why ERP alone is not the answer

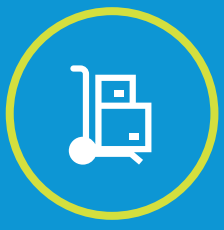
planet together

WHY ERP ALONE IS NOT THE ANSWER

The problems you face as a manufacturer aren't what they used to be. You're growing, and that's a good thing, but delivering what your customers want when they want it is getting harder. You don't have ready visibility into your capacity and order status. You make production plans and customer commitments based on tribal knowledge and guesswork instead of numbers. Your facility is having difficulty adjusting to demand changes, and your sales team is always pushing for faster delivery dates. You're at the point where you need relief, and you're realizing that your ERP software alone is not the solution to these problems.

As an integrated information management system, ERP is effective at processing orders and producing financial reports, but it's not designed for capacity management and resource optimization. The transactional nature of ERP systems doesn't give you the flexible visual and scenario-driven tools to manage and overcome bottlenecks in your process. Below, we'll take a look at what any agile manufacturing company needs, and how an ERP system may not meet those needs as well as you think.

The needs of an optimized facility



STRATEGIC CAPACITY MANAGEMENT DECISIONS

MINIMIZED LABOR & INVENTORY COST

OPTIMIZED PRODUCTION SCHEDULES

QUOTING & MEETING ORDER DELIVERY DATES

MAXIMIZED THROUGHPUT & REVENUE PREDICTABILITY

PROBLEMS WITH ERP

MINIMIZED LABOR & INVENTORY COST

Keeping track of employees, order delivery dates and inventory helps deliver the best schedule. ERP can help collect the information, but won't adapt to unexpected changes.

- Reactive (instead of proactive) work assignment
- Cannot measure the impact of absent workers
- Lack of pre-planning for long changeovers

OPTIMIZED PRODUCTION SCHEDULES

Creating a truly optimized schedule requires at least one full time planner, and even then, schedules are only as good as the information planners have at that moment.

- ERP cannot flexibly model capacity constraints, giving you unrealistic schedules
- Laborious work creating schedules prevents planners from evaluating better alternatives
- Schedules are not precise enough to hold manufacturing accountable to strict adherence and root-cause analysis of deviations is difficult
- ERPs have traditional forward/backward scheduling algorithms that are too limited to optimize complex trade-offs between production efficiency and customer service

STRATEGIC CAPACITY MANAGEMENT DECISIONS

A shop floor is bound to have bottlenecks and constraints. Though ERP can analyze that information at a high level, it does not empower you to capture critical details and simulate other options.

- Cannot accommodate changeover times and constraints
- Difficult to create what-if scenarios
- Inconsistent materials & capacity planning

QUOTING & MEETING ORDER DELIVERY DATES

Too much padding in delivery time results in lost revenue, while too little results in late deliveries. ERP does not adjust lead time to changing priorities.

- Blind order changes and expediting lead to delays for other customers
- Material delays or capacity problems cause orders to be shipped late without visible warning or bottleneck identification
- Communication between departments is delayed, resulting in priority disconnects and lost time

MAXIMIZED THROUGHPUT & REVENUE PREDICTABILITY

A lean process is an efficient process, but getting there is part art and part science. Scheduling with agility around your constraints maximizes throughput.

- ERP does not optimize schedules, resulting in missed productivity goals
- Bottleneck resources are starved due to material or labor shortages
- Unnecessary frequent changeovers waste time on key resources
- Monthly revenue goals are missed and end-of-month becomes a scramble to get product out the door