficiency.

With a full array of content management functionality provided by Oracle Content Management products, including search, security, workflow, metadata, revision control, content conversion and document capture capabilities, organizations can effectively and efficiently upload, scan, share and distribute electronic and originally paper-based documents and reports via Siebel CRM, public websites, intranets or other applications.
Integrated Oracle Content Management and Siebel CRM

The Siebel Adapter for Oracle ECM provides direct access to content attached to Siebel entities as well as to associated content management services, through familiar Siebel screens. An item such as a sales contract or service request related document can be checked in to Oracle Content Management via Siebel CRM, at which time it is automatically converted to a web accessible format such as PDF/HTML for online viewing and printing without requiring the original application with which it was created. The document is also assigned a unique URL to make it easy to access and share via different application interfaces. For those organizations that wish to convert paper documents to digital format and expose them as Siebel attachments, the Siebel Adapter is integrated with Oracle Distributed Document Capture that can be leveraged by end users to scan and index paper documents from wherever the Siebel user is located, and have the content attached to the current Siebel record while being stored and managed in the central Oracle ECM repository.

Role-based permissions ensure that content can be viewed or modified only by the intended parties. Full revision tracking is available and provides access to all previous versions of content items. Advanced content searching functionality leverages both metadata and full text indexing to allow the retrieval of content stored in the repository, whether that is a sales contract, a service agreement, a product spec sheet, a case history document, or a high resolution image used for a marketing brochure.

Sensitive documents attached to Siebel entities can be automatically sealed to a specific security context based on document type or other metadata via Oracle's Information Rights Management (IRM) solution, ensuring the security of these documents even if the Siebel user downloads and distributes them via email or other means. Oracle Content Management integration with Oracle’s AutoVue Enterprise Visualization product further enables Siebel users to access, view and
annotate documents ranging from simple Office documents all the way through complex CAD drawings.

**Achieve High ROI Today — Meet Information Needs of Tomorrow**

The Siebel Adapter for Oracle ECM in conjunction with Oracle Content Management provides an enterprise-wide infrastructure that scales to meet the document management requirements of multiple departments, that is capable of storing millions of content items, and that forms part of an organization’s Oracle Fusion Middleware platform implementation strategy.

Oracle Content Management is the strategic platform for managing unstructured information in both Oracle Fusion Applications and Oracle Applications Unlimited. Leveraging this Oracle Fusion Middleware content management solution ensures the company’s infrastructure is synchronized with the future of Oracle Applications. Additionally, the broader Oracle technology stack offers the flexibility to further enhance the applications landscape, by utilizing Oracle Identity Management for consolidated user authentication and authorization roles across applications, or the Oracle Database Secure Files feature that provides automated de-duplication of content at the database level, allowing ability to achieve storage cost savings in an environment with explosive content growth.

The fusion of Oracle ECM and Siebel CRM is achieved through a modular architecture with a minimal footprint on the Siebel side, ensuring that ongoing maintenance and future system upgrades will not require high services costs, custom integration “updates”, or jeopardize the ability to upgrade one system without impacting the other. By delivering the integration as a productized and supported solution based on the Oracle Fusion Middleware platform, “one-off” or “band-aid” integrations are eliminated, thereby minimizing application maintenance and support costs.

**ORACLE BUSINESS INTELLIGENCE**

Enterprises depend on information to optimize performance. However, most organizations are hampered by information that is incomplete, out of date, or otherwise inadequate for answering critical business questions. Additionally, organizations often struggle to deliver the right information to the right person at the right time. Behind these challenges are some familiar issues: inconsistent, untimely metrics, silos of information, and the proliferation of disconnected spreadsheets.

Oracle Business Intelligence’s highly scalable BI Foundation is designed to address all these challenges. The open Oracle BI Foundation that is hot pluggable with the Fusion Middleware stack, is based on integrated, scalable, web services architecture. At the core of the solution is a Common Enterprise Information Model, which brings all of the data together in one place, and allows the ability to model once and deploy everywhere by virtue of its multi channel information delivery capability.
Users don’t have to worry about where the data is coming from and this model reduces the cost of deployment and management of a company’s analytic operations. Its technology supports a broad range of operational and financial performance management applications, BI applications, and predictive analytic applications. Oracle Business Intelligence foundation enables organizations to maximize the value of their existing IT investments and resources. It allows organizations to leverage the investment in Oracle’s Siebel, Oracle’s PeopleSoft, Oracle’s JD Edwards, SAP, and other transactional applications using certified adapters and extraction, transformation, and loading (ETL) mappings. Apart from the Oracle database, one can access data in any relational and multidimensional source, including IBM DB2, Teradata, Microsoft SQL Server, SAP BW, Oracle’s Hyperion applications, and others. Oracle BI Foundation reduces the cost of ownership and provides pervasive BI through efficient self-service access to diverse data sources.

![Common Enterprise Information Model](image)

**Figure 7 - Oracle Business Intelligence Foundation**

**Pre-Built Business Intelligence Applications**

Oracle’s pre-built analytical applications cover needs in the front office (CRM Analytics) in functions such as Sales, Marketing and Service and in the back office (ERP Analytics) in areas like Finance, Human Resources and Supply Chain; address Industry specific analytic needs in sectors such as Financial Services, Telco, Insurance, Public Sector and Healthcare, and also through purpose built applications for Performance Applications for processes such as the Financial Close, Planning and Budgeting, Strategic Planning and Profitability Management.

Oracle Business Intelligence Applications are complete, pre-built BI solutions that provide timely, fact-based insight into activities across the entire organization. They gather relevant data and aggregate it into the most appropriate metrics and formats for the business user. Data is pulled from multiple systems, eliminating siloed views, enabling cross-functional analysis. Everyone—from executives to front-line
employees—gets complete and in-context insight that is personalized, relevant, and actionable. Built on the open Oracle BI Foundation, Oracle Business Intelligence Applications enable flexibility, extensibility, and standardization, reducing risk and TCO. Oracle Business Intelligence Applications provide a wide array of adapters to Siebel CRM source systems for data extraction and loading into the pre-built Oracle Business Analytics Warehouse. Leveraging the industry leading Oracle Business Intelligence Enterprise Edition (OBIEE) technology platform, the Oracle Business Intelligence Applications for CRM have been industry leading customer analytics applications for a number of years.

Oracle BI Apps for CRM
Oracle Business Intelligence Applications provide the most integrated and up-to-date pre-built analytical solution for Siebel CRM. It is the business enabler that delivers the insight professionals need to drive customer success and maximize the overall value of the CRM solution. BI Apps for CRM allows organizations to better derive and communicate business insight by leveraging information coming from Siebel CRM together with information from other application sources for a comprehensive analytical view. The solution serves to improve visibility and insight into operational performance, processes, and customers. By delivering actionable intelligence that is relevant to each user, one can quickly identify and respond to problems and opportunities to drive revenue and profit growth with better targeting. Based on common view of information and consistent performance metrics organizations can develop better strategy and align tactics across functions. Pervasive BI ensures the ability to manage and execute at all levels. One can improve effectiveness in all the key CRM functions by leveraging the many modules that Oracle offers in this area – Sales Analytics, Service and Call Center
Analytics, Marketing Analytics, Loyalty Analytics and Price Analytics - to collectively drive profitability. Sales and service professionals across various organizations need not waste time gathering data to manage and report. Packaged Analytics mean accelerated time to value and lower TCO and risk.

Use Case: Oracle BI Applications at work

A leading discount brokerage firm implemented Oracle Sales Analytics to cover the analytical needs of a significant number of financial consultants.

Prior to implementation, the company had examined their analytic needs and found a number of business challenges:

- Missed revenue due to lack of actionable intelligence
- Too much time spent gathering and formatting sales data
- Poor visibility into integrated sales performance

The firm selected Oracle Sales Analytics to deliver better, insight driven client analysis to its sales organization. As an example of a rapid deployment, the solution was deployed to 200 users in 10 weeks. The solution has enabled 1,700+ financial consultants with a 360 degree view of their customer base. As result of this project, the firm has noted that 5 - 9% of sales alerts result in new business development opportunities. In addition, the company has saved over 2,400 hours of unproductive work per week.

ORACLE BI PUBLISHER

Oracle BI Publisher reporting solution is Oracle’s strategic enterprise reporting tool (used in E-Business Suite, PSFT, JDE, BI EE as well as Siebel). Customers in many industries face challenges when attempting to provide management or executive information on enterprise processes that may span multiple systems. One of the abilities within BI Publisher is to be able to create a report against multiple data sources and combine the data at a general summarized level for analysis.

Consider a business with multiple products and data contained not just in Siebel CRM application but also in an ERP system (EBS) or a Billing system (Portal). Analyzing the management information challenges in an enterprise similar to this indicates many issues:
- Complicated report development tool may require development involvement
- End users cannot create or tailor their own layouts based on the information that they need to do their role
- In many cases report administration is clumsy, and this increases with multiple systems
- Traditional product reporting features many only support limited output formats
- Scalability, performance and high availability of any MI system is a concern in any large enterprise
- Data from all these sources can be collated in a BI Publisher report.

Analyzing this customer’s situation, we can consider end-users raising Service Requests on billing issues or on back office orders within Siebel CRM for both Product A and Product B. Simple management information about the relative number of faults identified with each product combined with information from the satellite ERP and Billing systems will both help identify workload issues amongst employees and quickly highlight wider issues within the enterprise. If only one Technical Support Engineer is tasked to work on issues relating to Product A, and many more are working on Product B, then the BI Publisher reports executed could show a trend for both workload and throughput if there was a dip in production quality in Product A and allow the line managers to proactively move engineers from Product B to Product A in order to maintain customer satisfaction.
The reports generated in BI Publisher can have multiple output formats, can be scheduled to run at a particular time and can also be automatically sent via email to the relevant people offering the following benefits to businesses fully leveraging its power:

- Using common desktop tools to create report layouts improves productivity and reduces development costs
- End users can create their own layouts allowing specialist reports to offer specific, point, business solutions
- Easy report layout deployment and administration means that businesses can be more agile and respond to changing needs
- Allowing the end user to choose output format (PDF, RTF, Excel and HTML to name but a few) allows flexibility in delivery methods and facilitates the inclusion of report data in a wider range of business activities.

**ORACLE REAL TIME DECISIONS (RTD)**

The Oracle Real-Time Decisions (RTD) decision engine is a real-time recommendation engine that can be used to extend Oracle Siebel CRM with business intelligence process optimization. RTD is a general-purpose closed-loop decision engine enabling business users to combines both business rules and automated predictive modeling for CRM decision management optimization. This SOA based highly scalable J2EE transactional server delivers real-time recommendations as a Decision Service.

**Measurable Business Benefits of RTD**

By providing cross-channel closed-loop decision automation at the point of interaction, Oracle RTD enables users of Oracle’s Siebel CRM suite of applications
to benefit from its extraordinary returns on investments. With RTD, companies worldwide and across various industries have delivered the following returns.

Improvements in transaction volumes

- 100% increase in click and purchase rates for Ecommerce Self-Service Web Site
- 50% increase in click and purchases rates for Email Marketing acquisition
- 76% increase in close rate for inbound Contact Center service interactions

Improvements in transaction value

- 6% increase in average sales value for annual renewable contract worth hundreds of $

Improvements in retention rates

- 40% increase in retention rates for proactive churn management during inbound service interactions

Improvements in customer satisfaction

- Agent confidence that RTD improved their job increased from 25% to 85%
- Agent confidence that RTD recommendations are ‘very accurate’ of 66%

Driving Success by combining Siebel CRM and RTD

A large North American Financial Services institution used Oracle RTD in conjunction with Oracle Siebel CRM suite of applications to dramatically improve response rates. This specific use case focuses on the integration between Siebel Marketing module and Oracle WCM as part of an Ecommerce Personalization deployment. In this context RTD’s role is to determine in real-time which marketing message and which specific creative (whereas cross-selling or retention) should be presented to logged-in visitors to optimize the value of each interaction.

The list of candidate offers are defined by Marketing users using Siebel Campaign Management and RTD acts as a targeting and decision engine to determine which of those offers should be presented and which associated content should be used to optimize click and purchase rates. This determination is made using a combination of business rules and automated predictive models that leverage a wealth of customer information thus enabling to tailor customer interactions in response to recent and real-time events. To identify the best over messaging RTD automatically analyzes historical data stored as Siebel events, in a customer data-warehouse and in the real-time Web interaction data.

This imitative resulted in drastic improvements in response rates and generated new insights for Marketing as this company can now leverage any of 1,000 customer events occurring to any of their millions of customers as part of the decision logic. An analysis of online customer responses automatically identified a group of older
customers with an interest in a specific product but who did not typically complete their purchases. This insight led marketing to refine and clarify their messaging to this particular audience leading to improve success rates.

The following diagram illustrates the architecture and process flow of this RTD deployment

![Diagram](image)

**Figure 10 - Oracle RTD is pre-integrated with Siebel CRM modules**

Oracle RTD is also integrated with Oracle Siebel CRM Contact Center to ensure cross-channel decision management. In this case, agents using Siebel contact center can deliver the best message to their customers leveraging this same decision logic and taking advantage of shared learning and content. Oracle RTD can also be used for service interaction optimization by predicting interaction flow outcomes such as zero-out, call transfer and escalations.

**ORACLE WEBCENTER**

In today’s hyper-competitive global economy, the ability to be agile and responsive to change is more important than ever before. Information and the interactions around it have become the key assets of most enterprises, and making correct decisions in shrinking cycle times is the defining operating characteristic of winning companies. The market imperative to access the right information and people at the right time has led to an increased interest in building a next-generation enterprise workplace. Such a workplace leverages Web 2.0 technologies and usage patterns to transition the enterprise to an Internet-powered, user-focused, and community-centric social fabric that ties together people, ideas, content, processes, systems, and enterprise applications.

**Enterprise composite processes require UI evolution**

For instance take an example of a customer service representative (CSR) at a call center for a large retailer. When a customer calls the retailer to enquire for a status
for an order, the CSR has to log into several different applications to find all the information related to the customer’s query. The CSR first logs in a Siebel CRM system to pull in the customer information. To find more detailed information on whether the order has shipped or not, he many need to log into Oracle E-Business Suite to find if the order has actually shipped. This context switch also typically requires the CSR to cut and paste the order number from Siebel CRM UI to the E-Business Suite UI, leading to human errors and loss of context. All this leads to loss of time, reducing productivity of the CSR, increasing total cost of running the call center, and adversely impacting the quality of service delivered to the customers who have to wait on phone for longer periods of time.

Figure 11 - Oracle WebCenter provides Web 2.0 features to Siebel CRM

Oracle WebCenter Suite provides a platform for creating composite user-interaction models allowing this retailer to surface both Siebel and E-Business Suite applications on a single WebCenter based User-Interface, contextually linking all the different regions (or portlets) that are surfaced. This allows the CSR to access both the customer information as well as shipping information from the same dashboard. This dashboard can be further personalized and customized by the CRS, both depending on the type of customer or transactions that they deal with or their own personal preference of applications and other collaboration tools they prefer. The CSR can also access his Worklist, notifications and alerts from here, allowing the CSR to either initiate workflows or check the status of business processes that he is a part of. Integrated search, presence, and social collaboration tools like wikis, blogs, discussion forums further improve the total user experience by providing all the information that they might require related to the task at hand, right there on the same user interface.
Delivering value by delivering tools

Oracle WebCenter Suite provides an open, standards-based, and extensible framework that enables users to interact with Business Applications and services. Oracle WebCenter makes it easy for users to get the information they need and to work with others to make the necessary changes to business applications and processes. It supports in a single, modern framework the development of all styles of Web sites, Portals, and composite applications. Oracle WebCenter delivers Oracle Composer for users and site administrators to highly personalize the behavior, look, and feel of the Portal to meet user requirements while insulating them from future upgrades. Oracle WebCenter provides an adaptable service model that follows what SOA has done for Enterprise Applications by enabling delivery of reusable, customizable, and personalizable Social Computing Services. Because users want to interact through the Enterprise Portal with all the resources in the Enterprise, Oracle WebCenter provides direct integration with Oracle’s Enterprise Business Dictionary and provides prepackaged integration with Applications, Content and Rich Media, Business Processes, and Business Intelligence in a role-specific way to speed user awareness of these critical resources. Together, this integrated set of Oracle WebCenter tools and services empowers end users and IT to build and deploy next-generation collaborative applications and portals that take advantage of the creativity and intellect of every user to improve internal and external business processes and delivers this information to users pervasively.

USER INTERFACE DEVELOPMENT WITH SIEBEL

Siebel applications have a rich user interface that provides users with high productivity to complete tasks at hand. Often customers feel the need to incorporate Siebel UI components in an external UI or create a new UI that access Siebel Business functionality directly.

Application Development Framework (ADF)

Oracle ADF is a comprehensive, model-view-controller technology stack that is oriented towards general-purpose application development. The ADF stack allows users to select among several choices of UI and business services technologies. The ADF stack is primarily comprised of ADF Faces (which is based on industry standard JSF technology), ADFm (m for model - the data control layer that implements JSR-227) and ADFbc (bc for business components). ADF design time is also integrated with Oracle JDeveloper. Siebel CRM exposes a number of web services, and ADF can consume these web services using an ADF Web Service Data Control, and present data returned by the Siebel web services in any of its rich UI components.

In addition Oracle ADF Mobile enables the development of rich user interfaces that are accessible from a variety of mobile devices – expending the reach of your applications to new clients.
Use Case: ADF in action at Oracle Support

The Oracle Support organization switched their backend system to rely on Siebel CRM. However they needed to have a specially designed customer self service front end to replace the existing Metalink system that would integrate with the Siebel repository and database. Later they decided to add an internal facing support portal that was browser agnostic and allowed them to integrate existing Oracle support functionality and systems with the Siebel repository and functionality of managing customers into a single Web user interface with advanced functionality.

Oracle Support selected the Oracle ADF framework in order to speed up the development of their new Web based customer service management system – Project Orion.

The team relied on Oracle ADF Faces to provide the set of components for building the UI. Using ADF’s ability to declaratively bind to Web services through the ADF Web service data control, the team was able to easily bind the UI to the Siebel system through the Web services interface Siebel exposes.

The result is a system that serves thousands of Oracle employees and customers allowing them to track and resolve customer’s service requests.

ORACLE APPLICATION INTEGRATION ARCHITECTURE (AIA)

Oracle Application Integration Architecture is the most complete integration solution for orchestrating agile, user-centric business processes across the enterprise applications landscape. With Oracle Application Integration Architecture, organizations can:

- Gain business and IT efficiencies
- Increase Agility
- Lower Total Cost of Ownership

Oracle Application Integration Architecture (AIA) is built on Oracle Fusion Middleware's market leading SOA and BPM products. These products deliver a comprehensive SOA & BPM infrastructure for connecting heterogeneous applications and business partners, managing structured and unstructured business
processes and advanced management via a unified framework for governance and monitoring. Learn more about Oracle’s SOA and BPM Products.

With Oracle Application Integration Architecture and Oracle's SOA and BPM Products, organizations are able to leverage a complete set of tools, templates, content and methodologies to do more with their existing IT investments, provide business and IT agility, and lower the total cost of ownership.

**Use Case: AIA handles complex integrations at retail customer**

A large retail Customer analyzed their existing Siebel CRM implementation and discovered that a lack of connection between the CRM system and ERP system had led to levels of customer satisfaction that were below the target level. Careful examination of the reasons for this indicated that the overall system needed to provide access to real time stock levels in order to give inbound call center agents better and more timely information about the products being up-sold and cross-sold to callers.

The customer worked with a System Integrator (SI) in order to implement an Application Integration Architecture (AIA) Foundation Pack based solution that included an “Availability to Promise” or ATP process leveraging Fusion Middleware components including SOA Suite in order to retrieve stock level information from their ERP system.

By implementing this solution the customer eliminated scenarios where call centre agents sold callers products that were not available and showed a 30% increase in customer satisfaction with call center interactions 3 months after introduction. Additionally the improved information flowing between systems delivered both increased profit and efficiency for the business that was directly attributable to the improved conversion rate achieved by their inbound call center.

**ORACLE IDENTITY MANAGEMENT**

A service-oriented architecture enables heterogeneous systems or platforms to more easily communicate, increasing the importance of using an infrastructure that can accommodate this heterogeneity while ensuring security and simplifying the
management of identities (users, customers, suppliers, etc) across this distributed infrastructure. Oracle Fusion Middleware provides a number of capabilities to address this critical set of needs.

Oracle Identity Management Suite provides a comprehensive, common security and identity management infrastructure that ensures a robust, protected IT environment as well as simplifies both the user experience and IT operational requirements. Capabilities include:

- Providing a source of truth system for enterprise roles and user identities via Oracle’s LDAP Directory Service (Oracle Internet Directory) as well as LDAP Directory Integration and the Oracle Virtual Directory
- Provisioning user accounts and managing user entitlements across multiple enterprise systems and applications with the ability to delegate administration of privileges via the Oracle Identity Manager
- Enabling Web as well as desktop (for client server and legacy applications) Single Sign-On within the enterprise as well as federated across partner enterprises via Oracle Access Manager, Identity Federation and Enterprise Single-Sign-On
- Enforcing security policies across your SOA via Oracle Web Services Manager

Every application must deal with identities, and be secure. In a fragmented IT environment, this often leads to user frustration in having to remember many different passwords, or alternatively inadequate security, as users take shortcuts. Similarly, this type of environment often is very costly to manage, as well as making it difficult to both implement consistent policies, or to have audit trails, or prove compliance.
Directory Services for Enterprise Roles and User Identities

Directory services are central to an identity management strategy. Oracle Internet Directory is an LDAPv3 directory that leverages the scalability, high availability and security features of the Oracle Database. Oracle Internet Directory serves as the central user repository for Oracle Identity Management, simplifying user administration in the Oracle environment and providing a standards-based application directory for the heterogeneous enterprise. In addition, Oracle Directory Synchronization allows Oracle Identity Management to seamlessly integrate with other directories and enterprise user repositories, allowing users to leverage identity information wherever it resides. Alternatively, Oracle Virtual Directory can create the illusion of one enterprise-wide LDAP directory through a run-time LDAP proxy service front-ending multiple different LDAP directories as well as legacy directories. Therefore, Siebel CRM can either leverage Oracle Internet Directory as the underlying directory, or if using a different LDAP product, integrate that directory with other directories in the company.

Provisioning into Siebel CRM

Oracle Identity Manager, part of Oracle Identity Management Suite, automates the process of provisioning users with IT resources across heterogeneous business processes and managed platforms. It connects users to the resources they need to be productive (“user on-boarding”), and revokes unauthorized access (“user offboarding”) to protect proprietary information and enhance security. With Oracle Identity Manager, the administration of user entitlements can be effectively delegated. A wide range of adapters, including Siebel CRM, is available to enable provisioning across diverse IT environments.

Single Sign-On (SSO) across all Systems and Federation

Once provisioned, an employee can be enabled to access multiple applications – packaged, legacy, custom – with Single Sign-On via Oracle Access Manager. Oracle Enterprise Single-Sign-On extends Web SSO capabilities to include desktop SSO for client-server and legacy applications. As described earlier in the portal discussion, SSO unifies the user experience as they move between applications, and reduces the headaches in managing passwords both for the user, and for IT.

Enforcing consistent policies across all Siebel CRM Web Services

Security performs a vital service within SOA. Oracle delivers a unique capability to ensure that only authorized access to services is allowed. Oracle Web Services Manager defines and enforces operational policies that can be layered on top of services, regardless of how those services were built, or where they are located. This ensures that security policies can be consistently applied and guarantees the integrity of a service-oriented architecture, for example, ensuring that critical data, such as credit card numbers, are encrypted.

ORACLE ENTERPRISE MANAGER PACK FOR SIEBEL
The business-driven approach of managing applications starts with monitoring the business processes that Siebel supports before going deep down into the foundation components that the application is built on. To support this business-driven approach, Oracle Enterprise Manager provides an Application Management Pack for Siebel which manages Siebel through its native interfaces. These extensions enable the pack to provide a broad set of Siebel-specific capabilities that work out-of-the-box instead of requiring you to make heavy customizations that are costly to perform and maintain.

Using the pack and from a single integrated web browser-based console, you can proactively monitor the health of all your key business processes that the applications support, the Siebel-specific application components, and the infrastructure that they run on. If a potential problem is spotted, you may use the management pack’s diagnostic tools to drill down and identify potential root causes quickly so that you can address them proactively while minimizing disruptions and costs to the organization. In addition, the management pack helps you model your application service level objectives and visualize the impact of application performance and availability in the context of business requirements, so that you can manage your application according to your business priorities. Because the various capabilities of the packs are integrated into the same console, you can move amongst these tasks effortlessly. With Oracle Application Management Pack for Siebel, you get a broad set of integrated tools that help you achieve the required application performance and availability, improve your management productivity, better utilize your resources, and drive down costs.

CONCLUSION

Oracle recognizes that many customers seek to extend the value of the investment in Oracle Siebel CRM by creating customer and industry-specific solutions that go beyond the scope of solutions provided within the Siebel product itself. By introducing Oracle Fusion Middleware 11g components into their enterprise deployments, customers can create truly innovative solutions that allow the reach and profitability of these business systems to be truly realized. By making full use of
Oracle’s expertise and experience in these areas customers can deliver solutions faster and drive higher returns by minimizing costs and simplifying the management environment.
APPENDIX A: SIEBEL CERTIFICATION WITH FUSION MIDDLEWARE

<table>
<thead>
<tr>
<th>Key Technology</th>
<th>FMW version</th>
<th>Siebel version</th>
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Please check with Oracle for latest certifications, as they are updated regularly.