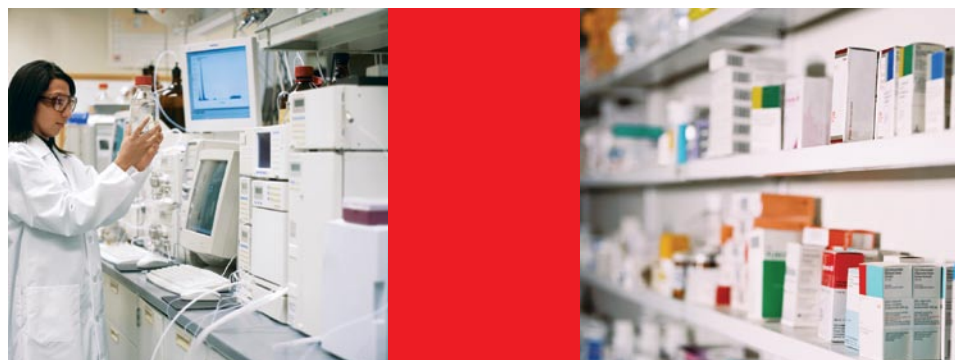


INFORMATION IMPROVES THE ODDS

Optimize Product Development—from Research to Patient

Oracle Solutions for the Life Sciences Industry





ORACLE IS THE INFORMATION COMPANY

Increase Product Development Success with Oracle Life Sciences Solutions

Oracle's uniquely integrated solutions are designed specifically for the challenges of the life sciences industry, to help you optimize your development pipeline so you can get to market faster—with better, safer products.

Out of all the drug candidates selected for development in the pharmaceutical and biotechnology industries, only a few make it to clinical trials. Fewer still go on to become successful, profitable products. Similar odds face the medical device industry, where product survival often depends on keeping prices competitive while containing design and manufacturing costs.

To shift the odds in your favor, you need an edge. Something that can help streamline your processes and give you real results right now. Oracle's life sciences solutions do that, and more.

Oracle is committed to the life sciences industry. We offer more than 30 industry-specific applications to address the needs of pharmaceutical, biotechnology, and medical device companies, and deliver the most integrated suite of applications for clinical research and development, manufacturing, supply chain management, and customer relationship management (CRM).

Only Oracle offers a unified data model that gathers and synchronizes real-time information across your organization. With up-to-date, consistent information, you can realize maximum efficiency in the product lifecycle. You can identify the most promising compounds and medical devices in the pipeline, keep your clinical trials on track, quickly aggregate clinical and operational data for analysis and reporting, manage production to ensure optimal conditions, and target the right customers with product messages that build brand loyalty.

Organizations spanning the life sciences industry are choosing applications, infrastructure software, and services that increase their probability of success. They're choosing Oracle.

Fact: 20 of the top 20 pharmaceutical companies run Oracle Applications and use Oracle technology.

“The goal of open access publishing is to make scientific research articles [rich in graphics, video content, and text] and data available on demand. Grid technology, like Oracle Database, will play a critical role in the future of science, giving scientists the tools they need to analyze and manipulate this information.”

Matthew Cockerill, PhD, Technical Director, BioMed Central Limited

Oracle Life Sciences Solutions Capabilities

- Accelerate and optimize the discovery pipeline
 - Advanced statistics and data mining
 - Secure collaboration
 - Heterogeneous data-type management
 - Grid computing technology
- Improve clinical trial management
 - CRM-enabled clinical trial management system
 - Electronic data capture
 - Clinical data integration, analysis, and reporting
 - Complaint reporting and adverse events reporting
- Reduce risk through process validation and regulatory compliance
 - Efficient manufacturing
 - Built-in regulatory compliance
 - Product quality and safety
- Increase sales, marketing, and service effectiveness
 - Dynamic sales support
 - Closed-loop marketing
 - Customer-centric service

Accelerate and Optimize the Discovery Pipeline

Companies in the life sciences industry face unprecedented pressure to accelerate development and testing. In recent years, significant scientific breakthroughs have generated huge amounts of data that—if harvested and analyzed effectively—could allow researchers to discover novel treatments for diseases. However, most of this data is in isolated silos on various computer systems, existing in many formats and analyzed by different applications.

Oracle provides information technology to help life sciences organizations access, integrate, manage, query, mine, and share the valuable information hidden in their genomic, proteomic, chemical, clinical trial, hospital, and other related data. Effective use of this information can help you accelerate your discovery pipeline and get the most promising compounds and medical devices headed toward clinical trials.

Oracle’s platform for life sciences consists of features in Oracle Database, Oracle Application Server, and Oracle Collaboration Suite that address key information technology issues in life sciences. These include accessing distributed data, integrating a variety of data types, managing vast quantities of data, collaborating securely, and finding patterns and insights in research data. Benefiting from a rich history of continuous database enhancements, Oracle has emerged as the leading platform in life sciences, with an estimated 75 to 80 percent market share, according to research firm IDC.

Access the Right Data at the Right Time

The traditional approach to drug discovery and development is for each application to have its own database. This separation of data can delay the detection of critical patterns that help you identify the safe, effective, and profitable drug candidates. Oracle Database is a unique enterprise solution for breaking down data silos, with its support for all leading data integration approaches, including relational, Extensible Markup Language (XML), and semantic Web.

Oracle Database lets you access and manage the multiple types of structured and unstructured data commonly found in the life sciences—such as text; images (JPEG, DICOM, and more); XML; and chemical structures. When you integrate all data and applications along the discovery and development cycle, you decrease your time to market by speeding up target selection and compound assessment and registration.

To help analyze your research data, Oracle offers powerful statistical capabilities and data-mining algorithms, including K-means clustering, Naïve Bayes, BLAST, and Support Vector Machines. With these algorithms, researchers can comb massive databases and quickly uncover relationships and patterns within the data—without having the performance overhead and security concerns of moving data to alternative processing platforms.

“Oracle is an excellent database. It’s been around for years, it’s been honed and developed, and it’s very good at handling large volumes of information—and that’s exactly what we need.”

Jennifer Allerton, Chief Information Officer, Roche Pharma Switzerland

Fact: Just one small clinical trial involving CT scans on a few dozen people can result in as much as 2 terabytes worth of data.

(Alan Louie, PhD, Research Director, Life Science Insights)

Manage Vast Quantities of Data

Exponential growth rates of data are an ongoing issue for the life sciences industry. Organizations often see their databases grow from a few gigabytes to terabytes in a single year, with some predicting 1,000 terabytes of data in the near future.

Oracle Database’s unique grid computing technologies let you efficiently and securely manage large amounts of data. For example, Oracle Real Application Clusters (Oracle RAC) reduces hardware costs by letting you build large systems out of small, low-cost servers and storage arrays and expand them as needed. Oracle Storage Management protects data and optimizes performance by automatically mirroring and balancing data across the available storage devices. And Oracle Data Guard coordinates the maintenance and synchronization of the database across local and remote servers for rapid recovery from disaster or site failure. These Oracle Database features protect your critical research data from all forms of unplanned failure, while reducing planned downtime and providing higher availability for your applications.

Increase Collaboration and Improve Project Management

To understand the implications of new research, collaboration within an organization and with outside partner organizations is often essential. But collaboration usually adds complexity, since many individuals worldwide are sharing information, and you must maintain the security of your intellectual property.

Oracle Collaboration Suite provides you with secure collaboration capabilities so you can better manage and deliver content and communications throughout your enterprise. It includes a complete internal communications package with unified e-mail and voice mail, group calendaring, and real-time collaboration capabilities such as instant messaging, voice chat, and Web conferencing. Communication is secure, and auditable records are maintained to help you meet corporate governance and regulation needs.

Oracle Applications not only help accelerate product discovery, but also improve the entire project management process. For example, Oracle Project Management lets you solve challenges such as outsourcing product design and manufacturing, and managing product design changes throughout a product’s lifecycle. And because Oracle Project Management consolidates project information into one repository and integrates with Oracle and third-party applications, you can readily track and analyze a project’s impact on your entire enterprise.

Fact: A one-day speed advantage typically saves US\$37,000 in drug development costs and nets an additional US\$1.1 million in daily prescription revenue for an average-performing drug.

(Tufts Center for the Study of Drug Development Impact Report, September/October 2006)

“Our ability to implement Oracle Clinical ‘out of the box’ without customization was an important consideration in our vendor selection process. In the past, we outsourced management of all trials. While we still rely heavily on CROs, Oracle Clinical enables us to manage a select number of trials in house.”

Beth Atkinson, Senior Director, Clinical Data Management, Sepracor Inc.

Boehringer Ingelheim Gains More-Reliable Clinical Trials

Boehringer Ingelheim of Germany includes 143 subsidiaries in 60 countries. To meet the challenges of worldwide clinical trials, Boehringer wanted a solution that could quickly adapt to future needs. It chose Oracle Clinical and Oracle Thesaurus Management System and obtained these results:

- Reduced the lead time between product discovery and market launch by several months
- Improved productivity by speeding data input and review
- Ensured common terminology for higher trial accuracy
- Optimized traceability of data modifications (audit trail)
- Gained the ability to expand access to contract research organizations via the Web

Keep Your Clinical Trials on Track

Once candidate compounds are identified or medical devices are developed, they must go through the rigorous clinical trial process. Clinical trials management is complex and often requires you to integrate information from across your enterprise and from outside partners. Without clinical trial data that’s well organized, easily accessible, and thoroughly documented, the value of a drug or device may not be fully realized.

Oracle is the leading software vendor for the clinical trial management industry. Oracle’s clinical applications support you in all aspects of clinical drug and device testing. Oracle’s combination of broad coverage and deep functionality offers unmatched benefits in clinical data management.

Gain Cost Savings Through Better Decision-Making

Clinical trials are increasingly global in nature, and companies may need to manage hundreds of trials simultaneously. With Oracle’s Siebel Clinical Trial Management System, you can take advantage of the world’s leading CRM application to help you efficiently manage your clinical trials—a centralized trial management database provides users around the world with the most relevant and appropriate information, based on their specific roles and responsibilities. Armed with this data, users can identify problems earlier and take corrective action sooner, thus reducing overall trial costs. In addition, CRM technology allows the sharing of clinical trials information with sales and marketing personnel—so your entire organization can benefit from the relationships developed with principal investigators through the clinical trial process.

As it becomes more difficult to identify, enroll, and retain clinical trial subjects, competition for top investigators increases. Siebel Clinical Trial Management System lets you collect, track, and analyze information about principal investigators—to identify those with the greatest chance of running your clinical trial successfully. In addition, during the clinical trial, the application provides real-time study milestones and subject enrollment tracking to help you identify enrollment bottlenecks and address them promptly.

“We deployed Oracle Clinical and Oracle Clinical Remote Data Capture to 33 countries and more than 1,000 users worldwide. Much of the success can be attributed to the integrated approach of Oracle products.”

Nicolas Schaltenbrand, Global Data Services Director, Quintiles France

Fact: Amgen saves US\$500,000 annually in investigator payment processing with Siebel Clinical Trial Management System.

Siebel Clinical Trial Management System also provides many automated tools to help clinical research associates and project managers keep trials on track. They can manage all study and regulatory documents, closely monitor site performance to minimize costly protocol violations, actively maintain contacts with their sites, schedule site visits, create and submit visit reports, and ensure that timely and accurate site payments are made. Siebel Clinical Trial Management System lets you improve your relationships with principal investigators; enhance employee productivity and effectiveness; and achieve faster patient enrollment, better trial quality, and lower trial costs.

Improve Data Accuracy, Visibility, and Integrity

Data is central to the clinical trial process. It serves as the basis for product submission, approval, labeling, and marketing. However, clinical trial data can come from a variety of sources and multiple systems. Generally, these systems will not be integrated unless a company invests significant resources in building interfaces.

Oracle has developed the first fully integrated suite of applications specifically for managing the data obtained in clinical trials. The world's largest pharmaceutical companies are currently using Oracle's clinical applications to improve operational efficiencies. The applications let you standardize and control data definitions and data usage across global operations, expedite multinational regulatory approval processes, and reduce cycle times in clinical trial processes.

Manage Data with a Fully Integrated Solution

Oracle Clinical is the core application in the integrated suite. It lets you model any kind of clinical study and store the study components for reuse in a flexible, global library. It also provides powerful study layout and design capabilities, comprehensive edit-check facilities, sophisticated tracking, and full analysis and reporting options. The integrated nature of Oracle Clinical lets you manage all of your clinical trial data in a single system, improving accuracy, visibility, and data integrity.

GlaxoSmithKline Improves Employee Productivity

GlaxoSmithKline is the world's second-largest pharmaceutical company, with 2005 annual revenue of GBPE21.66 billion. GlaxoSmithKline deployed Siebel Clinical Trial Management System to more than 2,500 users in more than 30 countries and achieved the following benefits:

- Easy access to trial information in real time
- Quicker, more-informed decisions
- Increased employee productivity
- Decreased trial costs, leading to lower R&D costs
- More employee job satisfaction

Fact: PPD, Inc. harnessed the flexibility of Oracle Remote Data Capture to support a full array of electronic data capture, as well as hybrid (paper and electronic) studies.

“Oracle Clinical is the gold standard for clinical management systems. It allows us to manage multiple global trials simultaneously, while offering exceptional data quality and value for the money to customers. Oracle Clinical helped us achieve a repeat business rate of more than 90 percent over the past three years.”

Tom O’Leary, Vice President, Data Management EU and RoW, ICON

LEO Pharma Reduces Time to Market

Denmark’s LEO Pharma is a leader in the field of topical dermatology and parenteral treatment of thromboembolic disorders, with 2005 revenue approaching US\$900 million. The company implemented a solution using Oracle Clinical Remote Data Capture and Oracle Clinical and achieved these benefits:

- Collected and evaluated clinical trial data in real time
- Decreased data discrepancy errors and cleaned data faster
- Locked clinical database in 1 to 2 weeks versus 6 to 12 weeks
- Eliminated expenses for in-house data entry and printing, distributing, and filing case report forms (CRFs)
- Decreased monitoring frequency and costs; gained more-productive site visits

Oracle Clinical is the only clinical data management application that is fully integrated with front-end electronic data capture (EDC), using Oracle Clinical Remote Data Capture. Because the two applications share a data model, you design, build, and validate your study only once, and both applications can share data entry screens and edit checks. Clinical trial site personnel use Oracle Clinical Remote Data Capture to enter data as they collect it; errors are flagged so they can be corrected at the source immediately. Because data entry is done in real time (or near real time), you can use Oracle Clinical Remote Data Capture to monitor trial progress and track source-document verification. These capabilities speed data collection and data cleaning processes, reducing the time and money you spend on clinical trials.

Oracle Thesaurus Management System can readily manage more than 100 dictionaries, and is designed to handle the complexities of the Medical Dictionary for Regulatory Activities (MedDRA), including the multi-axial hierarchy of a dictionary. Upon installation, Oracle Thesaurus Management System is fully integrated with Oracle Clinical and Oracle Adverse Events Reporting System. This ensures that the coding used to categorize and describe adverse event and medication data is done in a standard, consistent manner. And because all your clinical data is coded against the same dictionaries, any code changes, updates, and other coding decisions are applied across all your systems and databases simultaneously.

Oracle Adverse Event Reporting System pulls adverse event information from the Oracle Clinical database, so it prevents duplicate effort and reduces database discrepancies. Only Oracle gives you this direct integration. Powerful automation features include automatic narrative generation, active notification of important cases, and a submission wizard that recommends the international reports to file based on the license status of the product and attributes of the case. These automated processes save you time and money by letting you lock your clinical trial databases sooner, proceeding to data analysis and product approval request submission at a much faster pace.

Access Data from Multiple Systems

To obtain the data needed to develop a complete regulatory filing, you must often combine and analyze data from many trials in different parts of the world. This can be difficult, since the complex array of systems used to support clinical trials typically create isolated silos of information. You can speed the development process by integrating information from multiple systems using Oracle Life Sciences Data Hub.

“As an experienced user of Oracle Advanced Supply Chain Planning, we’re excited about Oracle’s integrated offering of a truly best-in-class manufacturing planning, scheduling, and execution solution, to drive our company to an even higher level of performance that will benefit our customers in terms of on-time delivery.”

Peter Billiaert, Vice President, BPI, Teva Pharmaceuticals

Fact: 10 of the top 10 medical device companies use Oracle technology and run Oracle Applications.

Oracle Life Sciences Data Hub takes data from all applications used in the clinical trials process and consolidates it for reporting and analysis—providing you with a single view of all clinical and nonclinical data. It supports any data structure and is adaptable to changing industry requirements. You can access data by any hierarchy, such as study, project, compound, therapeutic area, or company. You can also define the time frame for the import of data from other systems: from real time to static data from legacy systems. Advanced algorithms ensure that data remains blinded as appropriate. And to ensure data security and regulatory compliance, Oracle Life Sciences Data Hub allows every interaction with the data—from acquisition to submission—to be traced.

Reduce Risk Through Process Validation and Regulatory Compliance

Even when a product receives FDA approval and is successfully introduced into the market, risk factors remain. The types of risk vary, from lawsuits and recalls to manufacturing problems. Risks can result from issues such as nonintegrated processes, the inability to view data globally, and failure to comply with regulations, so you must continuously monitor the safety of your products at all stages of manufacturing, distribution, and product use.

Manage and Validate Manufacturing Processes

Medical device and drug manufacturers need to implement cost-effective manufacturing processes that ensure quality and safety and minimize compliance risks. Oracle manufacturing applications let you optimize production capacity from raw materials through final product—regardless of manufacturing methodology.

Oracle Discrete Manufacturing supports mixed-mode manufacturing methods used to produce medical devices, allowing you to readily automate and validate every stage of the product lifecycle—from design concept to quality release. The application also provides manufacturing execution system (MES) capabilities through its embedded quality management system functionality. Because Oracle Discrete Manufacturing supports efficient mass customization, build to order, and project manufacturing methodologies, medical device manufacturers can quickly and cost-effectively meet demand.

The Market Leader: Oracle Clinical

Oracle Clinical has been used to conduct more than 10,000 clinical trials, making it the market-leading clinical research solution. With Oracle Clinical, you can

- Design protocols and amendments and specify data tracking methods
- Store data in a universal format for study setup that does not require specialist database design skills
- Define a study once and conduct it at several locations concurrently
- Reduce time spent identifying data problems with a reusable library of procedures and edit checks
- Improve randomization using the built-in functionality of the Oracle Database
- Create submission-ready annotations with an intuitive method of annotating CRFs
- Ensure industry compliance with extensive built-in audit trail features

Fact: Only 3 out of 10 marketed medicines produce revenues that match or exceed average research and development (R&D) costs.

(Pharmaceutical and Research Manufacturers of America (PhRMA))

“Oracle has made a significant effort in its process manufacturing module to recognize validation and regulatory requirements—including 21 CFR Part 11.”

Perry Cozzone, Chief Information Officer, Colorcon

Polpharma Tightens Control of Manufacturing

Polpharma is Poland’s top manufacturer of generic drugs, manufacturing 6 billion units annually. Polpharma has implemented several Oracle E-Business Suite applications (enterprise resource planning (ERP) and supply chain solutions and manufacturing and production planning systems), with the following results:

- Realized 23 percent net ROI over five years
- Improved materials usage by 7 percent
- Expanded manufacturing capacity by 5 percent
- Reduced maintenance costs by consolidating 13 databases into 1 database

Oracle Process Manufacturing automates the entire product lifecycle for recipe-based manufacturing, from new product development, recipe management, and production to cost, quality, and regulatory management. It lets drug and biologics manufacturers formulate products to individual customer specifications, manage stability studies, account for ingredient potency variations, trace batches according to lot number, optimize capacity, and drive continuous process improvement. Because it’s built to suit manufacturing requirements through a Lean data model, Oracle Process Manufacturing helps manufacturers reduce waste and redundancy. Lean manufacturing techniques also improve the synchronization of production with customer demand and supplier capacity.

Oracle E-Business Suite provides the deepest pharmaceutical and biotechnology manufacturing and quality management capabilities of any Tier 1 ERP solution. In addition to the standard capabilities of Oracle Process Manufacturing, Oracle MES for Process Manufacturing adds significant capabilities such as dispensing management, comprehensive electronic batch records, nonconformance management, integrated operator processing instructions, standard operating procedures, and more.

Oracle Discrete Manufacturing and Oracle Process Manufacturing applications are part of Oracle Supply Chain Management. These applications integrate and automate all key supply chain activities, so you can enforce Lean principles across increasingly complex global supply chains. In addition, Oracle Advanced Supply Chain Planning applications—such as Oracle Strategic Network Optimization, Oracle’s Demantra Demand Management, and Demantra Real-Time Sales and Operations Planning—provide you with the information and analysis tools you can use to optimize your supply chain in response to changing demand and other market conditions.

Track Electronic Records and Signatures

Federal regulations require companies to maintain a secure audit trail of information about every phase of a medical product’s development, manufacturing, and even distribution. If a product comes into question, manufacturers must make detailed information, often including electronic signatures, readily available to auditors. Companies risk substantial fines and lost opportunities if they fail to meet these regulatory requirements.

Oracle offers a simple and comprehensive method to comply with FDA electronic records regulations (21 CFR Part 11). Oracle E-Records, part of the Oracle E-Business Suite, is a framework for securely capturing, storing, inquiring, and printing electronic records and

“We like to use the term ‘best practice’ rather than ‘compliance,’ because the gist of compliance involves proving you are doing things correctly and consistently... As a direct result of using Oracle technology, we received a good audit review from the MHRA [Medicines and Healthcare Products Regulatory Agency].”

Chris Jones, Business Systems Manager, Napp Pharmaceutical Group

electronic signatures (ERES). Oracle E-Records is the only application that allows you to determine when and where you will collect electronic signatures, simply by selecting from operational system checks prebuilt into approximately 100 GMP- and business-critical workflows. It also provides you with a complete set of tools for managing electronic records—including strong security, audit trails, and archiving.

Maintain Drug Pedigrees

To ensure public safety and eliminate losses due to drug counterfeiting, regulatory agencies—with industry cooperation—are taking steps to ensure that prescription drugs have a known origin. This is often referred to as requiring a “pedigree.” Companies must be able to “track, trace, and authenticate” a product’s journey through the supply chain—from manufacturer, through various phases of distribution, to the retailer, and, in some cases, the patient.

Oracle Supply Chain Management addresses requirements across the business process touchpoints critical to pedigree management: procurement, order management, manufacturing, product lifecycle management, logistics, and supply chain planning and execution. Oracle is the only company with the breadth of applications, technology, and industry experience to provide an end-to-end safe and secure supply chain solution that implements track, trace, and authentication capabilities.

Monitor Product Complaints and Report Adverse Reactions

Manufacturers of medical products such as drugs, vaccines, biologics, and medical devices are required by law to report all adverse reactions in a timely fashion to all countries where their products are marketed or studied. In addition to responding to adverse events as they arise, manufacturers are increasingly focused on proactive identification of safety issues.

Oracle Adverse Events Reporting System supplies product safety surveillance and signal detection that protects your product pipeline. It allows you to design flexible, global workflows without compromising your adherence to regulations. The application also addresses important elements of the Corrective and Preventive Action (CAPA) quality measures required by 21 CFR Parts 210, 211, and 820. Comprehensive capabilities for product-safety monitoring and compliance help you manage product complaints and adverse events reporting. In addition, Oracle Adverse Event Reporting System lets you monitor trends and gain valuable insight into differentiators that can help you plan, manufacture, and sell your next-generation products.

Fact: Colorcon improved inventory accuracy to more than 99 percent with Oracle E-Business Suite.

Improve Your Supply Chain

Oracle Advanced Supply Chain Planning applications let you transform business processes:

- Demand-driven adaptive planning
 - Sense demand with advanced analytics and forecasting, plus real-time demand visibility
 - Shape demand with real-time sales and operations planning, promotions planning, and optimization planning
 - Respond to demand with supply planning, enterprisewide collaboration, and demand-driven vendor managed inventory
- Global supply chain design and risk management
 - Manage supply chain risk via dynamic supply network design
 - Enable agile supply networks that align with your strategies
- Real-time operational control
 - Improve demand fulfillment through real-time, distributed, global order promising
 - Increase shop floor efficiency with real-time scheduling
 - Drive continuous improvement with embedded analytics

Fact: With Siebel Pharma Sales, the sales force at Novartis increased its satisfaction with the sales force automation system from 18 percent to 90 percent.

"[Oracle's] Siebel CRM system has supported the implementation of new business strategies and improved sales efficiency. We have increased the number of sales calls by 30 percent while cutting reporting time by 50 percent. The solution will certainly help us increase revenues and profits."

Cao Guangzheng, Senior IT Manager, Novo Nordisk Pharmaceutical Co., Ltd

Oracle Advanced Supply Chain Planning Applications: Benefits

- Oracle Strategic Network Optimization:
 - Balance conflicting objectives and limitations of supply, production, and distribution
 - Use what-if scenarios to plan for changes in supply, demand, and capacity while managing new product introductions
 - Improve decision support by rapidly creating revised plans
- Demantra Demand Management:
 - Analyze demand to identify changes in prescribing and dispensing
 - Create forecasts based on drug approvals and patent regulations
- Demantra Real Time Sales and Operations Planning:
 - Align collaborative planning process with corporate strategies
 - Start with a more-accurate prediction of demand
 - Shape demand for profitability
 - Balance demand and budgets
 - Track performance continuously

Transform Customer Information into Profit

Once a product is ready to sell, time is of the essence. To create and maintain demand for your product, you must analyze and assess the impact of every marketing and sales action in real time. You must also accurately forecast production capacity so manufacturing can meet shifting demands without interruption. And you must ensure that your cross-functional teams share the information they need to make good decisions. Falter in any of these areas and you risk losing market share.

Siebel Pharma applications from Oracle—Siebel Pharma Sales, Siebel Pharma Marketing, Siebel Pharma Service, and their customized solutions—are CRM solutions that let you integrate your marketing, sales, and service processes. (Siebel Medical Sales, Siebel Medical Marketing, and Siebel Medical Service are similar products developed for the medical device industry.)

Siebel Pharma is the only software suite specifically designed to meet the customer-centric business process requirements of the pharmaceutical industry. It lets you capture information about every customer interaction across multiple channels, including call centers, marketing and field sales departments, and the Web. With this information, you can create a comprehensive view of your customers, thereby eliminating conflicting sales calls and improving your ability to coordinate marketing and sales efforts. Siebel Pharma ensures that your organization is prepared to maximize customer value, while delivering superior service.

Respond Quickly to Changing Market Conditions

Only Siebel Pharma Dynamic Sales lets you respond quickly to changing market conditions by providing analytics that are built into the sales force automation and marketing applications, to better target physicians and maximize sales impact. You can use the applications to realign your sales force quickly, validate an alignment before deploying it in production, and model several alignment strategies concurrently. In addition, you can maintain historical views of alignments and territories to comply with federal regulations.

To help unify your sales efforts, the application supports cross-functional processes such as customer targeting, samples and formulary management, and territory and objectives management. Through its support of physician- and account-centric sales models, Siebel Pharma Dynamic Sales provides your sales force with a robust set of tools to manage the business. Because the application can be used both online and offline, sales representatives can remain highly productive no matter where they are. They can easily create target lists to plan routes and calls, add appointments to their calendars, invite medical education event attendees, and more, thus improving their overall sales effectiveness.

“By knowing more about the needs of our physician, veterinary, and hospital professional customers and targeting them with the right products, at the right time, Boehringer Ingelheim has recorded an increase in revenues in the past 12 months. An enhanced, coordinated service capability has also led to an increase in customer satisfaction and a corresponding increase in customer retention.”

Arnoud Kromhout van der Meer, Director, ICT Boehringer Ingelheim Holland

Fact: Abbott Diagnostics reduced service inventory carrying costs by 30 percent and improved service response time using Siebel Medical Service and Siebel Field Service.

Focus on Strategies with the Greatest Impact

Siebel Pharma Closed Loop Marketing lets you use a world-class CRM application—including industry-specific functionality—to significantly improve marketing effectiveness. The solution provides a central repository for brand planning, giving your brand team members a collaborative, operational tool to create, modify, and update brand plans, budgets, and forecasts. They can also use this solution to leverage built-in analytic capabilities to create complex sales-target groupings, analyze campaign and marketing ROI, and create and execute the tactical components (such as programs and campaign events) associated with a brand plan.

Siebel Pharma Closed Loop Marketing lets you create segment-specific drug detailing aids, and deliver custom detailing to physicians through the field sales channel. You can collect responses to product messages at the point of customer interaction and use this information to further refine marketing strategies. This closed loop process lets you identify and focus on the best product messages to build loyalty and strengthen your brand.

Improve the Quality and Speed of Medical Communication

Siebel Pharma Service lets pharmaceutical companies integrate service business processes with sales to provide richer customer information. It also streamlines business processes across medical information, product quality complaints, and adverse events reporting management.

Only Oracle offers the world's best-selling industry solution for customer response and medical information call centers: Siebel Pharma Call Center. Physician and consumer requests for information are automatically referred to appropriate parties so they can receive timely information about specific products, services, and corporate events. Information regarding each call is captured in your central repository and can be used to supply a 360-degree view of all promotional activity related to each physician, or other customers such as pharmacists, formulary managers, or retail consumers. When representatives are armed with the latest information on all customer interactions, they can maintain a continuous, consistent dialogue, which increases their effectiveness and improves customer satisfaction.

By implementing Siebel Pharma, life sciences companies can use their customer information to drive sales, marketing, and service activities. This leads to improved revenues, market share, and net margins.

Wyeth Streamlines Customer Relations and Sales Execution

Wyeth is one of the world's largest pharmaceutical companies, with 2005 revenue of US\$19 billion. Wyeth's investment in Siebel CRM applications quickly paid off for the company with these benefits:

- Reduced operational spend by 20 percent in the first year
- Decreased average call-answer time by 40 percent
- Increased the number of issues resolved during the first call from 39 percent to 93 percent
- Reduced problem escalation resolution time by 1,500 percent
- Provided sales representatives with timely, integrated sales data
- Supplied complete view of promotional activity for each physician

Fact: All 12 of the pharmaceutical companies in *Fortune* magazine's 2005 Global Top 500 run Oracle Applications.

"We recognized the need to automate to meet our expanding business and regulatory requirements. Oracle understands the intricacies of the biotech industry—making it the clear choice over other vendors. With Oracle, we can support our clinical processes and prepare for future anticipated needs, providing us with the ability to reliably introduce our innovative products."

Linda Staley, Vice President of Information Technology, Dendreon Corporation

The Oracle Life Sciences Advantage

The ultimate goal in life sciences is to bring new products to market more profitably. But to do this, you must have efficient processes in place throughout your organization. Oracle life sciences solutions can help you implement best practices to meet your goals. You can effectively manage discovery data and streamline clinical trial management processes—improving the quality and quantity of drug products in your pipeline and shortening time to market. You can meet regulatory compliance demands to improve product safety and quality. And you can increase the efficiency of your sales, marketing, and service organizations—to provide greater value to customers and maximize revenue growth.

Oracle life sciences applications are seamlessly integrated, allowing you to manage resources and costs across discovery, development, manufacturing, and marketing teams. Oracle's ability to bring together information from all your systems—Oracle and non-Oracle—provides you with a critical element that no other vendor can offer: analysis built on a single, shared definition of customers, suppliers, partners, products, services, and employees.

Oracle is the No. 1 enterprise software vendor in the world and offers top-to-bottom support for the life sciences industry. We can provide you with the most scalable, reliable, and secure infrastructure, with built-in capabilities for life sciences. Only Oracle offers complete clinical data management, electronic data capture, clinical trial management, and adverse event reporting solutions. Our market-leading CRM technology lets you plan more-personalized, effective interactions with your customers. And our Good Manufacturing Practice (GMP) business events reduce risk and provide rapid "out-of-the-box" process validation and compliance.

We have the industry's largest sales and marketing user community—with proven success from more than 150,000 life sciences users. In addition, we provide the world's largest software support team to assist you, with more than 3,000 support engineers located in 145 countries. Join the more than 2,000 life sciences companies that rely on Oracle Applications and Oracle Database technology.

CONTACT US

For more information on how your organization can leverage the power of Oracle life sciences solutions, please visit oracle.com/industries/life_sciences or call +1.800.ORACLE1 to speak to an Oracle representative.



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