

# **Beyond the Abacus:**



*How Cost Estimating Software Saves  
—and Makes  
—Your Business More Money*

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*If you are still estimating manually (based on experience), your manufacturing business could be leaving serious money on the table.*

*Discover why embracing cost estimating software technology can mean the difference between a good year and a great one.*

### **The Ultimate Challenge— *Winning the Bidding War without Losing the Profit Margin***

It's one of the more frustrating tests that any manufacturing firm must pass consistently to remain relevant and maintain growth: The ability to submit a solid bid to potential prospects that is both competitive in the industry and realistic in terms of profit. Simply 'winning' the job is no longer enough—there must be an acceptable range of potential revenue to make the job worthwhile.

However, winning the job and finding that acceptable revenue range within a myriad of project requirements is a difficult task, at best. Professional experience and past project comparisons can only take an estimator so far, as ever-changing variables in materials acquisition and labor costs can turn project fees on a dime. Not to mention the fact that human errors in estimating, no matter how small, can have a radical effect on your customers' satisfaction, their purchasing decisions, and your business' bottom line.

If profit margins out of sync from part to part; if project bids vary greatly depending on which professional in your shop is assigned estimating duties; or, if your prospects consider your bids to be out of line with industry expectations, then there's a good chance cost estimating software will radically improve your operations.

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## Separating Fact from Fiction—

### *Understanding What Cost Estimating Technology Is and Isn't*

Cost estimating technology is certainly nothing new. The first versions of computer-aided cost estimating systems for manufacturing featured basic spreadsheets that made calculations faster and more reliable. However, as technology is inclined to do, these systems gradually grew in size and scope, with expanding customization that can be tailored to industry type as well as project details, and much more.

#### **Operations-critical capabilities included in today's cost estimating software suites:**

- **Estimating** for consistently accurate identification of manufacturing time for parts and processes
- **Cost estimating** to identify costs for setup, run-time, material, labor in specific geographic locations
- **Product cost management** to arrive at the lowest possible cost of an individual part or product
- **Design for manufacturing** to identify potential issues in the design phase
- **Cost Models** for fast and consistently accurate determination of particular time and cost
- **Should costing** to provide insight as to what a part or product should cost to manufacture
- **Competitive cost benchmarking** to compare your products to that of your competition
- **Quoting capabilities** that convey speed, accuracy, consistency, scheduling, and professionalism

For further validation of the value and potential from using cost-estimating software, simply ask any manufacturing professional responsible for bidding on highly competitive, highly lucrative government

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*-Nick Phernetton, McNally Industries*

contracts—where timely, accurate, and consistent quotes are the standard. Nick Phernetton of defense contractor McNally Industries, LLC, explains their need for “a centralized cost estimating system that removed the subjectivity out of the process.” Once McNally found cost estimating software that matched their needs, Phernetton reveals “the system had so many variables in it that it allows us to customize the system

to more closely fit our business needs--it's made our estimating and quoting process faster, more accurate and more consistent than it's ever been, and we are very happy with the results.”

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It's important to note the difference between professional cost estimating software versus proprietary quoting programs accomplish the same result, but with far less accuracy and precision. Without robust, industry-driven manufacturing data, these 'home-grown' quoting programs are little more than a digitized manual estimating process.

## **Fear of the Unknown—**

### ***Why Professionals Avoid Cost Estimating Software Technologies***

Despite the prevalence of professional software platforms already in use by thousands of manufacturers worldwide—and the obvious advantages, they provide—many resist adding this profit-generating tool to their estimating arsenal for a variety of reasons.

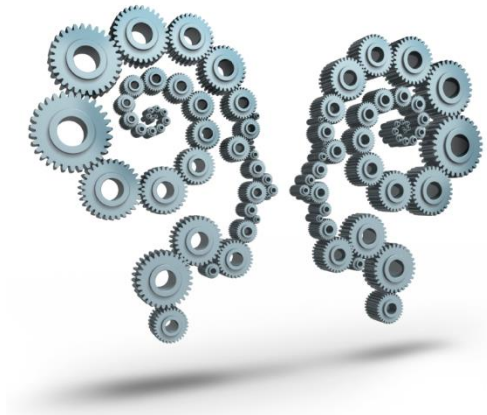
- 1. Short-term, and short-sighted, thinking with respect to profit generation.** Traditional manufacturers prefer adding new machines to the production floor as opposed to new software—which might result in more work accomplished, but does little in solving lapses in competitive estimates and quoting.
- 2. A belief that manual quotes based on experience and 'feel' are faster.** While this may be correct thought in the initial stages of basic projects, jobs that become infinitely complex or change in scope and sequence midstream are much easier handled by software technologies where information is pulled from a database.
- 3. The training factor inherent in learning any new computer skill.** Many companies are unable—or unwilling—to put in the time, effort, and resources needed to learn new software technology. They simply can't see past the initial sacrifice to realize the vision and benefits of a streamlined quoting process.
- 4. Because it is difficult to quantify what your current method is costing you – it's easy to ignore.** For example, if you were able to identify losing a sizable dollar amount -- due to overestimating – you would be more like to take steps to solve the problem.

Things change when analysts compare these processes in their manufacturing environment. The potential outcomes between relying on manual estimating versus a computer-aided cost estimating software on both business efficiency and cost reduction, as well as profit gain or loss potential are simply too wide to ignore.

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## Going Head-to-Head—

### *A Comparison of Manual Estimating and Cost Estimating Software*



In a straight-up comparison, manual estimating procedures leave too much to chance—while the professional estimating software suite cover all bases of time and cost each and every time.

It's this certainty in process and outcome that justifies the resources required to make it a part of your business approach. It is also critical to note that over time the addition of data increases the speed and accuracy, as well as consistency.

- **Estimating by experience alone -- yields to inconsistencies in the accuracy of estimates and estimators.** These inconsistencies often result in lost projects due to overestimation, lost profits in underestimation, and lost customers due to a loss in faith.
- **Manual estimating -- incurs slower timeliness to quote completion.** Without a centralized database of manufacturing information, price quotes, and other vital reports, the potential of losing jobs due to slow or rigid response times.
- **Estimating by experience alone -- typically requires highly-paid, highly-experienced professionals.** This condition reduces profits due to the salary demands of experienced estimators or the skyrocketing costs of acquiring and training new estimators.
- **Manual estimating -- often results in a lack of documentation.** Without an audit trail that demonstrates how the numbers were derived prospect justification and internal review become exponentially more difficult.

Professional cost estimating software addresses each of these challenges and more. It is not hard to imagine the impact that of eliminating these estimation and quoting difficulties entirely might have on manufacturers' operations and profit margin; it is a tough case to make for continuing to do things the old way.

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## **Advancements in Software Technology— Organizations Paving the Way for better Estimating Solutions**

As you might expect, there is a wide range of cost estimating software options available, from those that support the needs of suppliers, engineering and sourcing. Some systems are process driven while others rely on parametric or statistical analysis of historical data. Software suites vary widely based on core features, add-on options, and industry specifics. A few of the most prominent companies in this software space include Akoya Inc. (Akoya), MTI Systems, Inc. (Costimator®) and PRICE Systems LLC (TruePlanning™).

Mark Kneller of Service Machine Company—a provider of CNC equipment for component machining raves about the versatility of MTI Systems’ flagship cost estimating and quoting software suite. “Costimator® helped us out a lot when our previous estimators had left. It allowed us to not only improve our own internal processes, but allowed us to begin estimating more complex parts and components that previously took up too much time to do,” remarked Kneller. “Without a program like Costimator®, our process would be that much more time-consuming and error prone.”

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## **The Bottom Line— Exploring Beyond the Abacus to Realize More Business Potential**

The good news is that it’s never too late to bring a manufacturers estimating, costing and quoting up to speed. Professional cost estimating software packages continue to refine estimating and quoting methods. They offer the robust basic operations that your business can use to enhance your profits immediately, along with enhanced industry-specific customizations that will serve your company well no matter what the future holds.

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