



HINDUSTAN CONSTRUCTION COMPANY

CONSTRUCTING AN EFFICIENT BUDGETING PROCESS

QUICK FACTS

Industry

Engineering, construction, and operations

Revenue

Rs 31,000 million
(about US\$620 million)

Employees

3,000

Headquarters

Mumbai, India

Web Site

www.hccindia.com

SAP® Solutions and Services

SAP® ERP application for project estimation and budgeting process

Implementation Partner

In-house

Hindustan Construction Co. Ltd. (HCC) is an 80-year-old organization with a track record in executing complex infrastructure projects across various sectors. HCC has undertaken challenging projects across India in widely divergent areas such as power, roads and bridges, dams, buildings, and environmental projects. With a growing need for quantity-based budgeting, HCC developed an estimation and budgeting tool based on the SAP® ERP application to suit the requirements of the construction industry.

Key Challenges

- Develop quantity-based budgeting, a key requirement in the construction industry
- Eliminate complexity and errors caused by spreadsheet-based estimation and budgeting
- Enable senior managers to analyze budgets more simply and faster
- Facilitate budget preparation for employees at all organizational levels, including staff working at remote locations

Implementation Best Practices

- Committed support from senior managers to use SAP® software to support best practices
- SAP tools for development, ensuring integration with core (ERP) processes
- Involvement of all stakeholders in project, from conceptualization to implementation
- Pilot rollouts for fine-tuning and user input
- Extensive end-user training at corporate center as well as project locations

Financial and Strategic Benefits

- Reduced time needed by senior management to review and evaluate budgets
- Enabled better management control through accurate comparison of material consumption across projects
- Enhanced budgeting process by eliminating potential for error
- Helped tendering department to accelerate estimation and budgeting

Why SAP Was Selected

- Successful deployment of SAP for Engineering, Construction & Operations solutions with documented benefits
- Management mandate to move budgeting to a robust platform from spreadsheet-based system
- SAP's strong technology expertise and product road map
- Ability to integrate end-to-end business processes from budgeting to execution in a single solution

Low Total Cost of Ownership

- Rapid development and rollout in 6 months
- Complete construction-specific budgeting developed and mapped in existing SAP platform
- Reduced dependency on experienced budget-preparation staff due to solution-driven planning
- Drastic reduction in overall time needed for budget planning
- Rich historic project data added for more accurate prediction of new project estimates

Operational Benefits

Key Performance Indicator	Impact
Overall time needed for planning, budgeting, and management approval per year	-350 staff days
Reduced budget preparation time needed by planners	-50%
Expected project payback period	9 to 12 months



“The budgeting software based on SAP ERP provides vital support to a key business process at HCC. It helps to strengthen the creation, review, and tracking processes for budgets.”

Satish Pendse, Chief Information Officer, Hindustan Construction Company

www.sap.com/contactsap

Breaking Ground with an ERP Project

The construction industry in India has witnessed stupendous growth in recent years due to increased investments in infrastructure and real estate. Hindustan Construction Co. Ltd. (HCC) foresaw this rapid growth and the associated challenges for managing it and decided to automate its processes by investing in the SAP for Engineering, Construction & Operations (SAP for EC&O) solution portfolio.

The company's IT-enabled business transformation initiative “Sankalp” was launched with total commitment from management. Impressively, the implementation was completed in six months and, despite its complexity, came in ahead of schedule. In addition, the company has realized project payback faster than expected. Initially estimated to take five years, payback actually took just three years. Today, HCC has better control of equipment and tools at project sites, improved utilization of its capacity, and optimum execution costs.

With its core processes streamlined and enabled by SAP® solutions, it was crucial for HCC to enhance the effectiveness of its SAP software. From the perspective of HCC's senior managers, the most important controlling tool was quantity-based budgeting and project estimation. HCC's executives decided to develop an estimation and budgeting tool on the SAP software platform – according to the requirements of the construction industry.

Enhancing the Budgeting Process

In the past, preparation of budgets for a new project at HCC required more than 20 days of effort by a senior planner. HCC ran the entire budgeting process manually on spreadsheets; the specialized project management tools available in the market do not have the ability to track and manage quantity-based project budgeting.

Because the HCC senior management team could not get a clear view of how planners derived budgetary figures, extra effort was necessary to establish the accuracy of the prepared budgets. From a budgetary control perspective, the management needed to follow standard norms across all projects – but staff submitted only a variation report for review. With these objectives in mind, the HCC IT team, with active guidance from SAP India, designed and developed the budgeting functionality using SAP solutions and the ABAP™ programming language.

Budgeting for the Future

Today, the entire budgeting process from time and activity planning to quantity allocation through resource requirement and associated costs for carrying out specific activities (in terms of equipment, materials, and so on), is completely calculated by the SAP solution. Reports on projected profitability, cash flow, and balance sheet are now available for management review with minimal manual effort.

The robust platform has helped standardize the budgeting process for more than 30 projects and reduced potential discrep-

ancies associated with projections by individual planners. Planning engineers can now estimate projected-cost deviations based on variations in location and the nature of the project. This improvement enables faster yet accurate decision making for the budget control “cell” and senior management. Because it helps ensure accuracy of data and eliminates chances of exclusions due to human error, the new solution has significantly reduced the cycle time for budget review and evaluation. The control cell can now better focus on establishing cost control measures and providing training to planners and project managers for better project execution.

Buoyed with the internal success of this project, HCC showcased the combined ability of the SAP ERP application and integrated budgeting functionality to several companies in the engineering, construction, and operations industry. Today, HCC's IT team is implementing SAP ERP and the budgeting functionality with multiple companies in the industry. These companies were impressed by both HCC's understanding of their unique business needs and the SAP solutions' ability to meet end-to-end process requirements for all stages – from planning and budgeting right through to project execution.

50 094 159 (09/04) Printed in USA.

©2009 by SAP AG.

All rights reserved. SAP, R/3, SAP NetWeaver, Duet, PartnerEdge, ByDesign, SAP Business ByDesign, 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 other countries.

Business Objects and the Business Objects logo, BusinessObjects, Crystal Reports, Crystal Decisions, Web Intelligence, Xcelsius, and other Business Objects products and services mentioned herein as well as their respective logos are trademarks or registered trademarks of Business Objects S.A. in the United States and in other countries. Business Objects is an SAP company.

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.

THE BEST-RUN BUSINESSES RUN SAP™

