

# Computer Guidance Corporation and IBM: driving decisions with data

*A real-time financial and operations management solution for the construction industry, integrating powerful enterprise resource planning (ERP) with dynamic business intelligence and analytics*



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## Highlights:

- Enables efficient, convenient, real-time data access and sharing across the enterprise
  - Helps generate data-driven insights for project planning, adjusting and forecasting
  - Delivers drill-down capabilities in a customizable dashboard to identify trends and causes
  - Uses collaborative reporting and sharing to reduce reporting complexities and drive decisions
  - Ensures secure access to all data (past, current and future) for a complete business picture
  - Offers scalability and multitenancy with full failover recovery and dynamic load balancing
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In today's construction industry, data and analysis are as essential to success as heavy equipment. From financial management to human resources to project management, accurate data about every aspect of the business drives critical decisions about clients, projects, budgets, profitability and forecasting.

Seeing the big picture is an ongoing challenge, especially when performance measurements fluctuate constantly and often exist in disparate places. With Enterprise Resource Planning (ERP) solutions, construction firms can accumulate real-time data from across the enterprise. But acquiring the data isn't enough. To maximize its value, users need to act on it. They need to predict outcomes, share insights, make informed decisions and act quickly as new information arises.

Together, Computer Guidance Corporation and IBM offer a comprehensive, proven and reliable financial and project management solution designed specifically for the construction industry. By integrating eCMS, an ERP application, and Cognos BI and Analytics, Computer Guidance and IBM give contractors the solution they need to make the most of the data at their hands.

## Solution Overview

A growing number of contractors are looking to ERP solutions like eCMS from Computer Guidance Corporation to help them acquire and organize large amounts of data. However, even the most powerful, reliable, and feature-rich ERP systems are ineffective if contractors cannot access the wealth of insights these systems house. That's why Computer Guidance and IBM are working together to provide a revolutionary, construction-specific solution that integrates enterprise data and business processes with advanced business intelligence (BI) and analytics.



Instead of keeping data trapped in stand-alone construction accounting software, static in spreadsheets or lost on scraps of paper, the solution from Computer Guidance and IBM helps contractors visualize, manage, share and analyze data in a dynamic, flexible manner. Run on the IBM Cognos software platform, the solution is highly scalable and supports multitenancy, so important data points can be updated and shared in real time. The solution uses a Custom Authentication Program (CAP) to ensure data security while delivering a comprehensive picture of business performance.

Simply stated, the solution acts like a living, breathing jobsite, enabling the daily use and analysis of massive amounts of data across departments by different users within the organization. Because the solution is browser-based, as well as offered in the cloud, users can access data and reports anytime, anywhere, making it easier to drive information to key decision makers. Access to the facts not only results in good planning, but also the ability to quickly adjust and keep projects moving on time and on budget.

Operating under a comprehensive set of frameworks and disciplines, including financial management, human resources (HR) and project management, the solution seamlessly shares eCMS data points across the entire enterprise. As data from each discipline becomes available, users can design specific reports, customize standard report templates, distribute them on demand or on a scheduled basis, and create ad-hoc queries to fit the needs and functions of different individuals throughout the organization.

For instance, the solution helps construction financial managers (CFMs) monitor cash flow. They can track running job costs as they compare to budgets, stay informed on equipment and labor cost and utilization, and project profit based on input from the field. With this comprehensive visibility and real-time analysis, the solution allows CFMs to focus on big-picture objectives for the company, including upcoming contracts and anticipated profitability, as well as such key performance indicators (KPIs) as debt-to-equity and debt-to-income metrics and ratios.

Project managers (PMs), meanwhile, can use the solution to help ensure jobs remain profitable. Ongoing access to real-time data helps manage people toward task deadlines and ensure materials are sourced, purchased and delivered on time. PMs can schedule preventive maintenance to maintain optimal equipment performance and lifespan. Furthermore, PMs can combine financial and field data for an in-depth job analysis, uncovering insights to make intelligent decisions that solve problems and sustain success.

HR managers can use the solution to help increase operational efficiency away from project sites, improving enterprise-wide performance. During the hiring process, they can store applicant and candidate information in the ERP system over the course of one or multiple projects and use BI and analytics tools to streamline hiring and rehiring. The solution automates the self-service process, so workers in the field can log on remotely and manage their information, which remains accurate and up-to-date.

For each user across the enterprise, the solution delivers highly customizable dashboard options, allowing them to access, interact with and personalize content in a manner that supports how they make decisions. Users can add as many applications and business processes as necessary, assembling the dashboard to highlight vital information, from equipment monitoring to payroll management, bringing key data points to the forefront.

For continuity, each user's unique dashboard launches from the eCMS menu, with Cognos BI and analytics launching simultaneously for a seamless, user-friendly experience. The solution's intuitive interface allows users to sort and filter data, add calculations, and quickly identify performance trends. Powerful drill-down capabilities help users dig deeper into data and identify the source of performance or budget issues in particular jobs.

Once users have identified problems or negative trends, the solution's collaborative reporting features and mobile accessibility make sharing information easy, whether users are in the field or at the office. This enhanced visibility and communication through collaborative features, such as comments and annotations, help drive decisions and uncover additional insights.

Along with current data, the solution leverages historical and forecasted data to enable fast, efficient reporting. For instance, during an audit or compliance check, contractors can easily pull reports or generate a consolidated reporting package for swift distribution. Similarly, the solution provides quarter-end and year-end report processing, eliminating time-consuming manual efforts to sort through data and assemble the necessary components.

## Solution Benefits

The solution from Computer Guidance Corporation and IBM combines enterprise-wide content management with superior BI and analytics capabilities to deliver important advantages designed specifically for the construction industry:

- **Dynamic data access and insights** — With its intuitive user interface and customizable dashboards, the solution makes it easy for different users to access the accurate, real-time information required to identify and assess key metrics. The browser-based design enables users to add, view, interact with and update content whenever, wherever.
- **Robust reporting and sharing** — The solution helps users quickly uncover insights, generate reports, share information with team members and act on it. Users can schedule regular report blasts or distribute on demand. The solution helps managers create consolidated reporting packages for quarter-end or year-end reports, or in case of an audit or compliance check.

- **Improved decision-making capabilities** — The solution gives construction firms a consistent, comprehensive, data-driven view of the business. Firms can leverage historical and current data, as well as forecasting capabilities, to manage projects and business operations proactively for increased productivity, performance and overall profitability.

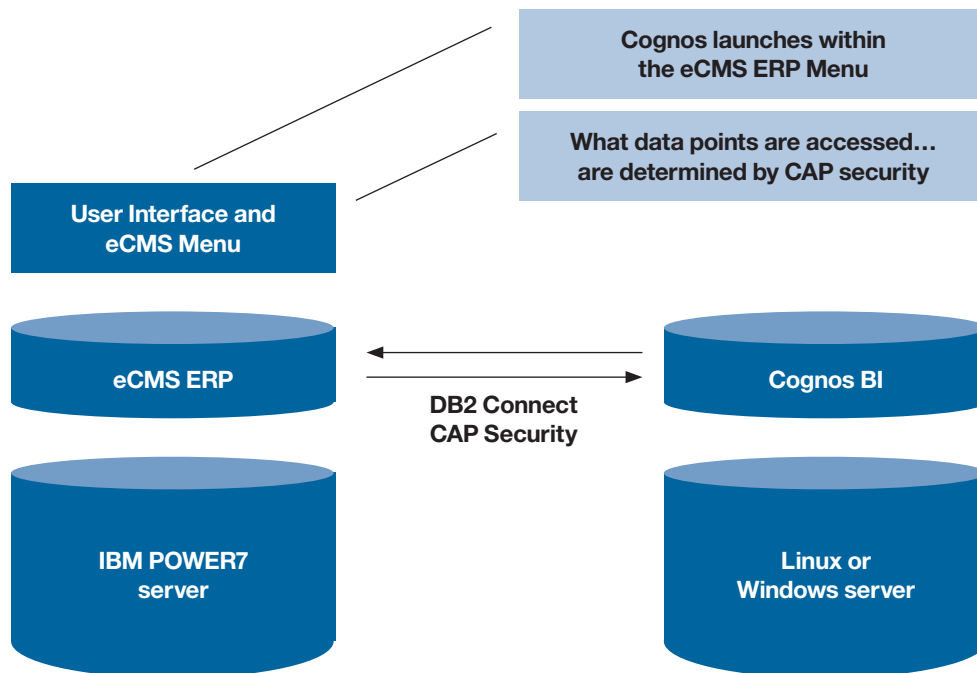
## Computer Guidance Corporation and IBM: a closer look

The solution from Computer Guidance Corporation and IBM provides the data-driven insights construction financial managers, project managers and HR managers rely on to improve productivity and profitability. Components of the solution from IBM may include the following:

- **IBM Cognos® Business Intelligence software** — This platform expands traditional BI with planning, scenario modeling, real-time monitoring and predictive analytics. It uses a limitless BI workspace that supports how people think and work, allowing users to see results, analyze trends, and collaborate and share information in reports, dashboards and scorecards.

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## Computer Guidance Corporation and IBM Solution Architecture



The solution from Computer Guidance Corporation and IBM revolutionizes the way commercial construction firms manage operations, integrating powerful ERP capabilities with BI and analytics to help enable real-time, data-driven insights.

- **IBM Datacap software** — Datacap data extraction technology automates the conversion of unstructured and physical data, including email files, PDF, Word, Excel and zipped files, into actionable insight in seconds. It eliminates physical handling and accelerates the dissemination of information throughout an organization.

## Computer Guidance Corporation and IBM: take data further

### Computer Guidance Corporation

Computer Guidance Corporation is the trusted provider of construction management software for architecture, engineering and construction companies. Committed to setting industry standards in financial and project management software development for leading construction companies, Computer Guidance solves commercial contractors' business challenges day in and day out by improving productivity, operational efficiency and overall profitability.

### IBM

IBM Business Analytics software delivers data-driven insights that help organizations work smarter and outperform their peers. This comprehensive portfolio includes solutions for business intelligence, predictive analytics and decision management, performance management, and risk management.

### For more information

To learn more about IBM solutions for BI and analytics, contact your IBM sales representative or visit:

[ibm.com/analytics](http://ibm.com/analytics)

To learn more about Computer Guidance Corporation, please visit: [www.computerguidance.com](http://www.computerguidance.com)



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