



ORACLE UTILITIES ANALYTICS

TRANSFORMING COMPLEX
DATA INTO BUSINESS VALUE

UTILITIES FOCUS ON ANALYTICS

Aging infrastructure. Escalating customer expectations. Demand growth. The challenges are many. And increasingly, utilities are finding that the best way to meet them is to increase the use of data analysis as a base for planning, process administration and strategic decision-making.

Few utilities today can thoroughly analyze their data without new tools and techniques to extract full value from existing and new data streams. To help, software and services vendors are stepping forward with new products and innovative analytic approaches. Some build add-ons to existing applications. Some offer a new technology or a new service. Others adapt tools that have been successful in industries like finance and telecommunications.



Evaluated individually, each of those analytic approaches has merit. But offered individually—as most are—they often twist your problems into forms they can process. The results? Distorted analysis. Partial answers. Lost revenue.

THE ORACLE DIFFERENCE

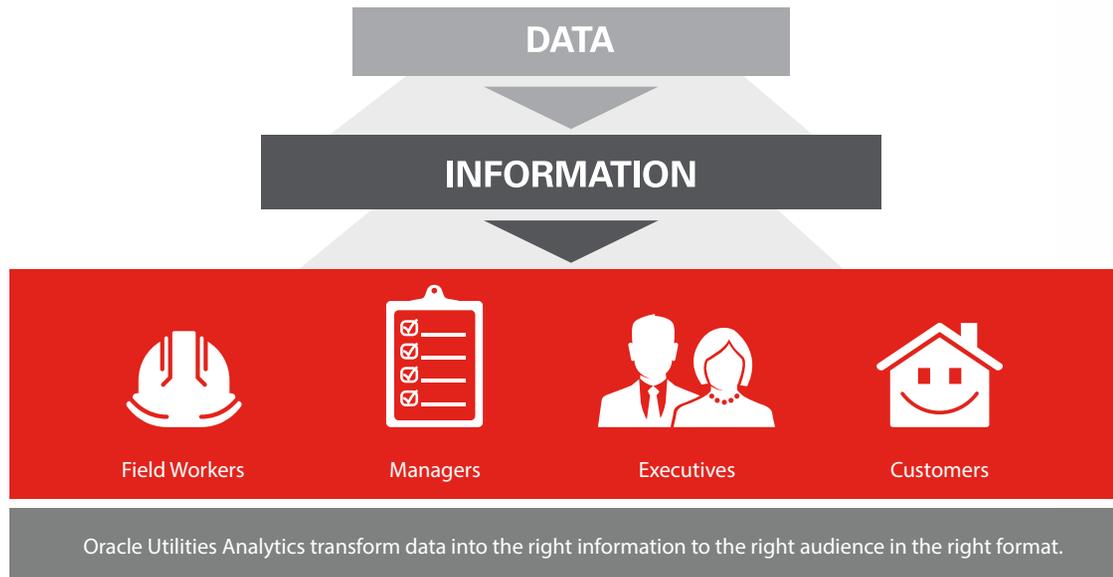
Oracle offers far more—a wide choice of applications and technologies selected and combined to fit the precise requirements of the opportunities you are trying address.

For more than three decades, Oracle has helped organizations worldwide extract value from all kinds of data. With this experience, Oracle has built a wide array of analytics software, hardware and services that offer real solutions to your precise needs.

With Oracle, there’s no “one size fits all” approach.

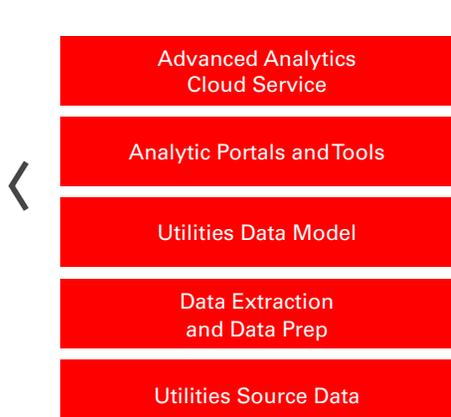
When you choose Oracle, you work with utility experts to define your immediate analytics goals and longer-range direction. You develop a step-by-step plan that helps you move forward at the speed your staff and budget can accommodate. You choose the right applications and technologies that fit your business needs.

The result is an analytics program that delivers immediate, cost-effective operational results and long-term goal achievement.



THE FOUNDATION FOR A LONG-TERM PARTNERSHIP

Oracle’s world-class products forms the best utility analytics platform available on the market today. And Oracle’s utilities experts help you make the best choices from that platform to ensure real operational results with bottom-line impact.



The Best Platform
As the world leader in information processing, Oracle has a flexible analytics platform that allows utilities to deploy based on their needs and adjust over time as business and market needs evolve. There’s no forcing your data through a single lens that can easily distort both the questions you’re asking and the answers you get.

Oracle matches the solution to the problem. With Oracle’s renowned end-to-end data handling, you get the validation

and security techniques that protect your data as it moves seamlessly and flawlessly through each stage of the analytics process—from data acquisition and organization to analysis and process improvement.

Oracle also matches its delivery method to your budget and to the level of analytical expertise of your staff. For example, you have the flexibility to choose from:

- On-premises dashboards-based applications that track performance objectives
- Engineered systems like Oracle Exalytics that combine hardware and software in a single box for maximum performance
- Cloud analytics that offload the burden of finding answers to complex questions onto a team of Oracle experts

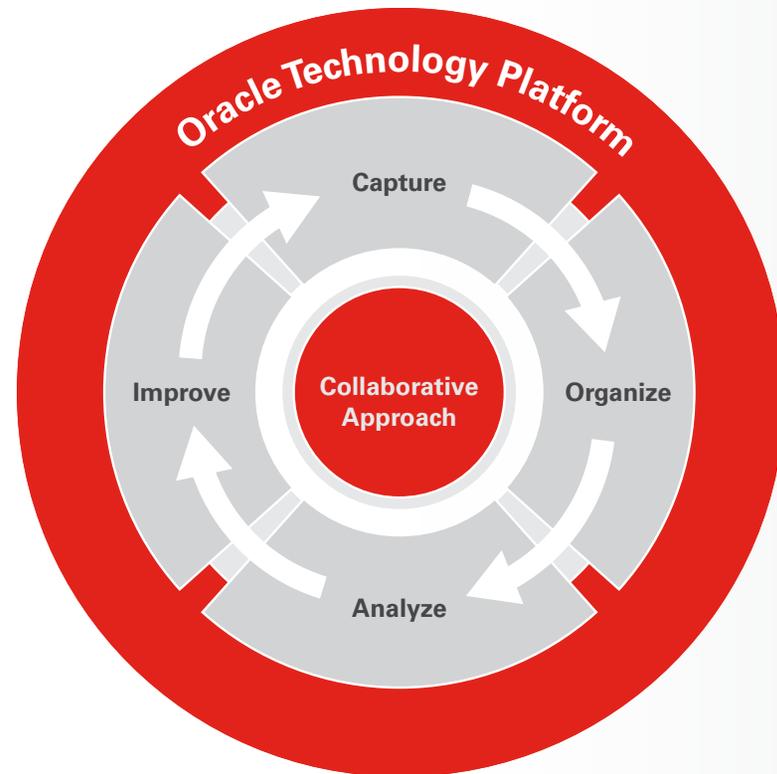
Oracle’s hardware, software, and services readily combine to meet your requirements—answers in real-time or next week, using structured and/or unstructured data from single or multiple data streams and supplemented, as needed with public and proprietary data.

The Most Experienced

Utilities are unique. The critical nature of energy, gas and water services demands levels of reliability and safety far greater than typical business and industrial requirements.

Oracle dedicates more than a thousand people to the development and delivery of unique, top-quality mission-critical applications specifically for utilities. Oracle experts understand utility processes, performance objectives and standards. They know when to build analytics processes into core applications and when to make those processes directly available to decision-makers. They know how to introduce additional analytics into an organization, how to grow analytics programs and how analytics can help you find not just the right answers but also the right questions to ask.

What's more, Oracle also delivers world-leading corporate applications, middleware and technology. The free exchange of information and ideas across the entire Oracle organization cross-fertilizes utility solutions with successful concepts from closely related industries like telecommunications and public sector. And access to a wide range of technology experts ensures that Oracle Utilities Analytics processes flow seamlessly into the full range of enterprise analytics.



Real Operational Results

You need more than just answers. You need answers that feed back into the operational applications already governing your basic processes to deliver quick wins and high return on investment.

Oracle delivers those high returns across all types of analytics techniques. Descriptive analytics gauge current performance. Predictive analytics tell you what's about to go wrong, while prescriptive analytics point to problem prevention.

You can use analytics to improve business operations by preventing re-work, improving outage statistics like System Average Interruption Frequency Index (SAIFI), replacing overloaded transformers before they cause outages, identifying equipment malfunctions, dramatically reducing losses resulting from customer theft or meter tampering and providing personalized customer communications.

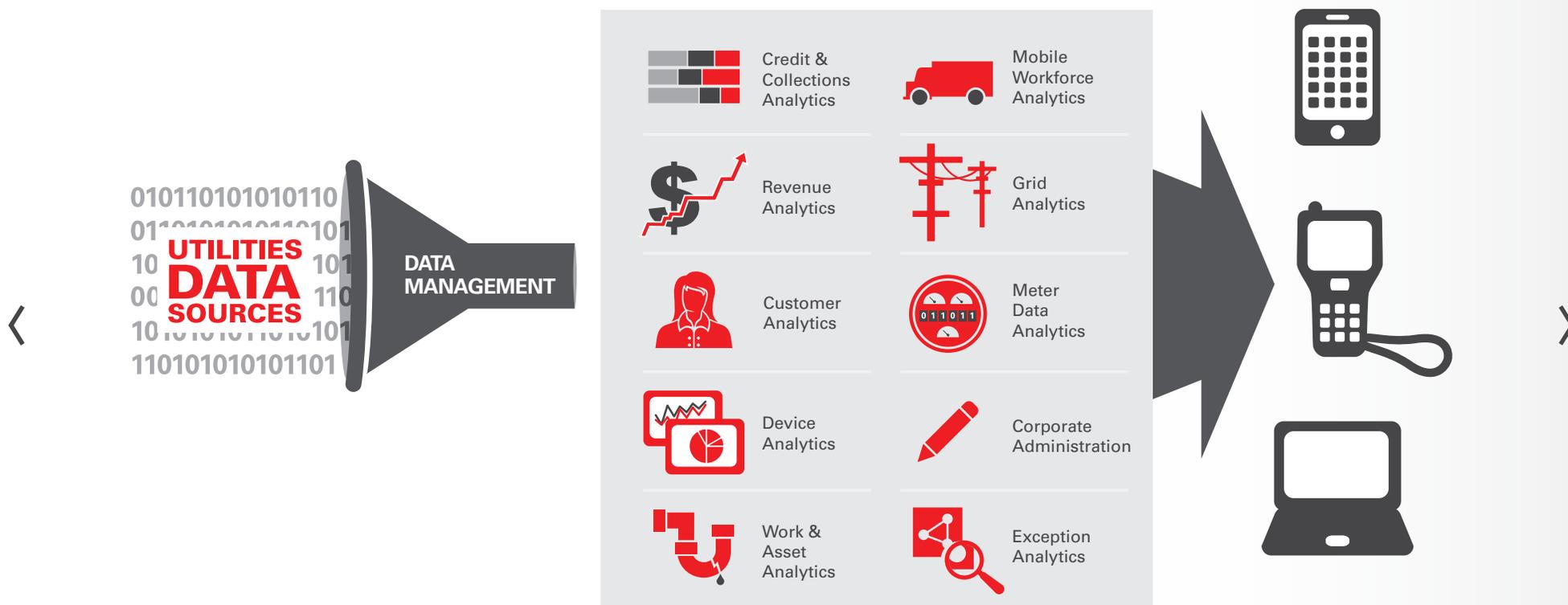


<p>CUSTOMER SATISFACTION TARGETED INTERACTIONS</p> <ul style="list-style-type: none"> ▸ Segmentation-driven marketing offers ▸ Proactive alerting ▸ Personalized communication 	<p>RELIABILITY MORE EFFECTIVE MONITORING AND PROACTIVE MAINTENANCE</p> <ul style="list-style-type: none"> ▸ Asset management ▸ Transformer load management 	<p>OPERATIONAL EFFICIENCY BETTER PLANNING AND EXECUTION</p> <ul style="list-style-type: none"> ▸ Employee utilization ▸ Revenue assurance ▸ Optimized field work 	<p>SAFETY UNDERSTANDING AND MITIGATING HIDDEN RISKS</p> <ul style="list-style-type: none"> ▸ Reducing public safety hazards ▸ Vegetation management ▸ Field work management
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Oracle helps your utility transform into a data driven organization.

ORACLE UTILITIES ANALYTICS SOLUTION



Oracle Utilities Analytics offers a complete analytics platform that includes prepackaged analytics and data mining and analytics tools that let you select the approach that best meets your utility's unique needs.

ORACLE UTILITIES ANALYTICS

Oracle DataRaker transforms smart meter data into action. You begin by feeding selected data streams to experts who analyze it using a set of leading edge technologies. They mine your data for common indicators of problems like slow meters, high usage, or failing feeders. They use sophisticated algorithms to identify for instance, the causes of load inefficiencies or missed opportunities for conservation program outreach. They return a series of compelling recommendations based on clear evidence that you turn into action items with quantifiable results.

Oracle Utilities Data Model helps you establish an analytics foundation by defining the utility-specific business requirements that underpin your analytics solutions. Oracle Utilities Data Model is a pre-built, standards-based data warehouse optimized for Oracle database and hardware but applicable to any applications environment. Using the model's pre-defined relationships and a common analytics infrastructure across all departments and functions improves analytic results.

Oracle Utilities Analytics Dashboards are pre-built tools for standard reporting and performance tracking. The dashboards, which sit on top of a schema specifically designed for utilities, permit staff to drill down into data from both Oracle and non-Oracle applications, supplement that data with external information sources and perform tasks like root-cause analysis.

You get results right out of the box. There's no waiting for computer or analytics experts to build technical gateways or to tailor interfaces to meet special needs. And when you use the dashboards with Oracle Utilities Analytics core applications, you can save even more set-up time and cost by using pre-built extractors for Oracle Utilities Customer Care and Billing, Mobile Workforce Management, Outage Management System and more.

Oracle Business Intelligence Enterprise Edition (OBIEE) is an enterprise-wide analytics platform. It provides the foundational tools and techniques that help you develop insights from individual applications and combine them to examine an organization's total performance. With OBIEE, staff can use dashboards, charts and visualization tools to help formulate and support their decisions. They can tailor and refine those tools without waiting for expert support. And they can combine analyses with those from other departments to aid executive- and board-level decision-making.

OBIEE is the foundation for Oracle Utilities Analytics Dashboards and for many other analytics products in Oracle's enterprise application portfolio such as finance, human resources, supply chain, etc. It can be licensed as a limited support for specific dashboard products or as a full enterprise analytics platform.

Oracle Endeca helps you draw insights from new, unstructured data sources: content in social media, websites, content management systems, email and more. By combining these data streams with more traditional, structured data—for instance, from a data warehouse—you can better respond to emerging customer and regulatory needs.

Oracle Exalytics combines an enterprise business intelligence platform with in-memory analytics to visualize and explore the huge amounts of data required for such complex tasks as modeling, forecasting and planning. Transactions take just microseconds, and complex analytics queries happen in real-time.

Oracle Essbase is an online analytical processing (OLAP) server that helps you model complex business scenarios quickly. It can forecast likely business performance levels and deliver "what-if" analyses while maintaining extremely fast query response times across very large numbers of users, data sets and business models.

Oracle Event Processing permits your IT team to develop event-driven applications without the hurdle of specialized training or unique skill-set investment. With it, you can filter, correlate and process events to drive downstream applications with real-time intelligence.

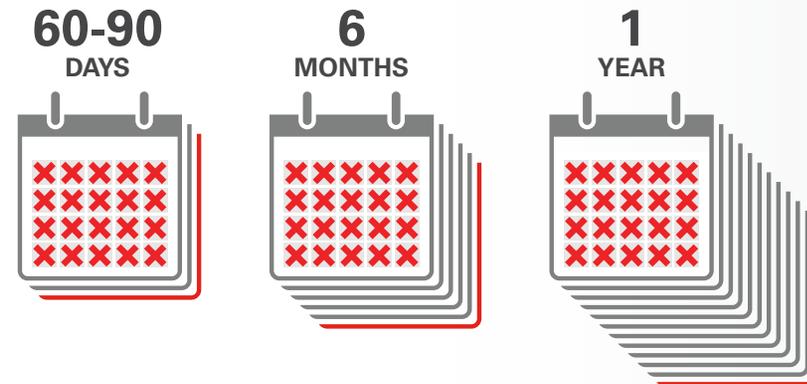
Oracle Advanced Analytics combines data mining with a graphical user interface to make new insights available from within the Oracle Database. Using algorithms accessible by SQL and R APIs, Oracle Advanced Analytics turns your database into a scalable and secure platform for delivering predictions and insights—without the need for investment in separate analytical servers.

WHERE TO BEGIN?

Given all the solutions Oracle offers, where should you start your program to improve results through analytics? How can you overcome entrenched information silos and staff who lack strong analytics skills to achieve an appropriate return on investment?

Oracle offers several ways to get started, including “start small.” We can help you build analytics expertise at a manageable pace, explore the power of information sharing and qualify results before you commit to a larger solution. Your Oracle representative can take you through the flexible options we offer such as enterprise data warehouse and analytics solutions, an Analytics Rapid Start Implementation, and DataRaker.

Start Small Approach



**Start Small.
Quick Results.
Realize Value.**

**Expand Use Cases.
Maintain Value.**

**Exploit Data Platform.
Maximize Value.**

As analytics begin to show real returns, you can expand success with additional applications and technologies.

TRANSFORMING COMPLEX DATA INTO BUSINESS VALUE

Oracle can help you transform your complex data into business value. With Oracle as your strategic analytics partner, you extract insights from your data that ensure continuing operational improvements to address not only today’s needs but also tomorrow’s unknowns. Our unique combination of **Best Platform, Most Experienced, Real Operational Results** will help you transform into a data driven organization.

For more information about Oracle Utilities Analytics, visit oracle.com/goto/utilities or call +1.800.ORACLE1 to speak to an Oracle representative.



Oracle is committed to developing practices and products that help protect the environment

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Hardware and Software, Engineered to Work Together