

# The Great 8 of Manufacturing and Why You Need Them

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Today's manufacturing customers expect fast turnaround times, competitive pricing, and on-time delivery of quality parts with every job. Achieving these outcomes requires a variety of capabilities called the "Great 8 of Manufacturing." These consist of the ability to:

1. Move parts through the shop quickly and efficiently
2. Schedule and deliver on time
3. Know your costs
4. Maintain accurate inventory
5. Control your labor costs
6. Get quality right
7. Serve your customers the way you want
8. Grow sales

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Falling short in even one these areas can impact your ability to deliver what customers want. Problems in several areas make it extremely difficult to compete against manufacturers that achieve all of them on a consistent basis. These Great 8 elements are inextricably linked to each other, and low performance in one area negatively impacts all the others.

If you consistently struggle with scheduling, on-time delivery rates suffer. When you can't accurately determine costs, incorrect quoting can cause you to lose jobs. When shop floor personnel can't count on having the correct inventory on hand, jobs get delayed, costs go up, and promised due dates are missed. All of which reduces your ability to go head to head with leaner, more efficient competitors.

Failure to attain the Great 8 of Manufacturing often results from using outdated manual data

collection to manage the shop floor. If you're still filling out hand-written timecards, using manual spreadsheets to schedule jobs, and tracking inventory by hand, don't expect a high degree of accuracy in these areas. If you regularly have to schedule overtime or extra shifts to meet customer deadlines, labor costs will spiral out of control. If sales reps frequently walk down to the shop floor to hand-count parts in inventory before confirming a job, you won't be able to serve customers the way you want.

Perhaps the worst outcome is the atmosphere and culture that pervade the shop when key elements of the Great 8 are missing. When the same problems occur over and over again, frustration increases, tempers can rise, and a culture of blame rather than accountability takes over. Is it any wonder that productivity, performance, and profitability take a nosedive in such an environment?

# Quote to Cash in One Complete ERP System

Making the Great 8 a way of life in your manufacturing business starts with Global Shop Solutions ERP software. Designed for small to medium-size manufacturers, this powerful business management tool digitally tracks, measures and organizes performance data in every area of your shop floor. You can instantly see what's happening throughout the shop floor in real time and access the data needed to make smart decisions for your business.

A comprehensive ERP solution, Global Shop Solutions touches all critical aspects of the shop floor so that everything gets better. Automating manual processes enables all employees to work more efficiently and become more productive. Costs and waste decline while sales, margins and product quality go up. You can promise due dates to customers with confidence. Everything comes together in one integrated system so that you really can deliver a quality part on time every time.

Global Shop Solutions delivers these outcomes through a complete package of over 25 software applications. Some of the most used applications include:

- [Planning & Scheduling](#)
- [Inventory](#)
- [Job Costing Accounting](#)
- [Quality Control](#)
- [Shop Floor Data Collection](#)
- [Sales](#)
- [Customer Relationship Management \(CRM\)](#)

Global Shop Solutions is constantly adding new features that enable manufacturers to keep up with the increasingly interconnected Internet of Things (IoT). Some of the most recent IoT enhancements include [Electronic Data Interchange \(EDI\)](#), [CAD Interface](#), and [Nesting Interface](#) software. These offer phenomenal time savings and cost reductions by digitally importing job and customer information that would otherwise require time-consuming manual data entry.

To explore all that Global Shop Solutions has to offer, browse our [complete list of software modules](#).



# How the Great 8 Transforms Your Manufacturing From Good to Great

A manufacturing shop floor is like a jigsaw puzzle. All the different pieces have to come together at the right place at the right time to get the job done. The more complex the job, the more pieces you have to contend with. Each element of the Great 8 represents a key piece in the manufacturing puzzle. If even one is missing, you end up with a big hole in the puzzle. Here's how they work.

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## 1 Move parts through the shop quickly and efficiently.

Having access to real-time production data facilitates fast, efficient movement of jobs through the shop floor. When you can schedule based on your true capacity, jobs get started and completed on time. Machinists know which jobs to work on now and next, and no longer waste time hunting down routers, BOMs, inventory lists or other job information in order to get started.

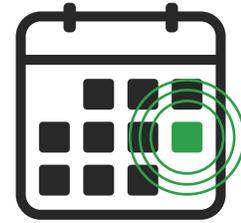
Having the right inventory on hand avoids the delays that can occur when waiting for parts to arrive. Electronically importing CAD/CAM, nesting, and customer data eliminates time-consuming double data entry. When bottlenecks occur, the data tells you why it's happening, allowing managers to take prompt action to resolve them. When you know the up-to-the-minute status of all jobs in production, they get done on time with the quality your customers expect.

## 2 Schedule and deliver on time.

Accurate scheduling and on-time delivery go hand in hand. Global Shop Solutions' Advanced Planning & Scheduling (APS) module puts you in control with fully automated scheduling. Enter the job and machine data into the router and other modules, and the system automatically schedules the job for you in minutes, transforming one of the most difficult and time-consuming tasks into a model of lean efficiency.

With APS, you can finitely or infinitely schedule, balance your workcenter loads, and engage in advanced labor scheduling. When customer changes require last-minute adjustments, you can forward, backward and global reschedule with ease. APS also displays how moving a job around will impact the entire schedule.

When multiple jobs get stacked on top of each other due to limited capacity, APS reduces or eliminates these bottlenecks by scheduling the right job on the right machine at the right time. Instead of "safe" due dates, you can tell customers when their jobs will be complete and know you can deliver on time.



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**INSTEAD OF "SAFE" DUE DATES, YOU CAN TELL CUSTOMERS WHEN THEIR JOBS WILL BE COMPLETE AND KNOW YOU CAN DELIVER ON TIME.**

# 3 Know your costs.

Accurate job costing is one of the most important activities in a manufacturing business, affecting everything from estimating and quoting to cash flow and profit margins. It's also one of the toughest to get right – unless you track and manage your costs with ERP software.

Global Shop Solutions automatically assigns the correct cost to all labor, parts and materials that go into a job so you know the exact costs as soon as it is complete. Our innovative FLOOM product determines individual costing components by measuring freight, labor, overhead, outside services, other and material. With this data, you know exactly how much labor and materials went into a part or job.

Knowing your costs improves estimating and quoting accuracy and lets you generate sales and work orders in minutes rather than hours. It helps determine your most profitable products and gives your business a competitive edge over those that can only approximate their true costs.



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# 4 Maintain accurate inventory.

Delays in production often result from disorganized inventory management. Global Shop Solutions provides real-time inventory data from one point of entry for precise management of materials needed for production.

Knowing exactly what you have in inventory and where eliminates the need to hunt for parts to get a job started. Lot bin tracking enables complete traceability of parts. Physical inventory counts are fast and accurate, and often not needed. Paying expedited shipping charges for incoming materials becomes the rare exception rather than a common occurrence. Automatic reorder points ensure materials get ordered before stock runs out, and jobs are never late due to lack of raw materials.

With ERP, you'll never miss another order for materials needed to keep your production line moving.



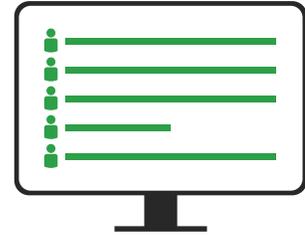
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**LOT BIN TRACKING  
ENABLES COMPLETE  
TRACEABILITY OF PARTS.**

# 5 Control your labor costs.

ERP software provides complete visibility of one of the biggest line item costs in your business – direct labor. Workers electronically log on to each job and the system precisely measures estimated versus actual labor by job or part. When variation occurs, you can determine whether the problem lies with the machine, the machinist, or other factors. Daily productivity reports help identify problem areas and trend variances so you can take corrective action before they become major problems.

Accurate scheduling reduces overtime costs because jobs get completed on time. Downtime costs decline because shop floor personnel always know which job they should be working on. Separately tracking indirect labor categories helps control those with the highest costs. Whether direct or indirect, Global Shop Solutions provides a detailed picture of what employees are doing on and off the job so you can allocate your labor dollars appropriately.



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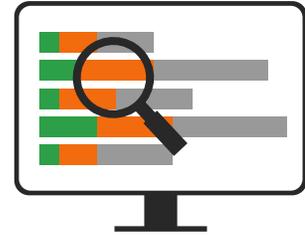
**DAILY PRODUCTIVITY REPORTS HELP IDENTIFY PROBLEM AREAS AND TREND VARIANCES SO YOU CAN TAKE CORRECTIVE ACTION BEFORE THEY BECOME MAJOR PROBLEMS.**

# 6

## Get quality right.

You can't improve quality unless you can track, measure and analyze the sources of quality problems. Global Shop Solutions' customizable reporting and statistical analysis tools allow you to track and measure quality information in real time. Nonconforming alerts help identify failure trends as they occur on the shop floor, making it possible to identify and correct bad parts before they go out the door rather than after.

The Document Control™ module makes it simple to manage quality documentation by consolidating all internal and external documents into one central area. Simply scan each document, assign it a location, and you're good to go. You can also link technical drawings and job spec sheets to routers, attach inspection and gauge calibration documents to work orders, and attach imported CAD/CAM .pdf files to specific part numbers. No matter what type of quality documents or level of traceability you need, ERP provides an effective solution for managing all your quality information.



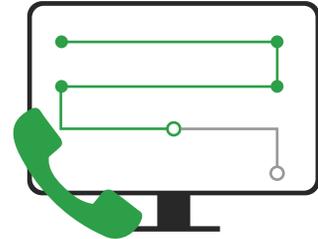
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**QUALITY CONTROL  
TOOLS ALLOW YOU TO  
TRACK AND MEASURE  
QUALITY INFORMATION  
IN REAL TIME.**

# 7 Serve your customers the way you want.

In today's mobile manufacturing environment, fast, responsive customer service creates a real competitive advantage. CRM lets you provide the level of service and transparency needed to build profitable long-term relationships with today's demanding customers by managing and servicing them with accurate, real-time data.

Instantly check the status of work orders and open quotes with complete job, part and customer data from one screen. Easily create quotes, generate work orders, and make changes to existing work orders in minutes. Provide answers to customer inquiries in one phone call instead of spending hours chasing down information. Available in the palm of your hand, Mobile CRM helps you deliver superior customer service from the office or on the go.



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**PROVIDE ANSWERS TO  
CUSTOMER INQUIRIES  
IN ONE PHONE CALL  
INSTEAD OF SPENDING  
HOURS CHASING DOWN  
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# 8

## Grow sales.

ERP software provides a complete business management system designed to grow sales. When you schedule jobs more efficiently, it lowers setup and labor costs, improves throughput, maximizes capacity, and increases on-time delivery. These outcomes improve estimating and quoting so you can give customers the best possible price. Efficient scheduling also reduces the time spent putting out fires on the shop floor, allowing more time to focus on generating new business and increasing sales.

As a manufacturing business, the ability to deliver on your promises is your biggest selling point. When you give customers a due date and follow through every time, it builds trust. When you deliver quality parts on time every time, sales go up. If you're struggling to grow sales, let ERP run your shop floor so you can focus on developing new ideas, new products, and new customer relationships.



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**WHEN YOU DELIVER  
QUALITY PARTS ON TIME  
EVERY TIME, SALES GO UP.**

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### Wondering How Your Business Is Doing Overall?

Take the [Manufacturing Health Test](#) to identify how Global Shop Solutions can help make the Great 8 a way of life for your business.



## ABOUT THE AUTHOR

**Mike Melzer** serves as VP of Operations for Global Shop Solutions and is a 20-year veteran of the company. As a graduate from The Colorado School of Mines, Melzer is an unparalleled leader, coaching the industry's top talent to ensure the continued success of Global Shop Solutions customers.

If you're ready to gain the Great 8, call Global Shop Solutions at 1.800.364.5958 or [set up a demo online](#).