



## CASE STUDY: SAP ERP implementation for a manufacturing company

### Customer Profile

The client for this case study is a manufacturer of public transit fare systems for point of sale, validation, as well as fare media, audio, and vending equipment. The manufacturer is located in the Chicago metro area, and has one manufacturing facility and distribution center. Annual revenue for the company is approximately \$150M.

### Business Need

As the company grew, it got to the point where the legacy systems were no longer providing the necessary visibility to effectively run their business. Too many different systems were used to manage the various processes, and these systems were not integrated with each other. This led to contradicting data sets, and inaccuracies in inventory, financial statements, as well as controlling and profitability analysis.

The client evaluated several ERP platforms. Due to the vast amount of integration between the various modules, and the need for flexibility of the system because of their complex discrete manufacturing process, they decided to proceed with SAP.

### Project Scope

End-to-end implementation of SAP ERP 6.0 for a discrete manufacturing process, including:

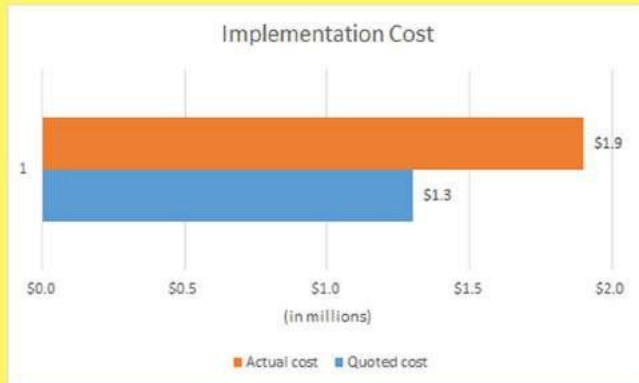
- Finance & Controlling (FI/CO)
- Controlling & Profitability Analysis (COPA)
- Sales & Distribution (SD)
- Service Management (SM)
- Materials Management (MM)
- Warehouse Management (WM)
- Production Planning (PP)
  - Discrete Manufacturing Process
- Variant Configuration (VC)
- Plant Maintenance (PM)
- Human Capital Management (HCM)
- ITS Mobile



## Quoted vs Actual

### Implementation Cost

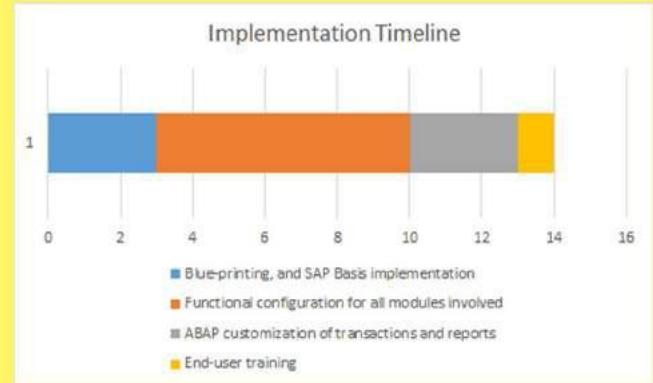
Based on the original scope of the project, Mygo Consulting quoted the implementation at \$1.3M. However, due to change orders throughout the life of the project, the scope expanded, and the actual implementation cost was \$1.9M.



### Implementation Timeline

The proposed timeline for this implementation was estimated at 14 months, and the goal was met in spite of changes in project scope.

Here is a summary of the various project phases:



## Challenges & Solutions

This client has a particularly complex discrete manufacturing process. The fare systems they sell vary based on order and are highly customizable based on customer needs. While the materials used to manufacture these units are fairly consistent, the combination of components can differ significantly from one order to the next. Our client not only needed SAP to accommodate this flexibility, but also a standardized business process for controlling and profitability analysis.

Mygo Consulting overcame this challenge by leveraging variant configurations (VC) to give the client the flexibility they needed in the manufacturing process. Variant configuration is particularly helpful in an environment where there are a large number of combinations of components in the finished product.

Another challenge was integration of the pre-existing serial number business process with the implementation. Every finished product has an individual serial number. Controlling and profitability analysis need to integrate this serial number throughout the manufacturing process. Materials get assigned to serial numbers, and need to be reconciled. Finally, the serial number needs to be validated by the system prior to creating an outbound delivery.

A large amount of data had to be migrated from the legacy systems into the various SAP modules.

Furthermore, this client uses many 3rd party manufacturers who supply components to them, and required integration of these 3rd party suppliers into their SAP infrastructure.

## Required Resources

Total Resources: 24

- On-Site Project Manager – 1 (PMP, Technical & Functional SAP Expert)
- On-Site Functional Consultants
  - Finance, Controlling & Profitability Analysis – 2
  - Sales & Distribution – 1
  - Materials Management – 1
  - Production Planning – 1
  - Quality Management – 1
  - Warehouse Management – 1
  - Plant Maintenance – 1
  - Human Capital Management – 1
  - Variant Configuration – 1
  - Data Migration - 2
- Off-shore Technical Consultants
  - ABAP – 11

## Implementation Process

The following is a brief synopsis of Mygo Consulting's implementation process:

1. Determine client side department heads, and subject matter experts (SME's).
2. Kick off meeting with all department heads, and SME's.
  - a. Review of implementation process, and timeline (GANTT Chart).
  - b. Discuss deliverables for the various stage gates in the implementation.
3. Blue printing
  - a. Analyzing business processes
  - b. Linking business processes
4. Configuration of all modules
5. Functionality gap analysis
6. Customization of transactions and reports
7. Execution
  - a. Training
  - b. Data migration planning
8. Data migration from legacy systems
9. Go-live

## Current System Landscape

- SAP ERP 6.0
  - DEV
  - QAS
  - PRD
- Hosted On-site
  - Database Server
    - Microsoft SQL Server
  - Application Server
- 120 SAP Users
- Implemented Modules
  - Finance (FI)
  - Controlling & Profitability Analysis (COPA)
  - Sales & Distribution (SD)
  - Production Planning (PP)
  - Discrete Manufacturing
  - Materials Management (MM)
  - Plant Maintenance (PM)
  - Quality Management (QM)
  - Human Capital Management (HCM)

## Result

By using a team of experienced consultants with cross-functional experience in multiple modules, Mygo Consulting was able to deliver a high quality implementation with minimal post Go-Live troubleshooting. Given the vast amount of integration, it is important to have experienced consultants who understand not just their specific modules, but also how those modules integrate with other modules in SAP.

Business interruption on Go-Live was minimal, and within two weeks, the client teams had developed a new routine in their everyday business processes. Mygo Consulting soon transitioned from the implementation role into a support role. Due to the success of the implementation, the client selected Mygo Consulting to support the SAP system on an ongoing basis.

Since completion of the implementation, Mygo Consulting has transitioned into supporting, daily troubleshooting and improvement efforts.