Project Management for Manufacturing

By Dusty Alexander
President & CEO
Global Shop Solutions

Global Shop
SOLUTIONS
ERP SOFTWARE

We simplify your manufacturing.™

Project Management

When manufacturing large, complex products, few activities are more important than job costing. Without an accurate assessment of costs, it can be difficult to estimate and quote future jobs, avoid material and labor overruns, and achieve the desired profit margin for each project.
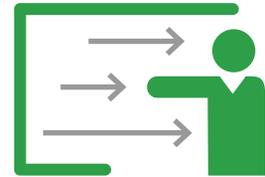
For most manufacturers – even those with ERP systems in place – large projects involving hundreds of work orders and multi-level BOMs with thousands of parts can present a cost-accounting nightmare. You either have to print volumes of reports to organize and track costs, or you have to write a custom Crystal Report to pull together all the data needed to analyze the costs of the project. Both approaches require significant investments of time and resources. And both are prone to human error, redundant data entry, and other inefficiencies that can compromise the integrity of the data and drive up costs.

NOW THERE'S A BETTER WAY – GLOBAL SHOP SOLUTIONS' Project Management application.

Designed to help you control expenditures on large, lengthy jobs, Project Management provides a powerful tool for identifying and tracking your true costs while monitoring the status of every aspect of a project. With Project Management you can:

- Consolidate costs and data from multiple work orders, quotes, sales orders, purchase orders, invoices and shipments

- Easily compare data between original budgets, estimates and actual performance

- Take accurate project costing "snapshots" at any given point in time

- Recognize revenue on an ongoing basis to minimize accounting/profitability peaks and valleys

Project Management does all this – and more – from one intuitive, easy-to-use screen. Moreover, it tracks all the data in real time so that you can make critical scheduling, resource allocation, and profit margin decisions in the moment rather than weeks or even months after the fact.

GLOBAL SHOP SOLUTIONS' PROJECT MANAGEMENT APPLICATION TRACKS ALL THE DATA IN REAL TIME SO THAT YOU CAN MAKE CRITICAL SCHEDULING, RESOURCE ALLOCATION, AND PROFIT MARGIN DECISIONS IN THE MOMENT.

Who Should Use Project Management

Designed for companies with very large projects that run for extended periods of time, Project Management is ideal for:

- Engineer-to-order environments
- Companies that engage in concurrent engineering
- Products/projects with long lead times
- Companies that frequently require multi-level BOMs

Project Management can also be used to track costs on external projects not associated with a work order or invoice. For example, many Global Shop Solutions customers use Project Management to track engineering time, materials and other costs when making R&D prototypes. Others use it to track the cost of ISO certification procedures, or to monitor labor and material costs when building their own additions to their manufacturing facilities.

To help you manage large projects, Project Management offers the ability to:

- Create user-definable project groups
- Group similar work order operations for reporting purposes
- Create project budgets by work order or project group
- Analyze estimate versus actual over the life of the project

Additionally, Global Shop Solutions' Document Control features, which ensure you have the correct drawings, customer specs, and other job-related documents, are available by project and phase. And Project Management's extensive drill-down capabilities allow you to view and analyze costing data at any level of detail you require.

How It Works

To track costs as a project unfolds, Project Management breaks down the production process into phases and groups. A phase is usually related to a work order, and tracks costs related to a specific time frame, such as engineering, manufacturing or on site installation.

For example, a company building a project that requires a multi-level BOM with hundreds of work orders, might set up their projects phases as follows:
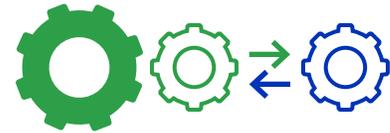
- Phase 1 – ENG – The jobs to design and daft the assembly
- Phase 2 – 001 – The jobs to build components level 1
- Phase 3 – 002 – The jobs to build components level 2
- Phase 4 – 003 – The jobs to build components level 3
- Phase 5 – 004 – The jobs to build components level 4
- Phase 6 – 00N – The jobs to build components level N

A company managing different materials costs would set up their phases in a different manner:

- Phase 1 – SSTL – The jobs to track stainless steel material cost
- Phase 2 – ALUM – The jobs to track aluminum material cost
- Phase 3 – CSTL – The jobs to track carbon steel material cost
- Phase 4 – IMPT – The jobs to track import material costs
- Phase 5 – MFG – All other jobs needed to build the assembly

Groups are subsets of phases, and are related to the sequences on a work order. In the manufacturing phase, for example, different groups might include cutting, welding, painting, and other processes required for that specific phase. The engineering phase would include drafting, obtaining customer drawings and other related activities. As with phases, Project Management tracks the specific costs associated with each group.

Project Management is highly tailored, allowing you to set up the phases and groups to meet your shop floor environment. Global Shop Solutions consultants can help you build in some of the default settings for your phases, but at all times you have the flexibility to define the phase and group parameters to suit your project needs.

PROJECT MANAGEMENT IS HIGHLY TAILORED, ALLOWING YOU TO SET UP THE PHASES AND GROUPS TO MEET YOUR SHOP FLOOR ENVIRONMENT.

More Than Just A Costing Tool

In addition to unprecedented costing accuracy, Project Management helps to bring large projects to successful completion through:

- **Forecasting.** At any time in the project, Project Management can assess work in progress and forecast whether you're on track to complete the job on time and within budget. When a project falls behind schedule, Project Management provides the real-time data you need to get them back on track again. For example, suppose you've estimated 500 hours for a project, but at 480 hours the job is far from complete. Project Management can forecast how many additional hours it will take to complete the job and the associated costs.

- **Problem solving.** When problems arise during the course of a project, you can launch Global Shop Solutions' Advanced Planning & Scheduling (APS) application directly from Project Management – without having to exit the screen or open up another part of the system. Upon opening APS, it will automatically display every work order associated with the project. From there, you can easily drill down to determine the reason for bottlenecks, delays and other problems having to do with scheduling and materials.

- **Revenue recognition.** From an accounting standpoint, one of the biggest challenges with lengthy projects is balancing costs with revenue. With Project Management, you can recognize revenue on a monthly basis (by product line, based on a ratio of actual versus estimated costs) to ensure that costs and revenue are appropriately aligned throughout the life of the project. This enables accounting to close the books quickly and accurate at month's end, and helps to stabilize the P&L statement – an important consideration for companies that rely on government contracting work.

Real-Time Management Decisions

The biggest danger with large projects is not knowing for weeks or months that you're behind schedule, over budget, and losing money on the job. Project Management brings together all costing data into one easy-to-use screen, providing a single point of entry from which you can drill down to any level of detail. At any point in the project, you can determine your costs with remarkable accuracy and take corrective action to get back on track with your scheduling, budgeting and margins.

When the project is complete, you can quickly determine total costs for the job and, more important, understand how and why you ended up with those costs. Armed with this data you can more accurately quote future jobs, negotiate better pricing with customers, and keep labor and materials costs under control. The senior manager's most powerful costing tool, Project Management provides the data you need to make informed business decisions that keep your business profitable and growing.

ABOUT THE AUTHOR

Dusty Alexander is President and CEO of Global Shop Solutions. Since joining the company in 1990, he has played a leading role in new product development, with a special emphasis on customer-driven applications and customer success.

Dusty has been instrumental in Global Shop Solutions' growth and development as an innovative leader in the ERP software industry. Under his direction, the Company has increased sales every year, and has grown into one of the largest privately held discrete manufacturing ERP software solutions companies in the United States.

Dusty is actively involved in our customers' increased benefits derived from the software. Through his dedication, Global Shop Solutions has earned a reputation for outstanding customer service, superior training and highly successful product implementations.

To learn more about Project Management can help you manage costs and protect margins on large, lengthy projects, call 1.800.364.5958 or visit www.globalshopsolutions.com.

Global Shop
S O L U T I O N S
E R P S O F T W A R E

We simplify your manufacturing.™