

Solution in Detail
SAP for Engineering,
Construction & Operations

END-TO-END PROCESSES FOR THE CONSTRUCTION INDUSTRY

MANAGE PROJECTS, CONTROL COSTS,
AND GROW YOUR BUSINESS

SAP has put 30 years of active involvement in the construction industry – supporting thousands of construction businesses across the globe – into the SAP for Engineering, Construction & Operations (SAP for EC&O) solution portfolio. Providing a tightly integrated set of applications that capture every aspect of your construction business, SAP for EC&O helps you complete more projects on time and within budget with fewer resources. The end result: maximum profits and business growth over the long term.



THE BEST-RUN BUSINESSES RUN SAP™



CONTENT

4 Executive Summary	
5 Seeing Your Way to Growth	
6 Adapting to Today's Risks, Challenges, and Opportunities	
6 Operational and Financial Risks	
7 Resource Management	
7 Collaboration	
7 Talent Shortages	
7 Opportunity Expansion	
8 Improving Processes with SAP for EC&O	
8 Tight Integration Means Better Project Execution	
8 Building Information Modeling	
8 Project Management	
9 Cost and Quotation Management	
9 Communication Management	
9 Baseline Project Schedule and Scope (Including Milestones)	
9 Integrated Planning	
9 Resource Allocation	
10 Workforce Management	
10 Equipment and Tool Management	
10 Material Procurement	
10 Subcontractor Management	
10 Change Management	
10 Performance Management	
10 Risk Management	
11 Critical-Path Management	
11 Cost Control	
11 Project Cash Flow	
11 Project Simulations	
11 Contract Closeout	
	11 Talent Management
	11 Equipment and Tool Management
	12 Procurement
	12 Corporate Performance Management
	12 Turnover to Owners and Operators
	12 Specialized Hardware and Network Support
	13 Powered by SAP NetWeaver®
	14 Benefits You Can Build On
	14 A Long-Term Commitment to the Construction Industry
	14 For More Information

EXECUTIVE SUMMARY

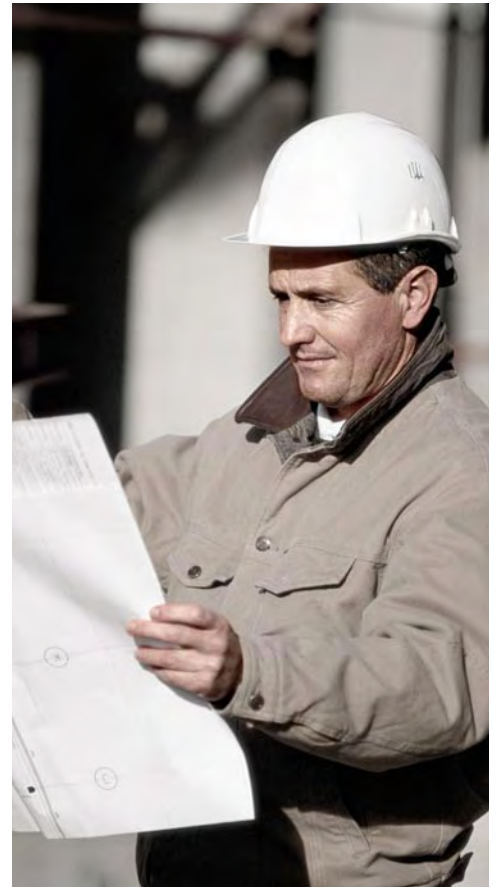
In the construction business, opportunities abound – but capitalizing on them has never been more challenging. Today, success is determined by what you know about your projects and when you know it. Your crews in the field may have all the high-tech tools and state-of-the-art equipment they need – but when information determines success, your management team needs to be similarly equipped.

Unfortunately, many construction companies struggle with nonintegrated, multiple-vendor legacy systems that provide untimely, inaccurate information and make it difficult to adapt to changing business requirements. If this describes your business software environment, you owe it to yourself to discover why global construction leaders trust the SAP for Engineering, Construction & Operations (SAP for EC&O) solution portfolio to ensure business success.

SAP for EC&O provides the most complete set of integrated construction-specific applications available from a single vendor. Combining proven best practices with unsurpassed functional depth, the solution portfolio helps you keep projects on track and within budget

with comprehensive functions to manage resources such as material, labor, and equipment and tools. SAP for EC&O also helps you interact with strategic partners, manage documents, and track the shipment and quality of materials. With greater visibility and improved control across your entire project portfolio, you can increase accuracy, reliability, and accountability throughout your organization and significantly improve business performance.

Read on to learn why companies that use SAP for EC&O consistently outperform their peers with low total cost of ownership and effective management of more projects with less resources while maximizing cash flow and ROI.



Today, success is determined by what you know about your projects and when you know it.

SEEING YOUR WAY TO GROWTH

THE VISIBILITY YOU NEED FOR BUSINESS INSIGHT

In many ways, today's construction business can be summed up in a single word: more. Competition is more aggressive, projects are more complex, and schedules are more demanding. To maximize profits in this environment, you need to execute with precision and optimize your use of human and capital assets. Unfortunately, middle manage-

ment does not always perform at the expected levels. So even though your project portfolio is growing, your vision across the enterprise is becoming progressively cloudier.

That's why your continued growth and success depends on greater transparency across all levels of your enterprise.

And this is where the SAP for Engineering, Construction & Operations (SAP for EC&O) solution portfolio can help. An integrated, comprehensive set of solutions based on years of construction-industry experience, SAP for EC&O gives you the visibility to manage a multitude of projects at lower cost and with greater ease than previously possible.

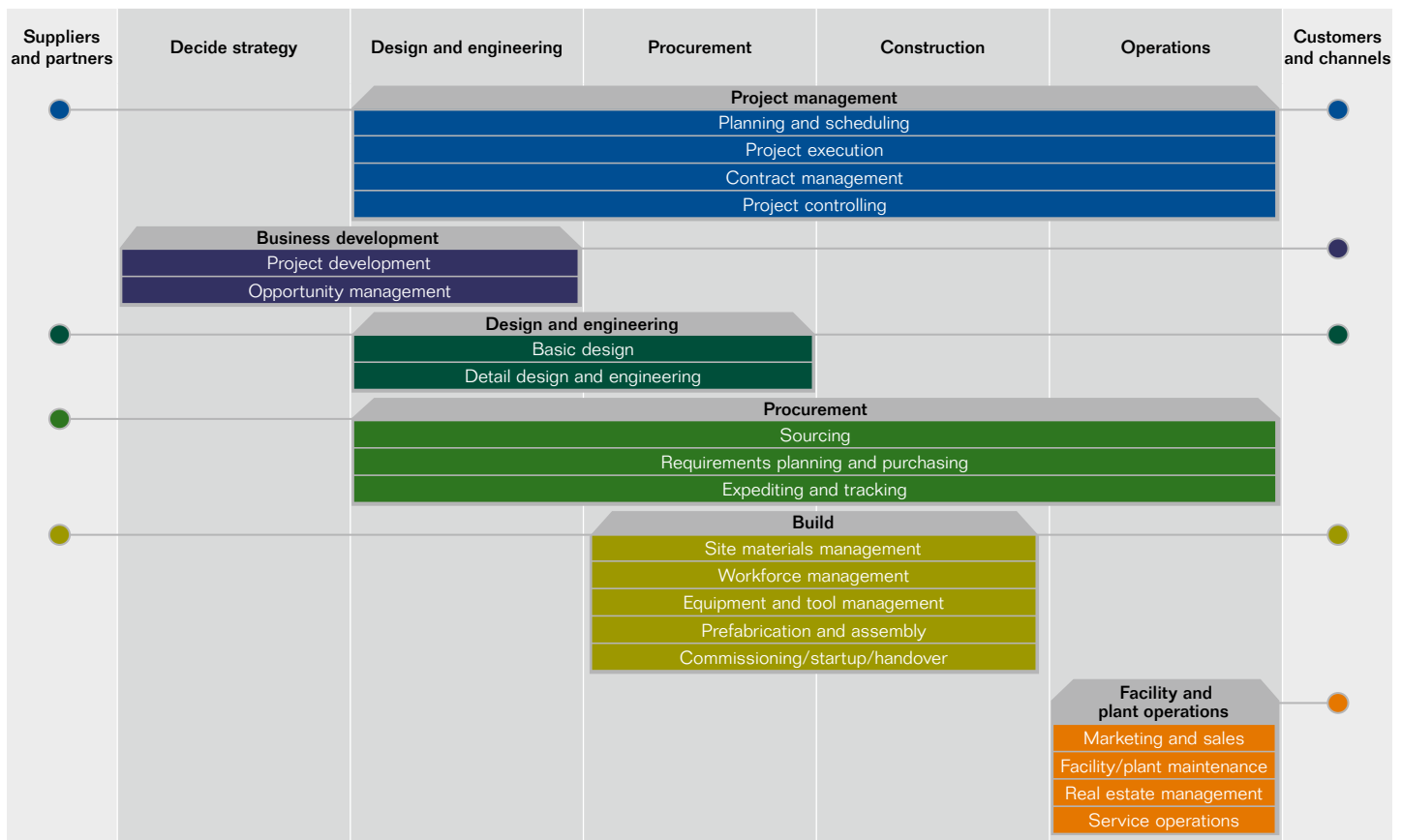


Figure 1: Solution Map for Engineering, Construction, and Operations



As illustrated in Figure 1, SAP for EC&O solutions span your entire project life cycle – starting from business development and design to procurement, construction, and handover. Near real-time visibility across your entire project portfolio provides the insight you need to make informed decisions on a day-to-day basis. Integrated best practices, end-to-end process integration, task automation, and convenient alerts all help you empower project managers to maximize asset utilization and increase profit margins. You can also manage suppliers, subcontractors, and employees more effectively for improved business performance.

SAP for EC&O is world-class software that your organization can implement quickly. Built from the ground up in close cooperation with SAP customers around the world, the SAP for EC&O solution portfolio is highly configurable, ensuring a close fit to your organization's specific needs. You can also use defined-scope implementation services from the SAP® Active Global Support (SAP AGS) organization to assist with training, deployment, or ongoing support as you see fit. All SAP for EC&O solutions are highly scalable – ensuring that your software will never again limit future growth opportunities. And because the software reduces or eliminates the need for third-party add-ons, it helps lower your risk and total cost of ownership while accelerating your time to value.

When it comes to your business, no other offering comes close to matching SAP for EC&O for the breadth of supported business processes or depth of functionality targeted to the needs of the construction industry.

Adapting to Today's Risks, Challenges, and Opportunities

In a constantly changing business environment, you must continually find new ways to respond to changes in project scope, costs, and schedules. Whether it's underperforming subcontractors, unforeseen field conditions, a stretch of bad weather, or sudden supply shortages, you must overcome each obstacle in your path to stay on course and meet customer expectations. The sections below examine some of the varying situations you face every day and explore how SAP for EC&O can help you meet them head-on.

Operational and Financial Risks

Project owners are increasingly trying to shift more and more risk onto you. Contractual demands for penalties and liquidated damage clauses are on the rise. For "fast track" projects, you may even have to submit bids based on designs that are still in progress. Completion schedules are shrinking and cash flow is tighter than ever before.

Coping with these challenges requires better visibility into the performance of your current portfolio so that you can adequately evaluate how much risk you are willing to take on with each new project. To accurately craft new bids, you need structured access to your historical performance. You must also accurately forecast future availability of employees and equipment and shorten the duration of progress billing cycles to maintain cash flow. SAP for EC&O solutions provide the tools necessary to turn these challenges into opportunities.

Resource Management

The two keys to a successful project are being on time and within budget. Meeting these objectives consistently requires successful management of labor, materials, equipment, and subcontractors on each project. The industry-specific functionality and tight integration across the entire portfolio of solutions in SAP for EC&O enable efficient project execution – necessary to maximize your profitability.

Collaboration

As you become involved with your projects earlier in the design stage, owners require more detailed and frequent interaction. Tighter schedules require more interchange with suppliers and subcontractors. The collaboration tools in SAP for EC&O make it easier for you to share information and project processes and foster congenial relationships with all stakeholders.

Talent Shortages

The growing shortage of project managers and engineers is real – and future trends only show the trend increasing. SAP for EC&O provides the tools necessary to recognize, reward, and retain your key talent. With skills-inventory functionality, you can better match abili-

SAP for EC&O provides the most complete set of integrated construction-specific applications available from a single vendor.

ties to needs. Knowledge management allows you to more effectively grow talent internally. Equipping managers and engineers with better tools increases job satisfaction and reduces the burnout that leads to turnover.

Opportunity Expansion

The cyclical nature of the construction industry has likely motivated you to expand your service offerings into adjacent opportunity areas. Whether you're focused on developing additional core competencies, moving into the design area, or seizing opportunities in facility operations and maintenance, SAP for EC&O can provide the tightly integrated application support you require to expand.

IMPROVING PROCESSES WITH SAP FOR EC&O

THE POWER OF INTEGRATION

Tight Integration Means Better Project Execution

Do you find yourself fitting your operational methodologies to your current IT requirements? Shouldn't it be the other way around? SAP for EC&O has the proven ability to adapt to your current and future business needs. Instead of

Instead of a patchwork of legacy systems and multi-vendor point solutions that impede visibility and hamper business performance, SAP for EC&O offers a tightly integrated single-source solution, making it far easier to achieve your business objectives.

a patchwork of legacy systems and multivendor point solutions that impede visibility and hamper business performance, SAP for EC&O offers a tightly integrated single-source solution, making it far easier to achieve your business objectives. Complementary integrated offerings from SAP partners add to what is already the largest application footprint in the construction industry.

In an integrated environment, your software is more reliable. It also provides more timely and accurate information

and is easier and less expensive to manage. The breadth and depth of SAP for EC&O includes the full range of functionality available in the SAP ERP application. In addition, the construction industry-specific functionality in the solution portfolio spans HR, business development, quotations, planning, scheduling, project management, craft planning, subcontractor and supplier management, resource management, and project turnover.

Integration also increases visibility across all projects, resulting in immediate gains including better management of assets, employees, subcontractors, and suppliers, as well as tighter control of budgets and schedules and increased cash flow. The unified view enabled by SAP for EC&O delivers a centralized way for accessing consistent company information and integrated project data. In addition to viewing project costs and schedules, you also have quick access to vital documents, such as contracts or CAD drawings, across all projects. You can view and compare projects side by side, taking note of successful practices in one project and implementing the same practices in others. You can also allocate your workforce resources optimally, giving priority to projects in the most critical phases.

These are real and tangible benefits – and that is why SAP's construction industry customers regularly outperform their peers in revenue growth, operating margins, inventory-carrying costs, and return on invested capital. Some of the most important processes supported by SAP for EC&O are described below.

Building Information Modeling

With SAP for EC&O, you can better manage your projects from the design stage through the entire project life cycle, with integrated building information modeling (BIM) functionality. Allow every participant in the value chain – from designer and engineer to procurement agent, construction manager, and facility manager – to add to the information pool, generating more accurate data with less effort. This reduces friction in the design-build-manage cycle and facilitates more accurate space, maintenance, asset, and capital planning. The BIM functionality also allows better analyses while making schedules more reliable. And with direct cost savings, business process improvements, and better decision support, you can improve project profitability on a consistent basis.

Project Management

One of the key components in any construction solution is the project management functionality. SAP's solution for project management has been proven in more than 2,000 installations worldwide. You'll find it robust and functionally comprehensive.

If you're like most construction companies, your current project opportunities are more complex and require tighter schedules. Securing projects with higher-margin opportunities means establishing competitive differentiation with a prospect base that's becoming increasingly more sophisticated in their demands and expectations. Staffing

issues are becoming more common amid a shrinking labor market. Geographically dispersed opportunities bring additional challenges.

As you work to address issues like these, you may find that your current software foundation is more hindrance than help. By contrast, you'll find that SAP applications for project management cover all key project management processes and incorporate support for proven best practices to help you reach your fullest potential as quick as possible. The following are some examples of the processes covered.

Cost and Quotation Management

For any construction company, the quotation process sets the groundwork for generating new business and maintaining profitability. Quoting too high could take you out of the running. Quoting too low can cut into profits. The key is striking the right balance and this requires access to historical cost and performance information. When looking at a prospective new project, can you answer the following questions?

- Which past projects best match this opportunity?
- Where were these projects carried out?
- What staff do I have with the requisite skills and are they willing to relocate?
- What supply chain elements (subcontractors, vendors, fabricators, and so on) are in place?
- What are my historical costs and how do I pull them forward to present-day levels localized for this project?
- What is the optimum contract and budget structure?

With SAP for EC&O solutions, you can answer these questions with a level of speed and accuracy that was previously impossible. And when the project is awarded, the details from the proposal process become the base for your execution stage.

Communication Management

Efficient, effective communication is one of the keys to success in a dispersed project-oriented work environment. This is why SAP for EC&O helps you efficiently collaborate and share information across your project team, including joint venture partners, subcontractors, vendors, engineering partners, and owners. With integrated document management functions, you can manage your contract and project documents – update, track, and efficiently share information with all stakeholders.

Baseline Project Schedule and Scope (Including Milestones)

To keep projects on schedule, you need to know what the schedule is and what the reality on the ground is. Supporting both top-down and bottom-up views, SAP for EC&O lets you measure actual performance against your baseline estimates so that you know how you're doing at all times. It also couples your defined project scope and budget with change-management procedures, allowing continual control of scope and costs.

Integrated Planning

Without a consistent, integrated view of all your running projects, it's difficult to make strategic planning decisions at the portfolio level. SAP for EC&O



Your continued growth and success depends on greater transparency across all levels of your enterprise.

addresses this challenge by enabling the visibility you need to view and manage resources, dates, costs, and revenue across your entire project portfolio.

Resource Allocation

To ensure success, you need to assign the right resources to the right projects while balancing availability and demand from other projects. With increased visibility across all resources at your disposal, SAP for EC&O makes it easier for you to assign resources according to skills, availability, and capacity across all your projects. In addition, the software helps you manage the labor-intensive craft planning function with greater effectiveness.



SAP for EC&O gives you the visibility to manage a multitude of projects at lower cost and with greater ease than previously possible.

Workforce Management

If your workforce is your most valuable asset, managing it is one of your most important jobs. SAP for EC&O can help with functionality that makes it easier to manage your professional labor, craft labor, and crew production at the job site while meeting the HR requirements of a dispersed, project-based workforce. You can expedite labor easily with complete visibility of your available skill sets and current work assignments.

Equipment and Tool Management

You've made a significant investment in your equipment and tools – and if you're like most companies, you want to maximize your return on this investment. SAP for EC&O helps do this with powerful functionality for managing equipment and tools – from requirements and location planning to calculating the equipment rental costs and transporting the equipment. This helps you maximize the utilization and profitability of your equipment and tools across your entire project portfolio.

Material Procurement

Efficient, structured procurement processes help keep costs down. This is why SAP for EC&O provides functionality that helps you exert greater control over material procurement. You can evaluate each potential partner and its quotations, make informed decisions about multiple sourcing alternatives, automate order processing and invoice management, and optimize the cost and delivery of materials.

Subcontractor Management

When working with dozens of subcontractors working on thousands of individual jobs, even the most seasoned project manager can become overwhelmed. SAP for EC&O reduces this pressure by automating the tasks associated with managing the subcontractors you work with on a daily basis. You can coordinate subcontractor activities, track performance, and ensure timely payment. This enables you to control the quality, cost, and timeliness of work provided by others.

Change Management

The ability to initiate and track changes to project scope, budget, and costs is critical for effective project and risk management. SAP for EC&O helps you manage all changes through a single interface, enabling you to keep track of where each change order stands in the queue and how many are waiting to be approved. The software also creates an audit trail for each change, providing you with critical protection should a customer question any work done.

Performance Management

To know how you're doing with each project, you have to take measure. SAP for EC&O helps you easily evaluate project performance through integrated key performance indicators (KPIs). These can include critical measures such as percentage of completion, productivity, and earned value. With the software, you can also compare these KPIs against your baseline budget and schedule.

Risk Management

To minimize your risk, you need to keep projects on track. With tight project controls that produce early warnings in the form of alerts and exception reporting, SAP for EC&O helps you minimize your risk. Financial KPIs – organized by project or in the aggregate – allow you to stay abreast of potential problems and address them early in the cycle. You can proactively manage your project performance using methods such as earned value and forecasting.

Critical-Path Management

It's not always self-evident which aspects of a project are more important than others. This is why SAP for EC&O supports integrated critical-path management scheduling, which allows you to know in advance which project components are critical in maintaining your completion schedule. With this information, you can dedicate extra resources to potential bottlenecks before schedules slip.

Cost Control

Without strict cost control, you can quickly experience the kinds of cost overruns that can doom any construction project. To help you avoid cost overruns, SAP for EC&O supports integrated cost reporting for all types of costs (planned, committed, actual, and forecast). This is further enhanced with powerful exception reporting that quickly alerts you to potential problem areas before they derail a project.

Project Cash Flow

With SAP for EC&O, your expected cash flow is forecasted across your entire project portfolio, facilitating capital requirements planning and allowing you to evaluate actual-cash position versus forecast. With integral processes, you can generate milestone-based progress billings at the earliest opportunity – optimizing your cash flow and reducing capital requirements.

Project Simulations

It's always best to know ahead of time how any proposed project change will affect schedules and costs down the line. With SAP for EC&O, you can use

powerful simulation functionality to examine multiple what-if scenarios and analyze the impact of possible changes. This helps you decide the most advantageous course of action among many choices.

Contract Closeout

The last thing you want when completing a job is a troublesome handover that leaves a bad impression on an otherwise well-executed project. This is why



SAP for EC&O supports integrated processes that enable you to quickly and easily gather all required documentation and execute a smooth handover to the owner or operator.

Whatever your project management challenges are today or in the future, the project management functionality provided by SAP for EC&O can address them. You can keep costs down, schedules on track, and customers continuously satisfied.

Talent Management

Chances are, the single factor that limits your growth the most is your available human asset pool. The SAP Talent Visualization application by Nakisa – the industry-leading talent management solution – helps you manage and apply resources based on a detailed skills inventory. By recognizing and rewarding your most important and in-demand skill sets, you are better able to maintain key in-house talent. By highlighting pending shortages, you can deal with them in advance by conducting training and skills advancement programs, attracting semi-retired talent, or turning to outsourced alternatives.

Integrated knowledge management tools allow your employees to function at higher expertise levels and master new skill sets rapidly. Collaborative components built into SAP for EC&O allow you to stretch scarce management and subject matter expert talent across multiple projects by assembling virtual project teams with the skills necessary to manage complex projects.

Equipment and Tool Management

Are you getting the maximum ROI from your equipment and tool assets? With the SAP Equipment and Tools Management for Engineering, Construction & Operations (SAP Equipment and Tools Management for EC&O) package, you get unmatched vision and control of these important but often mismanaged assets. From small specialty items to your “big iron,” you know exactly where every tool and piece of equipment is

located. The software also indicates the operational status of each item and when it will be available for reassignment. Improved visibility and utilization typically lead to lower stocking levels and reduced reliance on external rentals. SAP Equipment and Tools Management for EC&O allows you to set internal cost charging and billing according to your requirements. The software automatically maintains and updates information on depreciation, maintenance costs, and profitability from internal rentals. It also tracks equipment uptime – along with scheduled and unscheduled maintenance – and monitors warranty status, sending out alerts that remind managers of maintenance tasks required to keep warranties in good standing. SAP Equipment and Tools Management for EC&O also tracks insurance status and requirements.

Procurement

The project-based procurement methodology employed by SAP for EC&O focuses on bottom-line results, reducing the costs of materials and services acquired in support of your projects. The streamlined procure-to-pay processes require less administrative effort and provide a more efficient purchasing methodology, fewer errors, increased productivity, faster cycles, and lower processing costs. You can use bill-of-material takeoffs from CAD drawings to generate initial material requirements.

By supporting powerful project-based procurement functions that help you generate quick, significant, and sustain-

able cost savings, SAP for EC&O delivers the following benefits:

- Better sourcing decisions that optimize the overall value contribution from your suppliers
- Greater flexibility for capturing, sharing, and continuously enhancing your sourcing knowledge
- Increased ability to manage compliance of suppliers, business units, approvers, and individual buyers
- Streamlined business processes for both buyers and suppliers, allowing increased focus on your value-added activities
- Open architecture and structure facilitating data interchange with your key suppliers' procurement systems
- Quicker turnaround of expedited purchases, thus minimizing project schedule disruptions

Corporate Performance Management

With SAP for EC&O, you can proactively measure performance using a single, trusted data source and meet stakeholder requirements for in-time and in-context information. You can quickly review each project's current and projected future impact on your profit and loss. With an integrated solution, you can also perform key financial performance management activities that support strategy and execution; budgeting, planning, and consolidation; and modeling and optimizing profitability. All stakeholders can easily see how their actions impact your organizational performance.

Turnover to Owners and Operators

Your customers are also looking to you to simplify their asset management efforts. They are (or soon will be) demanding that you transmit facility-turnover data to them in a structured format allowing easier retrieval, queries, and ad hoc reporting of asset information and documentation.

With the BIM functionality supported by SAP for EC&O – coupled with the SAP Visual Information for Plants application by NRX – you can comply with this requirement as a matter of course. By providing engineering, maintenance, operations, and supply-chain users with configurable role-based access to needed information, these tools streamline asset management, maintain interoperability, and deliver a single view of asset master data across the enterprise. Relevant content is accessed through an intuitive user interface that fosters information exchange and collaboration.

Specialized Hardware and Network Support

SAP for EC&O has the flexibility to enable interaction with current and future hardware systems and communication infrastructures to support tasks such as:

- Data interchange with CAD systems
- Radio frequency identification (RFID) and bar-code tags and labels
- Data collection and monitoring systems
- Geographic information systems
- Satellite-linked remote-job-site data entry
- Information and alerts to mobile devices
- Interaction with other XML-based interfaces



With easier access to timely project information, you can generate more accurate quotations and bids, improve your forecasts, respond more effectively to project changes, and increase your visibility across the entire project portfolio.

The SAP for EC&O solution portfolio is powered by the SAP NetWeaver® technology platform. Because SAP NetWeaver unifies technology components into a single platform, you can align your information systems with your business requirements and interact more effectively with new hardware technologies, communications infrastructures, legacy systems, partners, subcontractors, and vendors. SAP NetWeaver combines composition technologies and application functionality to reduce complexity and increase flexibility. You can compose applications using enterprise services, orchestrate business processes and events, manage enterprise information, and deliver applications and content to users more quickly and cost-effectively. As the foundation for enterprise service-oriented architecture (enterprise SOA), SAP NetWeaver allows organizations to evolve their current IT landscapes into a strategic environment that drives business change.

SAP NetWeaver helps you perform a variety of IT practices including:

- **Data unification** – ensures that your master data is accurate, free of duplicated records, and normalized
- **Process integration** – makes disparate applications and business partners' systems work together
- **Business information management** – increases the visibility and reach of structured and unstructured enterprise data

SAP NetWeaver will enhance your business flexibility and competitive advantage by enabling you to optimize your business processes and collaborate more effectively among all key stakeholders.

BENEFITS YOU CAN BUILD ON

DO MORE WITH LESS – AND INCREASE YOUR PROFITABILITY

SAP for EC&O helps you improve virtually every aspect of your construction operation. With easier access to timely project information, you can generate more accurate quotations and bids, improve your forecasts, respond more effectively to project changes, and increase your visibility across the entire project portfolio. And with improved abilities to do more with less, you can complete more projects on time and within budget – thus keeping your customers satisfied and your business more profitable. Many project tasks, moreover, are automated through the use of triggers that are tied to specific contingencies. The end result is you save time and free up your managers to focus on higher-value activities.

SAP for EC&O also supports powerful resource management functions so that you can maximize the utilization of all your resources – including materials, equipment, and labor. You can deploy your key asset – your workforce – much more effectively, while providing the constant support required to ensure retention. The software also gives you the visibility and collaborative functionality you need to enhance relationships with critical stakeholders – including owners and operators, designers, sub-contractors, and supply-chain partners.

From an investment perspective, SAP for EC&O also delivers numerous benefits – starting with a low total cost of ownership. Designed as a tightly integrated set of applications that encompass all aspects of your business life cycle, SAP for EC&O provides

unmatched breadth and depth when it comes to construction-specific applications. This virtually eliminates the need for third-party add-ons. SAP for EC&O also scales to meet your business demands as your organization grows. Instead of replacing your software foundation, you can build off it – thus minimizing your financial risk and ensuring an ongoing ROI that will last well into the future.

A Long-Term Commitment to the Construction Industry

As demonstrated by its reputation, stability, size, and global presence, SAP has established itself as the worldwide leader in the area of enterprise application software. And for more than 30 years, SAP has focused diligently on providing business solutions to the construction industry. The company's construction references total in the thousands, and it has conducted thousands of installations across six continents.

Subject matter experts with hands-on construction experience are on SAP's construction industry solution management team. The company stays intimately involved with the industry through the SAP global industry advisory council for engineering and construction. SAP software constantly supports industry best practices, integrating that support into the SAP for EC&O solution portfolio. In addition, SAP maintains strong collaborative relationships with product and service partners that share its commitment to the construction business.

In the end, this adds up to a unique understanding of the challenges you face in the construction business – and SAP remains committed to using that knowledge to create solutions that help make your business successful.

For More Information

For more information on how SAP for EC&O can help you manage projects, control costs, and grow your business, call your SAP representative today or visit us on the Web at www.sap.com/industries/eng_construct/index.epx.

Summary

The SAP for Engineering, Construction & Operations (SAP EC&O) solution portfolio provides the most comprehensive set of integrated applications, encompassing all key processes of the construction industry. SAP for EC&O helps increase profitability by enabling you to deliver more projects on time and within budget with fewer resources.

Challenges

- Improve project execution
- Mitigate growing operational and financial risks
- Address more complex customer demands
- Increase transparency within and across construction projects
- Improve integration across the IT solution landscape

Supported Business Processes and Software Functions

- End-to-end process integration – Support all aspects of the construction business with a tightly integrated single-source solution
- Cost and quotation management – Utilize historical performance data to improve speed and accuracy of bids and quotations
- Procurement – Reduce the costs of materials and services acquired during project execution
- Equipment management – Control equipment and tool assets with unmatched visibility into relevant data
- Talent management – Identify pending labor shortages, maintain key in-house talent, and empower employees to master new skill sets rapidly
- Opportunity expansion – Strengthen core competencies and develop upstream and downstream expansion

Business Benefits

- Maximize your profitability by enabling efficient project execution
- Manage more projects with less resources by integrating and automating key business processes
- Lower your total cost of ownership by implementing a fully integrated set of solutions
- Reduce your operational and financial risk by implementing tight project controls
- Improve your resource management by increasing your utilization of labor, equipment, material, and subcontractors
- Minimize your risk by ensuring high scalability and eliminating third-party add-on solutions

For More Information

Call your SAP representative or visit us online at www.sap.com/industries/eng_construct/index.epx.

50 088 075 (08/01)

©2008 by SAP AG. All rights reserved. SAP, R/3, mySAP, mySAP.com, xApps, xApp, SAP NetWeaver, Duet, Business ByDesign, ByDesign, PartnerEdge, and other SAP products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of SAP AG in Germany and in several other countries all over the world. All other product and service names mentioned are the trademarks of their respective companies. Data contained in this document serves informational purposes only. National product specifications may vary.

These materials are subject to change without notice. These materials are provided by SAP AG and its affiliated companies ("SAP Group") for informational purposes only, without representation or warranty of any kind, and SAP Group shall not be liable for errors or omissions with respect to the materials. The only warranties for SAP Group products and services are those that are set forth in the express warranty statements accompanying such products and services, if any. Nothing herein should be construed as constituting an additional warranty.