

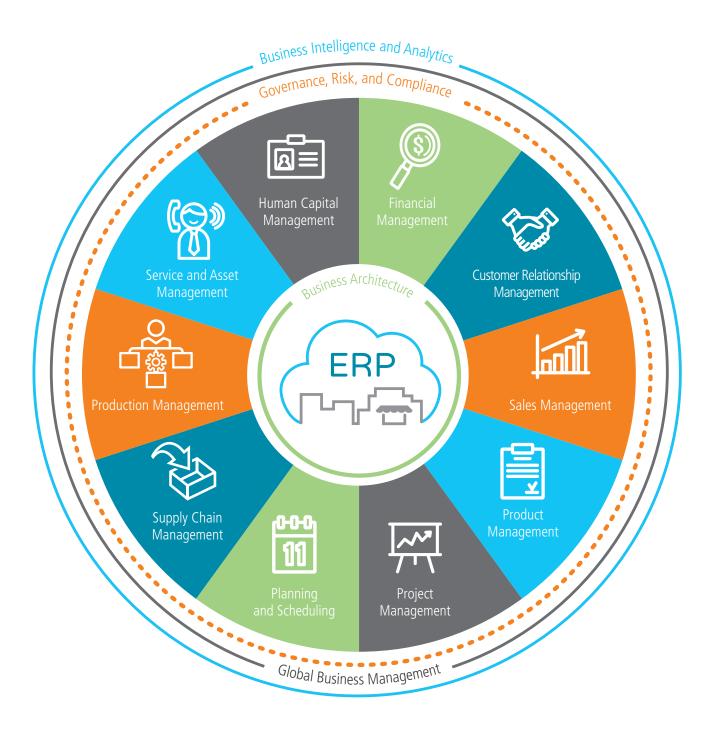
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Business Intelligence and Analytics





Epicor ERP Diagram





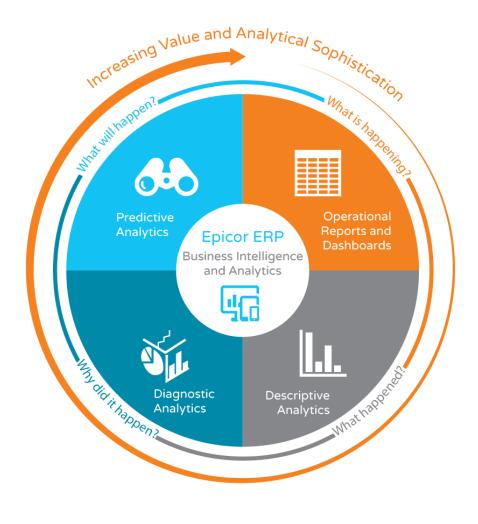
Business Intelligence and Analytics



- Operational Reports/Dashboards
- Descriptive Analytics (Business and Financial User Reporting/Dashboards)
- Diagnostic Analytics (Scorecards/KPIs, Financial Planning)
- Predictive Analytics (Forecasting)
- Data Warehousing
- Role Based Analytics and Business Intelligence
- Mobile Business Intelligence

Business Intelligence and Analytics for the Epicor ERP system help you answer four essential questions—what happened, why did it happen, what is happening now, and what will happen next? Dashboards, trackers, and data visualization tools built into the core ERP platform help you get a better understanding of what is happening in your company right now. Additional modules also provide you with deeper trending, diagnostic, and predictive analytics to bring the future into focus.

Business Intelligence and Analytics



Become a data-driven organization that can make fully informed decisions at every turn.

Operational Reports and Dashboards

To gain insight into everything happening enterprise-wide, look to the operational reports and dashboards available in every area of the Epicor ERP system. It all starts with Business Activity Queries—SQL queries throughout the Epicor ERP system made with a visual drag-and-drop wizard. The dashboards provided with the Epicor Mattec Manufacturing Execution System (MES) also keep you up to date with what is happening with your machines on the production floor. The complete list of operational reports and dashboards features:

- Epicor ERP Business Activity Queries
- Microsoft SQL Server Reporting Services
- Epicor ERP Trackers and Dashboards
- Epicor Mattec MES



Every business needs an intuitive and easyto-use query engine, which is why Epicor created Business Activity Query (BAQ) in the core platform of the Epicor ERP system allowing you to create personalized or copy standard SQL queries. Once created, queries can be used throughout the application to generate SSRS reports for quick searches, view results in a Dashboard or Epicor Data Discovery, and much more. Complete functionality includes:

- BAQ design wizards
- Graphical table links
- Embedded calculations
- Multiple data views
- Analyze/test query tabs
- Updatable BAQs
- External BAQs
- Configurable dashboard applications

(See figure 11)

Microsoft SQL Server Reporting Services

Microsoft SQL Server Reporting Services (SSRS) underpins the Epicor ERP system and provides a flexible reporting structure for

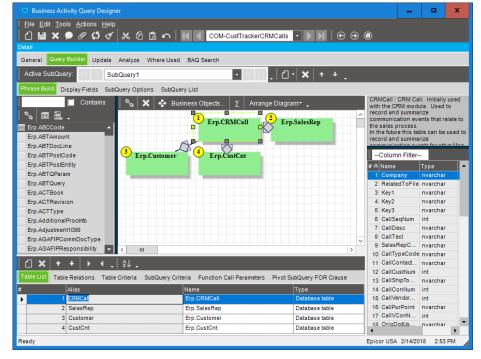


Figure 11 Business Activity Queries—The BAQ Designer provides many easy-to-use features for creating business queries.

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Figure 11.1 Trackers and Dashboards—Closely manage customer and supplier performance with comprehensive role-based and interactive dashboards that offer a complete picture.

delivering professional reports and analysis to business stakeholders in a format that business users can easily consume. It is also used with Epicor ERP Advanced Print Routing for forms printing and routing. SSRS easily utilizes many types of data and can deliver it in a variety of formats. Because SSRS works with other applications and products in the Microsoft platform—such as Microsoft SharePoint, Microsoft SQL Server Analysis Services[™], Microsoft Office, and Microsoft SQL Server Report Builder®—SSRS is an invaluable tool for improved analysis and decision making in the enterprise.

Trackers and Dashboards

Epicor dashboards permit the combination of multiple capabilities like inquiries, ad hoc reports, workbenches, graphical analyses, tactical business intelligence, alerts, and business monitoring—all in a single dashboard. They provide a robust, one-stop interface that replaces traditional menu systems with personalized role or contextbased views and links into core transactions of the system—including real-time, exception-driven indicator flags. Tooled with unique flexibility, dashboards enable users to develop their own workbenches using a series of online views of information. From monitoring your employee intranet site,



Figure 11.2 Mattec Manufacturing Execution System (MES)—Monitor machines and analyze their production and performance data—24x7—with Mattec MES

to live access to industry-related websites, each dashboard contains the information you and your employees need to more proactively run your business. Complete functionality includes:

- Role-based home page
- Real-time exception-driven management
- Real-time access to up-to-date information
- ► User/function-specific workbenches
- Drill-down trackers
- User-level personalized components
- Custom component generation
- Personalized functionality
- Open to related functionality
- ▶ Fully secured web interface
- Web deployable components
- Predefined dashboards
- Dashboard style sheets
- Dashboard charting
- Executive dashboards
- Dashboard assemblies
- Self-contained dashboards

(See figure 11.1)

Mattec Manufacturing Execution System

The Epicor Mattec MES collects data directly from equipment and operators on the shop floor in real time, minimizing inaccurate and time-consuming manual data collection. Get the powerful metrics you need to improve performance—including Overall Equipment Effectiveness (OEE), run rates, scrap, yield, energy consumption, material consumption, and much more. Keep a unified picture of production planning and data with full integration into Epicor ERP. (See figure 11.2)

Descriptive Analytics

Let every department learn from its data with self-service summaries, animated and interactive data visualization, and tools to simplify report creation and sharing. Most of the products that fit this category

Business Intelligence and Analytics

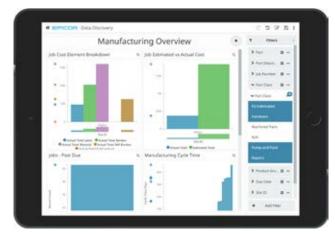


Figure 11.3 Epicor Data Discovery—Drag and drop measures and dimensions in the Data Discovery view for new insights.

support analyzing larger amounts of data for more historical trending analysis. These products include:

- Epicor Data Discovery
- Epicor XL Connect 7
- Advanced Financial Reporting
- Executive Dashboard

Epicor Data Discovery

Epicor Data Discovery (EDD) is a data visualization tool for the Epicor ERP system. With EDD, staff can use their natural visual abilities to quickly spot areas of interest in real-time production data that they might have otherwise missed by just looking at rows and columns of numbers. In the Data Discovery view, users can set filters and drag and drop measures and dimensions to produce rich visualizations—a process similar to manipulating a pivot table in a spreadsheet. They can then focus on a data point or area and drill down into the underlying ERP transactional detail. They can also combine views to create BI dashboards with shared filters and shared dimensions. Driven by real-time BAQs in the Epicor ERP system, EDD complements Epicor Data Analytics (EDA) by visualizing short-term, upto-the-second enterprise data, whereas EDA provides for longer-term data exploration running in a data warehouse.

EDD is accessible via SmartClient, web browsers, tablets, and modern smartphones.

The application is designed to work just as well on low-powered touch devices as it does on a powerful desktop with large screen real estate. EDD automatically adjusts its layout and behavior to the browser and device accessing it. Resizable data cards can be animated to cycle through multiple values like a stock ticker, providing a live feed of production data for applications such as Epicor Homepage. Advanced EDD gives access to Active Directory users who are outside of Epicor ERP, with data-level security set for the user or role. Advanced EDD also enables connection to cubes built in Microsoft SQL Server Analysis Services. (See figure 11.3)

Epicor XL Connect

Epicor XL Connect 7 is a self-service reporting and analytics add-in for Microsoft Excel that provides out-of-the-box functions for pulling Epicor ERP data directly into Excel. It saves you data extraction time and effort by downloading summarized data that you can analyze in-memory without further downloads. Imagine using functions like month-to-date beginning balance or yearto-date net budget to pull in just the data you need based on cell-based parameters like year, period, currency, segments, and reference codes. Dozens of functions combine with drag-and-drop, drill-down analysis sets that already know your data to make report creation a snap. XL Connect 7 is an all-inclusive product that comes with:

- Pre-built content for financials, sales, materials, and production
- Multicurrency capability
- Access to any field in Epicor ERP—as permitted by ERP user security
- PackNGo—lets report recipients analyze a subset of data without a connection to Epicor ERP

Advanced Financial Reporting

Epicor Advanced Financial Reporting (AFR) allows the creation and distribution of professional financial reports to company stakeholders. AFR simplifies report creation through an intuitive interface, which allows for the creation of reports using elements familiar to accountants or financial professionals. It also provides an additional element of reporting hierarchy or trees, allowing the viewer to generate the report for a specific business segment. Viewers can generate these parameter-driven reports as needed by selecting the time, company, book, or organizational element as required without the need for financial team intervention. (See figure 11.4)

Executive Dashboard

Executive Dashboard comes with a series of graphical components designed to give you summarized, cubed data inside the Epicor ERP system—enabling you to quickly make critical short- and long-term decisions. Executive Dashboard includes Plant Performance, Supplier Performance, Order Backlog, Scheduled Shipments, Shipping Performance, and Cash Flow.

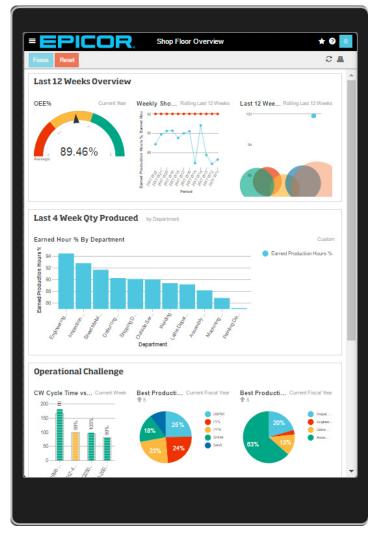
Diagnostic Analytics

Quickly and easily discover why certain product outcomes happened and perform what-if analysis with diagnostic analytics, including:

- Epicor Data Analytics
- Epicor Financial Planner
- Epicor Performance Management (EPM)

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Figure 11.4 Advanced Financial Reporting—Manage, report, and distribute trusted financial information securely.



Epicor Data Analytics

Powered by Phocas, Epicor Data Analytics (EDA) helps companies turn their data stored in the Epicor ERP system into actionable insights. EDA is an easy-to-use service in the cloud that takes a unique, intuitive approach to lead you on a journey of discovery through large cubed data sets contained in your data warehouse. With deeper insights, companies can grow by reducing cost, identifying new opportunities, supporting specific programs, and speeding up decision making.

EDA provides customizable and interactive dashboards to make it easy to analyze the data inside your business systems. The dashboards contain visual KPIs, graphs, charts, and tables, so you can quickly review important information about your business performance and make informed strategic decisions. Once you have spotted an area of interest in the visual metrics, the EDA grid is where you conduct most of your analysis, and unlike a spreadsheet, you can "drill down" into the data with a simple click to reveal additional levels of detail—all the way down to the ERP transactions—and find your answers.

EDA includes all Epicor ERP and Mattec (Advanced MES) content packs, and you can easily augment them with any other ERP fields or other data sources like historical databases or spreadsheets. These content packs include:

- Sales Management
- Production Management
- Material Management
- Financial Management
- Mattec MES (Advanced MES) (See figure 11.5)

Figure 11.5 Epicor Data Analytics—Access cloud-based Epicor EDA from desktops or mobile devices.

Epicor Financial Planner

The budgeting and forecasting process is a complex, time-consuming, and error-prone task for many organizations. Managing the processes and people and collating all of the information using tools that are not designed for this purpose can exacerbate an already challenging task. Epicor Financial Planner takes away this pain by giving back control and providing an oversight of the entire process-including approval workflow, creating multiple versions of plans, and defining templates to be used. Add to that a Microsoft Excel user interface—something nearly everyone in the workforce is familiar with-and you have the complete solution to relieve your budgeting headache. Key features include:

- Integration with the Epicor ERP system to bring in actuals for comparison, forecasting, and spreading purposes
- SQL Server storage for one version of the business model and data
- Modeling and what-if analysis
- Multiple budgets and budget versioning
- Sophisticated approval workflow

Predictive Analytics

What will happen next? Plan for success using demand planning and inventory optimization tools in the Epicor Smart Inventory Planning and Optimization Platform.

Smart Demand Planner

Epicor Smart Demand Planner provides cloud-based statistical forecasting that automatically selects the right forecast model for each item—accounting for trend, seasonality, and promotion-/event-driven demand. Once the baseline forecast is produced, it is available for collaborative review and consensus planning by authorized stakeholders. Forecast accuracy can be measured to ensure the best possible forecast is delivered to the business at both the aggregate and item mix levels.

Smart Inventory Optimization

Safety stock levels, reorder points, lead times, and order quantity directly influence the service vs. cost relationship. Epicor Smart Inventory Optimization helps you maintain the balance between service and cost by providing inventory policy decision support and the means to share, collaborate, and track the impact of your inventory planning policy. Inventory Optimization reconciles holding costs, ordering costs, and stock out costs in order to prescribe the inventory policy and service levels that yield the total lowest cost. Users can optionally assign service level constraints and targets and propose multiple policies for consideration. Then, they can share proposed policies and agree on a consensus plan that best meets the company's objectives.

Smart Operational Analytics

Epicor Smart Operational Analytics is a native cloud-based reporting platform that provides a fast, easily understood, and up-to-date perspective on the state of your inventory and its performance against critical metrics, actual supplier lead times, and opportunities to rebalance stocks across facilities—helping to uncover root causes of operational inefficiencies. Get a 360 degree view of your inventory to identify value, stocking trends, overstocks, understocks, and potential order cancellations. Also identify root causes of stock outs, excess inventory, and late deliveries.

Mobile Business Intelligence

You need to make the best use of advanced analytics and Business Intelligence tools to make informed decisions and keep the pulse on your organization whether you are in the office or on the go. Access the Epicor robust business intelligence and analytics anywhere, anytime with the ability to pro-actively push this insight to any device so that you can turn data into decisions and take timely actions to help grow your business.

About Epicor



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Epicor Software Corporation drives business growth. We provide flexible, industry-specific software designed to fit the precise needs of our manufacturing, distribution, retail, and service industry customers. More than 45 years of experience with our customers' unique business processes and operational requirements are built into every solution—in the cloud or on premises. With this deep understanding of your industry, Epicor solutions dramatically improve performance and profitability while easing complexity so you can focus on growth. For more information, <u>connect with Epicor</u> or visit <u>www.epicor.com</u>.



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