

AI for RFQ & Quoting in Manufacturing

John Gnotek | 4-21-26



One of the Most Practical AI Use Cases in Manufacturing

The best use of AI in quoting is not automatic pricing.

It is helping manufacturers understand the job, surface risk, and make better decisions before the quote goes out.

The Challenge

For many manufacturers, RFQ and quoting is one of the most important decision processes in the business—and one of the most fragile.

A quote may depend on information spread across customer emails, drawings, PDFs, spreadsheets, ERP records, supplier inputs, and the experience of one estimator, engineer, or owner.

The result is familiar: too much time spent searching, inconsistent assumptions, missed cost drivers, weak handoff into production, and margin risk hidden inside the quote itself.

The real problem is *not* just speed. It is committing to price, lead time, and delivery risk before the business has fully understood the job.

AI should not replace the estimator. It should help the business understand the quote more clearly before a decision is made.

Where AI actually helps

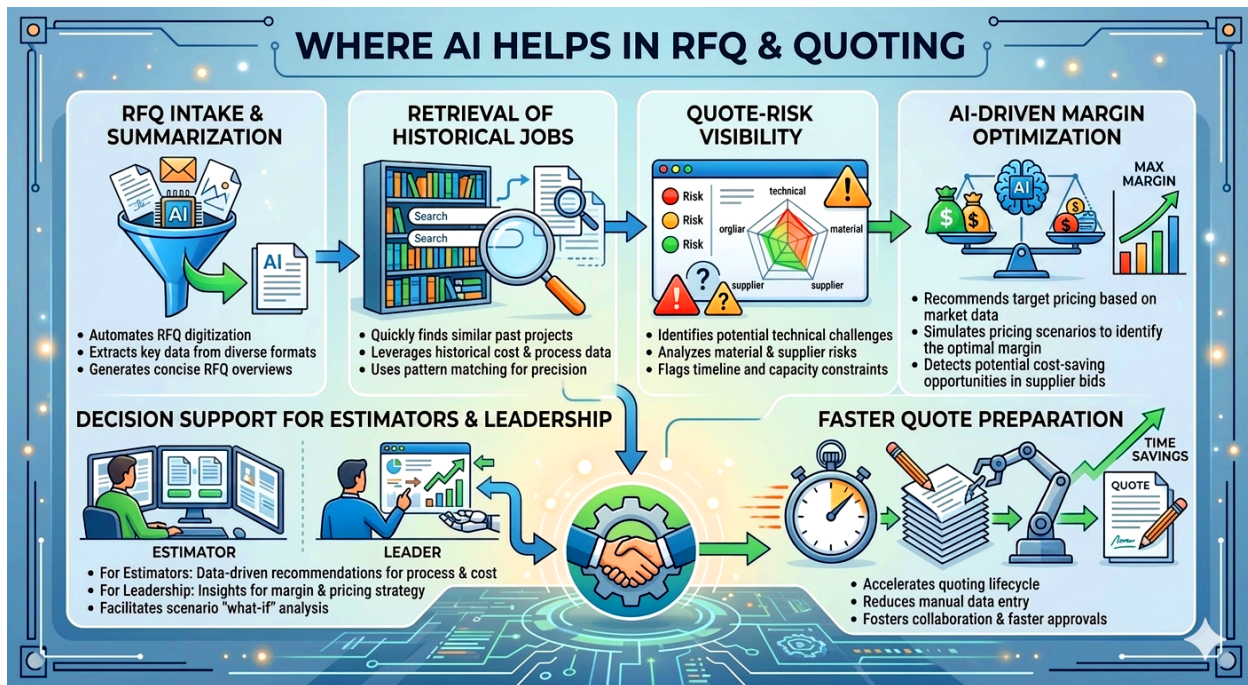
Used properly, AI becomes an intelligence layer inside the quoting process.

1. RFQ intake and summarization

AI can review incoming RFQ packages and extract key requirements such as:

- material
- tolerances
- quantities
- due dates
- secondary operations
- compliance requirements
- missing or unclear information

Instead of manually piecing the request together across multiple files and emails, the estimator starts with a structured summary.



2. Retrieval of similar historical jobs

AI can search internal records and surface comparable past work:

- similar parts
- prior quotes
- actual versus estimated costs
- routing similarities
- scrap or quality issues
- customer-specific patterns
- supplier or lead-time concerns

This turns old quoting history into usable operational memory.

3. Quote-risk visibility

AI can help identify where the quote may be exposed:

- unusually tight tolerances
- omitted processes
- tooling assumptions

- supplier dependency
- uncertain cycle time or setup estimates
- documentation gaps
- compliance or certification issues

That does not remove judgment. It improves it.

4. **Decision support for estimators and leadership**

Instead of hunting across systems, the estimator can ask:

- Have we quoted a part like this before?
- What assumptions are driving cost?
- What usually gets missed on jobs like this?
- What should we clarify with the customer before quoting?
- Where is the margin risk?

5. **Faster quote preparation**

AI can also accelerate supporting work by drafting:

- customer clarification questions
- internal quote summaries
- assumptions and exception notes
- quote-cover language
- follow-up communications

What this is not

This is *not* autonomous quoting.

This is *not* letting AI set prices on its own.

This is *not* replacing commercial or operational judgment with a language model.

The strongest model is simple:

AI supports the process. Humans own the quote.

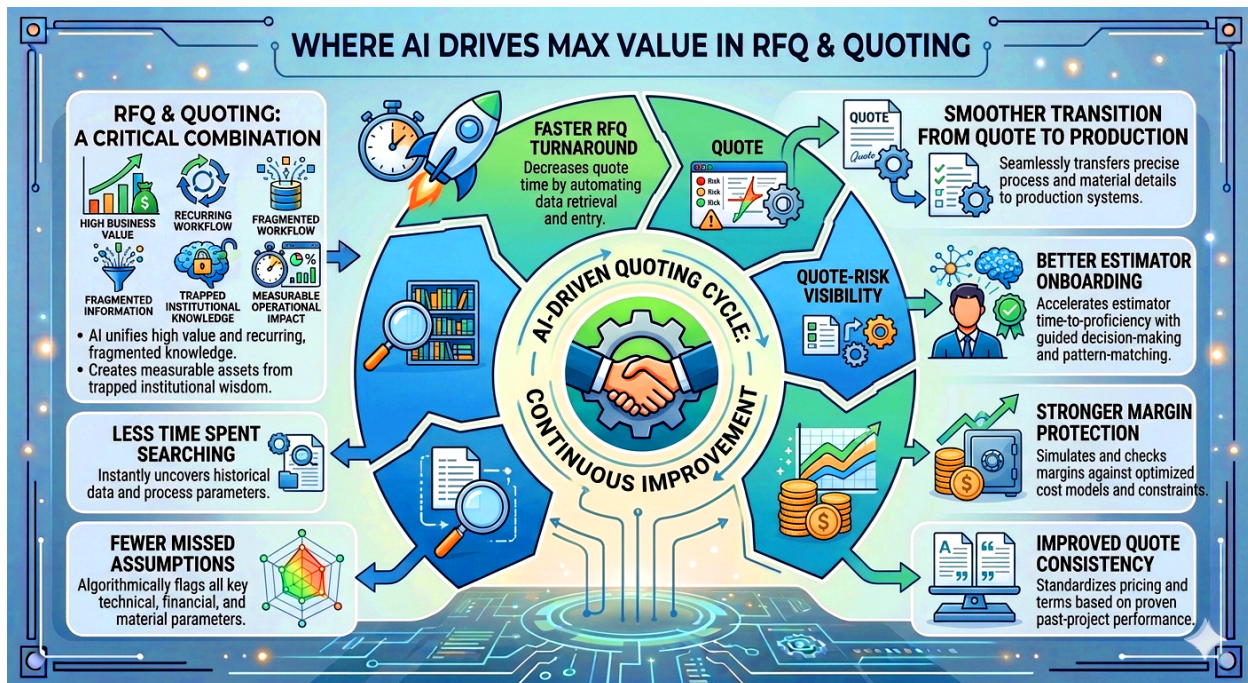
Why this use case matters

RFQ and quoting stands out because it combines:

- high business value
- recurring workflow
- fragmented information
- trapped institutional knowledge
- measurable operational impact

A stronger quoting process can produce:

- faster RFQ turnaround
- less time spent searching for information
- fewer missed assumptions
- improved quote consistency
- stronger margin protection
- better estimator onboarding
- smoother transition from quote to production



Recommended first pilot

Start with AI-assisted quote preparation

A practical first pilot is not automatic pricing. It is a system that helps the team prepare a better quote.

Use AI to:

- ingest the RFQ package
- summarize requirements
- identify missing information
- retrieve similar past jobs
- flag likely risk areas
- create a draft estimator worksheet
- generate customer follow-up questions

This is usually lower risk, easier to validate, and faster to adopt than trying to automate the quote itself.

Governance questions to answer first

Before introducing AI into quoting, manufacturers should define:

- What data can and cannot be entered into AI tools?
- Who owns the final quote decision?
- Which quote elements always require human review?
- How will AI suggestions be validated against actual outcomes?
- How will customer drawings, pricing, and proprietary information be protected?

Bottom line

RFQ and quoting is one of the clearest manufacturing AI use cases because it is fundamentally a problem of fragmented information and pressured judgment.

The opportunity is *not* to remove people from the process.

The opportunity is to empower them to:

- see the job more clearly
- surface hidden assumptions
- identify risk earlier
- quote faster with better judgment

That is where AI begins to create real value.

