

# IES Engineering

## Envisioning a Better Business System with SAP Business One

**Name:**  
*IES Engineering*

**Employees:**  
200

**Business type:**  
*Engineering and Construction Services*

**Industry:**  
*Oil and Gas*

**Services:**  
*Electrical Engineering  
Mechanical Engineering  
Electrical Construction  
Control Systems and Automation  
Steam Generators  
UL Panel Fabrication  
GPS Services  
Laser Scanning*

**ERP implementation**  
01/01/13

**ERP system**  
*SAP Business One*

**Implemented modules**  
*Finance, accounting, production,  
control, project management*

**Legacy information systems applications**  
*QuickBooks  
Microsoft Project*

In project-based industries like engineering and construction services, time sensitivities as well as the need to share information from multiple sources, makes projects complex to manage. While off-the-shelf project management solutions can help the scheduling and budgeting of resources, they do not provide business insight into key performance indicators needed to measure profitability or to guide strategic planning.

For IES Engineering (IES), a keen interest in continuous improvement and a culture of innovation led the company to seek out an Enterprise Resource Planning (ERP) solution to meet its need for real-time information. By implementing SAP® Business One, IES has a real-time reporting platform that automatically aggregates and shares data from multiple sources across the company. Together with Vision33 as its implementation partner, IES is able to leverage business information to deliver projects on time and within budget while supporting strategic business planning and decision making.

## Company Background

Headquartered in Bakersfield, California, IES provides turnkey solutions for high growth industries including oil and gas with integrated design, procurement and construction. Combining technical expertise with exceptional service, the company attributes its success to understanding its clients' goals; ensuring that each project aligns with their objectives by communicating timely and effective progress reports.

For IES, planned, strategic growth resulted in a merger, increasing not only the company's services offerings but also the workforce. Operating from a corporate office and satellite construction offices, IES continues to grow, expanding its portfolio of engineering and construction services, forecasting even more growth.



# A Complex System of Challenges

As a Make-to-Order (MTO) company, IES manages hundreds of projects at a time: resulting in the need for project management controls and access to business information to provide strategic direction to the company. "We were using off-the-shelf software and a combination of very elaborate spreadsheets that could only capture very minimal data. Extracting information was time consuming and limited in use," recounts Mark Weighall, Chief Financial Officer, IES.

IES would have to overcome several key challenges if it was to meet its goals for future growth.



## Manual Data Entry

Prior to IES' ERP implementation, labor intensive, manual data entry resulted in wasteful data duplication across IES' multiple systems and databases. This manual data extraction lent itself to piecemeal reporting that lacked the standardization required for detailed analysis. Before implementing an ERP solution, IES was faced with completing their accounting manually, where employees entered their hours into a weekly timesheet and then hand-keyed them into QuickBooks - resulting in multiple entries with multiple opportunity for user error.



## Limited Business Information

IES recognized a need for a scalable solution to meet growing business needs. Previously, IES utilized the QuickBooks accounting package coupled with spreadsheets from Microsoft Excel and Microsoft Project. The challenge for the company was that the system would capture minimal data and extraction was manual, putting a strain on resources. The limited accounting resources resulted in a stalled opportunity for business growth due to the bottle neck of manually processed invoices.



## Identifying New Opportunities

For IES, one of the key challenges that manifested at the financial level were the technical limitations of the system that restricted what and how information could be extracted for internal or external use. The company needed project budgets that, at pre-determined intervals weekly, monthly, and annually would measure how the project performed against that budget. This system is contingent, however, on the accuracy of the business system in place to provide management with the information that is necessary to operate its business.

# Envisioning a Better Business Solution

At IES, the company culture had always been one open to change with management looking to continually innovate how they do business. As the company started to outgrow its legacy business software, management realized that there were better solutions on the market. By implementing an ERP application, it would be possible to collect and transform business data into useful business information to help with business planning. Having evaluated alternative ERP solutions on the market on the basis of cost benefit and support for project management, IES chose SAP Business One.

## The Right Tool for the Job: SAP Business One

Designed for small to mid-sized enterprises (SMEs), the SAP Business One application provides comprehensive support for each functional area of IES; consolidating data from project management, finance, sales, customer relationship management, and operations. The highly adaptable solution is also capable of customizations to better map to the industry specific needs of its clients. Best understood as a business systems foundation, SAP Business One supports the backend of IES' operations and enables the company to align processes with the company's strategic objectives.

## SAP Business One System Modules



## SAP Business One Support for Engineering Services, Project Management and Construction

- ✓ Estimating and building plans
- ✓ Accurate budget vs. actual management reporting
- ✓ Gantt chart for project planning
- ✓ Capacity planning (allocation of departments, labor and machines)
- ✓ Accurate available-to-promise reporting
- ✓ Just-in-time material planning and procurement
- ✓ Increasing project margins
- ✓ Milestone billing and down payment
- ✓ Web-based labor reporting
- ✓ Comprehensive project planning



*“Vision33’s technical resources and strategic recommendations based on our company goals were critical in the success of our SAP Business One implementation.”*

*– Mark Weighall, Chief Financial Officer, IES.*

## Dedicated ERP Partner Resource - Vision33

Having selected SAP Business One for its new business management solution, it was critical to establish how to achieve their business objectives through the solution. This is not always an easy task for SMEs that may not have the experience or ability to envision how the system can be used to enhance operations and improve profitability. To better understand how the company could leverage the business intelligence from SAP Business One to guide business growth, IES partnered with SAP gold channel partner Vision33.

For IES, the value of partnering with Vision33 for its ERP implementation is in the access to technical resources that provide insight into how SAP Business One can be customized to align with the company’s business objectives. While IES had achieved competency with their ERP solution in a short time frame, Vision33 provided direction and matched the organization’s business goals with recommendations and alternatives along with a clear explanation of cost benefit of each during the critical implementation stage of the ERP adoption. “It’s one thing to develop a business strategy to guide the company into future success, but it’s another to answer how does ERP get us there? SAP Business One is a valuable application that enables us to achieve that vision,” explained Mark Weighall, Chief Financial Officer, IES. “Having the technical resources of Vision33 to take our company goals and provide recommendations and alternatives resulted in a cost benefit that was critical to our successful implementation.”

# Key Benefits

Once SAP Business One was implemented, the benefits were immediate. With Vision33 as its implementation partner, IES was able to align strategic management objectives with the solution to overcome growth challenges. Now IES manages its operations more efficiently, leading to cost leadership and service differentiation. In an industry where effective project management and client satisfaction are the primary concern, SAP Business One generates a competitive advantage against other engineering service firms. Key benefits experienced by IES through the implementation of SAP Business One include:

## 1 Project Specific Controls

Through the integration of project management with their ERP system, project data is fed into a system weekly producing real-time reports to management. Basing management decisions upon timely, accurate, and complete information has enabled IES to make ad hoc adjustments to projects on a daily or weekly basis to ensure that it is on schedule and that it will meet client expectations.

In the past, an employee would dedicate 30 to 40 hours a week to provide reporting on fewer projects a week to keep management up-to-date on client projects. Now hundreds of simultaneous projects can be reported on in real time within a few minutes. This has enabled the company to reallocate resources and make better project decisions.

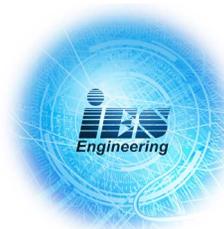
Project specific controls enable management to gauge the success of each project throughout its lifetime – a key point where IES sees value. “Project controls are a focal point for financial management; being able to monitor the progress and status of a project throughout its life,” says Mark Weighall, Chief Financial Officer, IES. “We are now able to capitalize on ERP, by generating reports from the database, using it as a platform to access information about each project, far superior to what other competitors can at less cost.”

## 2 Efficient Project Management

More than 40 percent of IES operations are focused on construction projects. For the company’s construction managers, SAP Business One has made a huge difference in efficient management of project resources, budgets, and schedules. By integrating project management with their ERP system, data is fed into the system weekly, and made accessible to obtain real-time access to the information. Basing management decisions upon timely, accurate and complete information has enabled IES to make ad hoc adjustments to projects on a daily or weekly basis to ensure that it is on schedule and will meet client expectations.

## 3 Building a Competitive Advantage

The value in having implemented an ERP solution is not only visible to management but also to its customers. When demonstrating to a prospect client how projects are managed at IES, the company is able to evoke confidence in its clients; serving as a point of differentiation from other competitors. This is critical since providing a high level of transparency in project management is expected in the industry. Without an ERP system, generating project specific reports from elaborate spreadsheets and disparate business management software can take upward of two weeks.



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# 4

## Access to Real-Time Information

SAP Business One provides a real-time look at high level finance numbers, cash flow numbers, projects and resources and provides the ability to focus on strategic planning of their organization without becoming overwhelmed with day-to-day operational issues.

This information can provide key roles within the organization with what they need in order to affect timely change in the organization. Now managerial questions like: “what was resource utilization for last week or yesterday?” or “What was the total number of billable hours generated this week?” Managerial questions like these are now possible with an ERP system.

Additionally SAP Business One provides a powerful platform to manage the entire business from distribution and manufacturing to project management; giving the company ability to create detailed high-level reports using queries. Resource management is easier to plan for now that employees can enter data fully integrated with a payroll system in web-based timesheets. Data from here is then seamlessly shared with administration, including non-project tasks as well as project-specific costs, eliminating double entry and discrepancy between its legacy systems.

## Summary

With the right software and implementation partner, IES ensures that not only are projects completed within budget and within scope but also that they have been profitable for the company. With visibility into their operations through timely real-time reporting, IES has a flexible, complete solution that will enable the company to easily scale to meet its envisioned growth in the future.

- ✓ Access to real-time information and direct business strategy
- ✓ Ability to manage hundreds of projects on time and budget for greater client satisfaction
- ✓ Custom real-time reporting system aggregates data from across organization providing high level reports for in depth analysis of cash flow, resource utilization supporting better decision making or project controls and project tracking
- ✓ Timely, accurate, and complete information leads to operational effectiveness and creates a competitive advantage
- ✓ Access to dedicated technical resources to align business objectives with software solutions
- ✓ Monitor the progress and status of a project throughout its life, for greater project success
- ✓ Reporting platform results in superior offering at less cost than competition

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