

//SURVEY FINDINGS & INDUSTRY INSIGHTS

AI adoption in woodworking 2025

About This Survey

In Q4 2025,

We surveyed AWI (Architectural Woodwork Institute) members to understand where the industry stands with AI adoption.

40 woodworking professionals

Shared their current workflows, biggest operational challenges, and what they want to learn about AI.

We followed up with a webinar

Featuring Curtis Garrard (LVL10 Consulting) and Iryna Mykytyn (COXIT) to address the most common questions.

COXIT.CO

A custom software development company specialized in working with manufacturers, particularly in woodworking. The team has deep expertise in machine learning and AI for manufacturing operations.

LVL10 CONSULTING

LVL10 is a business optimization consulting company specializing Continuous Improvement coaching, System Optimization consulting, and Fractional Support roles for Small to Mid size manufacturers.

Table of Contents

Key Takeaways	// 04
Survey Results	// 05
Case study	// 09
AI Document Agent for Information Retrieval	// 10
Webinar	// 11
Webinar Insights	// 12 - 13
Next Steps	// 12

Key Takeaways

The industry is digital but AI adoption is still early

Half the shops use digital tools like Cabinet Vision or Bluebeam, but only 1 in 5 have started using AI. There's a significant gap between current technology use and AI implementation.

Paperwork and revisions consume the most time

Two-thirds of respondents identified change orders and revisions as their biggest time drain. Submittals and specification documents come in second. These document-heavy tasks are prime candidates for automation.

Trust is the barrier, not interest

The top question isn't "what can AI do" but "can we trust it?" The industry wants to see proof that AI reads drawings accurately and understand how to validate its reliability before investing.

Results are real when approached correctly

We've seen estimation time drop from hours to minutes in real implementations. But success depends on defining the problem clearly first.

The preparation phase determines success

Companies that take time to calculate real costs, ensure their processes are repeatable and data-rich, and plan for proper testing see better outcomes than those who jump straight to technology.

Survey Results:

Current Automation Level

01 / 02

Which best describes how you work today with automation/estimation?

We asked respondents to describe their current level of automation and technology use in their estimating and workflow processes.

Use digital tools (Cabinet Vision / Microvellum / Bluebeam)



Mostly manual (Excel, printouts, manual counts)



Already using AI/automation



Tried some automation (templates/macros/scripts)



Not sure / just exploring



Key Finding

Half of the industry uses digital tools, but most workflows still require significant manual work. Only 1 in 5 shops are actively using AI.

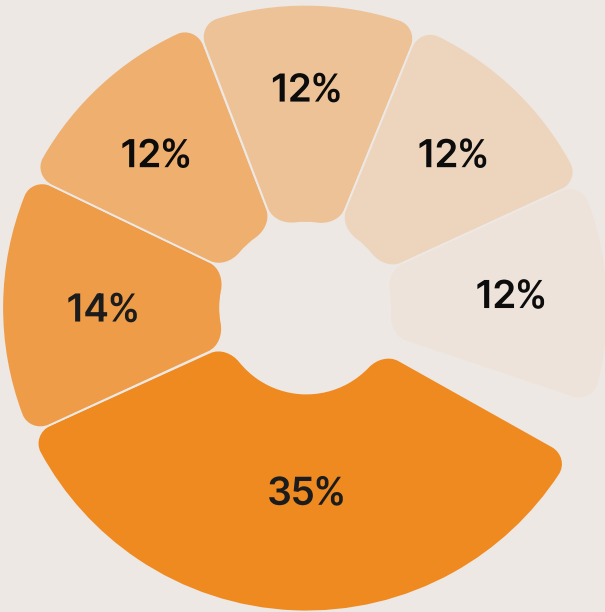
Survey Results:

Current Automation Level

02 / 02

What's your biggest operational challenge that you think AI might help solve?

This open-ended question let respondents identify their top business challenge. We categorized the responses into common themes.



- Estimating/Takeoffs
- Document Processing
- Shop Drawings
- Scheduling
- Organization/Systems
- Other

Key Finding

Estimating and takeoffs dominate as the primary challenge, with over one-third of respondents identifying it as their top issue.

"Not sure where to start with AI, but reducing errors in take-offs/ estimating from architectural drawings is the thing I am most interested in learning about."

– Survey Respondent

Survey Results:

Time Drains & Learning Priorities

01 / 02

Biggest time drain

We asked respondents to identify which tasks consume the most time in their day-to-day operations.

Handling revisions/change orders



Submittals/spec books/paperwork



Counting from PDFs/drawings



Data entry into ERP/sheets



Mapping to SKUs/BOM or cut lists



Key Finding

Change orders and paperwork consume the most time, affecting two-thirds of respondents.

Survey Results:

Time Drains & Learning Priorities

02 / 02

Which topics would be most useful for you?

We wanted to understand what the industry most wants to learn about AI implementation in woodworking.

Can AI read architectural/shop drawings and do accurate takeoffs?



How reliable is AI? How to check accuracy/QA



Where to start implementing AI (step-by-step, pitfalls)



Real examples of AI in manufacturing/woodworking



Quoting more projects with same team / Speeding up estimation



Off-the-shelf vs custom solutions



Key Finding

Accuracy and reliability are the top concerns. The industry wants proof AI works before investing.

Case study

ABOUT THE COMPANY

A large commercial casework manufacturer that relied on manual estimation processes to quote new projects.

THE PROBLEM

The estimating team spent 2-6 hours per project manually reviewing PDF construction drawings. This limited how many projects they could bid on. Additionally, finding and onboarding new estimators was difficult.

THE SOLUTION

The company chose to build custom software after the technical team researched available tools but found they weren't sophisticated enough. COXIT trained the AI models using the company's existing data—their drawings, specifications, and standards. The system processes PDFs, identifies and counts cabinets, extracts specifications, and generates estimates in their format.

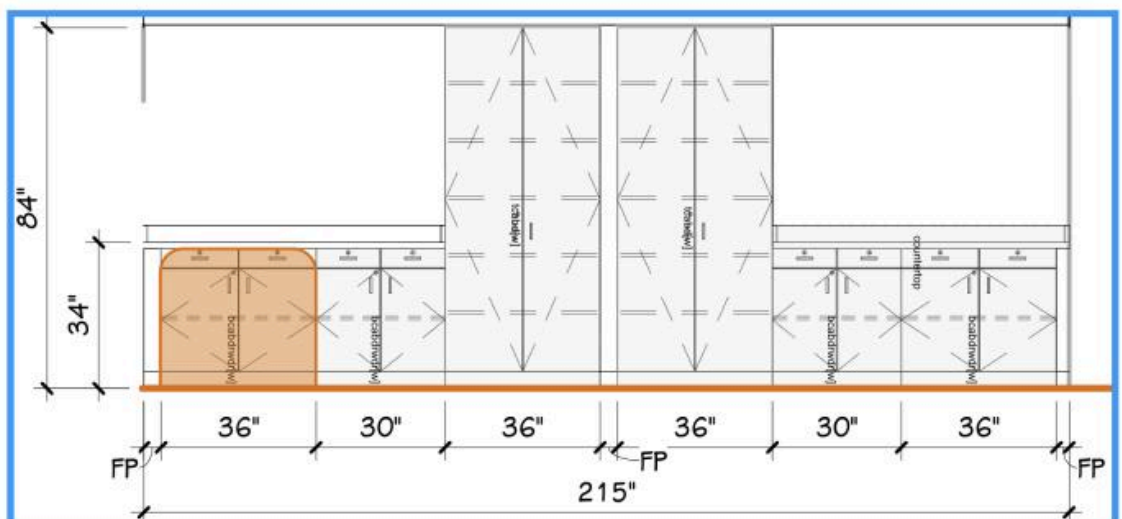
The Results

- Estimation time: **2-6 hours → under 10 minutes**
- The estimating team didn't shrink—they became 10-20x more productive. The company can now bid on significantly more projects with the same team size.

READ THE FULL CASE STUDY:

This project is documented across three separate case studies:
Discovery Phase, Proof of Concept, and Custom Build Solution.

Start from the beginning to see the complete journey.



AI Document Agent for Information Retrieval

ABOUT THE COMPANY

Any business working with large, complex documents faces the same challenge: finding specific information buried in hundreds of pages. Woodworking operations deal with this constantly: specification books, submittals, and change orders.

THE CHALLENGE IT SOLVES

Commercial projects come with massive specification documents - often 500MB PDFs with hundreds of pages. Finding specific information means manually searching through entire documents, taking hours per project.

HOW IT WORKS

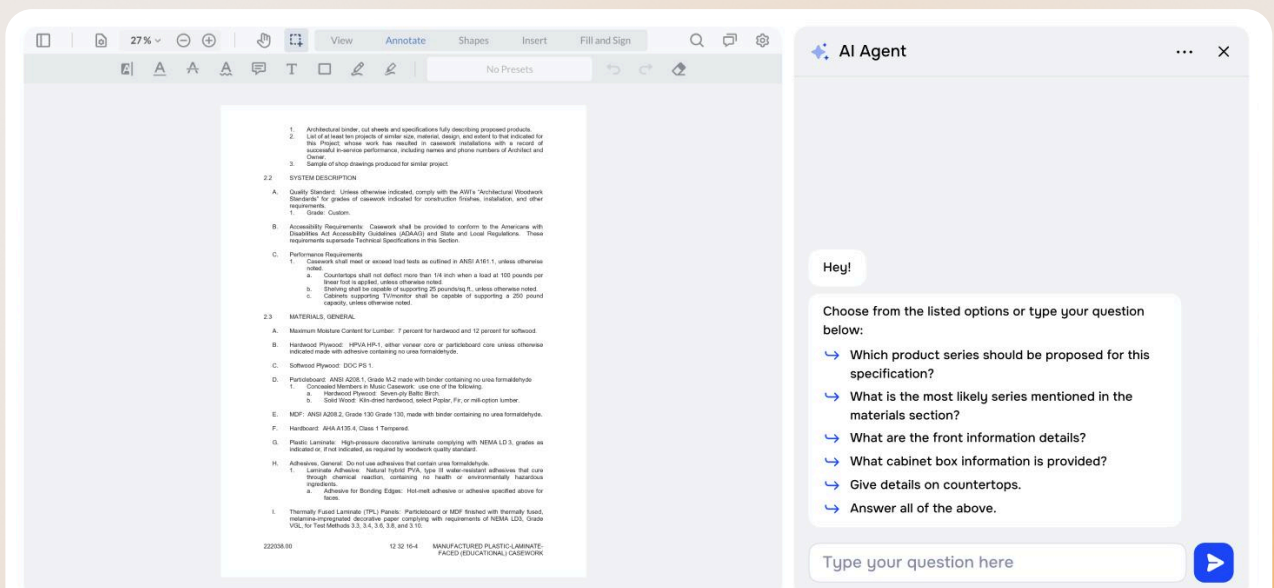
The system reads PDF specifications organized in Master Format. Users ask questions in plain language like "What are the hardware requirements?" and get direct answers. It separates specs from drawings and learns from user feedback.

The Results

- Teams process specifications in minutes instead of hours.
- The system handles files up to 500MB and adapts to different document formats.

[READ THE FULL CASE STUDY AND SEE THE ANIMATION*](#)

**Scroll to the end to see how the system works in action.*



Webinar

ABOUT THE WEBINAR

Following the survey, we organized a webinar "Improving Woodworking Operations: Where AI Can (and Can't) Help" to address the most common questions from the industry.

The webinar featured two speakers covering different aspects of AI implementation: the business preparation side and the technical execution side.

Speakers:



Curtis Garrard

Founder at LVL10



Iryna Mykytyn

CEO & Founder at Coxit

Curtis Garrard

Founder at LVL10 Consulting. Curtis helps manufacturing companies optimize operations through continuous improvement methodologies.

Curtis focused on the critical preparation work that happens before any technology gets built. Most AI projects fail not because of bad technology, but because companies skip this step.

//Webinar Key Takeaways

1. Calculate the real cost of your problem

Before looking at AI solutions, understand what your current process actually costs in time, materials, and lost opportunities.

2. AI needs repetitive, data-rich processes

The best AI opportunities are tasks that happen the same way repeatedly and involve processing information like drawings, documents, or specifications.

3. Start with one specific problem

Don't try to automate everything at once. Pick one clear problem, prove AI works for that, then expand.

Follow **Curtis** on LinkedIn



Iryna Mykytyn on Building AI Solutions

CEO and Founder at COXIT. Iryna leads a team that builds custom AI/ML solutions specifically for manufacturing companies.

Iryna explained the technical side of AI implementation, cutting through the marketing hype to show what really matters when building systems for woodworking operations.

//Webinar Key Takeaways

1. Different problems need different types of AI

Reading architectural drawings requires computer vision. Processing specification documents requires language models. Understanding what type of AI you need is critical.

2. Budget 30-40% for testing and validation

Most vendors skip this step, but you can't know if AI is accurate enough without proper evaluation. This investment prevents expensive failures.

3. Your data quality determines success

AI learns from your existing data. If your drawings are inconsistent or your processes vary wildly, clean that up first. AI amplifies what you feed it—good or bad.

Read the full article

"Improving Woodwork Operations: Where AI Can and Can't Help" by Iryna Mykytyn





Ready to Explore AI for Your Operations?

If you're facing challenges with estimation, document processing, or other repetitive workflows in your woodworking operations, let's talk about whether AI could help.

Book your discovery call

contact@coxit.co



// Our Approach

Step 1: Problem Definition

We help you clearly define the problem and calculate the real cost. If needed, Curtis Garrard can apply his continuous improvement framework.

Step 2: Technical Research

We determine if you need custom development or if existing tools can work, what type of AI is required, realistic costs, and whether your data is ready.

Step 3: Clear Recommendation

You get an honest assessment: build custom, use existing tools, or wait until processes are better defined.