# How Agentic Automation Transforms Invoice Processing

Invoice processing is a critical function for any business, but the method used significantly impacts efficiency, cost, and error rates. The three workflows—Manual, Robotic, and Agentic—demonstrate an evolution from traditional human-intensive processing to a fully autonomous, intelligent system.

## 1. Manual Workflow – Slow, Error-Prone, and Resource-Intensive
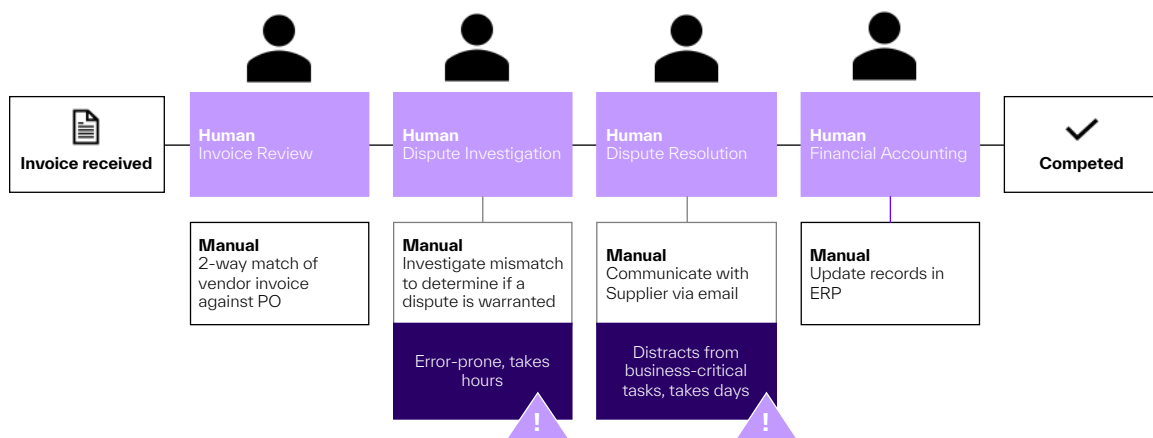


In a fully manual process, every step requires human intervention, leading to inefficiencies and a high risk of errors.

**Key Characteristics:**
— Invoice Review: A human manually performs a two-way match of the invoice against the purchase order (PO).
— Dispute Investigation: If there's a mismatch, a human manually investigates policy documents and determines whether a dispute is warranted.
— Dispute Resolution: If a dispute is needed, the employee communicates manually with the supplier, leading to long back-and-forth email chains.

— Financial Accounting: Once resolved, another human manually updates the ERP system, increasing the risk of data entry errors.

**Challenges:**

x Slow Processing Times: Investigations can take hours to days, delaying payments.

x Error-Prone: Human validation increases the risk of mistakes.

x High Workload: Employees spend excessive time on repetitive tasks rather than focusing on strategic work.

✓ **Outcome: Inefficient and costly, leading to bottlenecks in finance operations.**

## 2. Robotic Workflow – Faster, but Still Dependent on Human Oversight
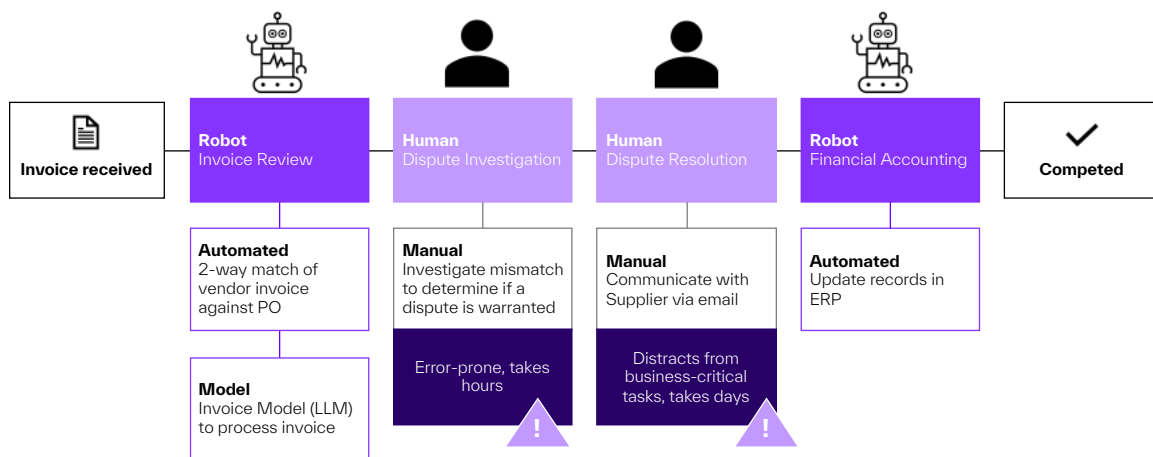


The introduction of Robotic Process Automation (RPA) automates some steps but still relies heavily on humans for handling exceptions and decision-making.
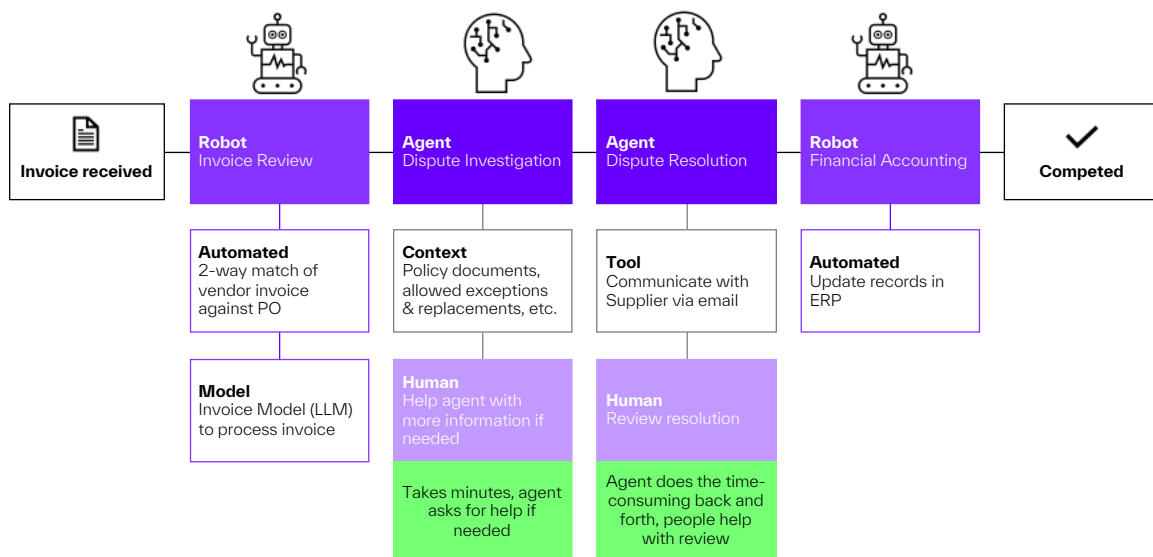
**Key Enhancements Over Manual Workflow:**

— Invoice Review: An RPA bot automates the two-way match between invoices and POs. A machine learning model (DocPath) extracts and processes invoice data with greater accuracy.

— Dispute Investigation & Resolution: Still fully manual, requiring human analysis and supplier communication.
— Financial Accounting: Once resolved, an RPA bot updates the ERP system, eliminating manual data entry errors.

**Challenges:**

⚠️ Dispute Investigation Still Manual: Time-consuming and error-prone.

⚠️ Human Involvement in Resolution: Employees still waste time managing disputes with suppliers.

✔️ **Outcome: Processing is faster, but human oversight is still a major bottleneck.**

## 3. Agentic Workflow – Intelligent, Self-Optimizing, and Adaptive



| Invoice received | **Robot** Invoice Review | **Agent** Dispute Investigation | **Agent** Dispute Resolution | **Robot** Financial Accounting | Competed |
|---|---|---|---|---|---|
| | **Automated** 2-way match of vendor invoice against PO | **Context** Policy documents, allowed exceptions & replacements, etc. | **Tool** Communicate with Supplier via email | **Automated** Update records in ERP | |
| | **Model** Invoice Model (LLM) to process invoice | **Human** Help agent with more information if needed | **Human** Review resolution | | |
| | | Takes minutes, agent asks for help if needed | Agent does the time-consuming back and forth, people help with review | | |

Agentic Automation introduces autonomous AI agents that actively think, decide, and communicate, significantly reducing manual work.

**Key Upgrades Over Robotic Workflow:**
— Invoice Review: RPA still handles automated matching and data extraction.

— Dispute Investigation: An AI Agent now autonomously investigates disputes, referencing policy documents, exceptions, and replacements. The agent only asks a human for help if additional context is needed—cutting down human involvement significantly.
— Dispute Resolution: The AI communicates directly with the supplier, automating emails and negotiations. Humans only review the final resolution instead of handling the entire conversation.
— Financial Accounting: Fully automated via RPA, ensuring accurate and real-time ERP updates.

**Major Benefits:**
✔ Autonomous Decision-Making: AI agents handle disputes intelligently without needing human intervention.

✔ Drastic Reduction in Manual Work: Employees only assist when necessary, making the process more scalable.

✔ Faster Invoice Processing: Time is reduced from days to minutes as AI resolves issues in real-time.

✔ **Outcome: A fully orchestrated human + AI + RPA system that is fast, intelligent, and scalable.**

This allows organizations to handle complex, exception-heavy processes with minimal manual intervention.

Agentic Automation bridges the gap between automation and true autonomy, enabling continuous improvement, context-aware decision-making, and seamless collaboration between humans and AI. As a result, finance teams can focus on strategic initiatives rather than getting stuck in repetitive tasks and operational firefighting.

## The Evolution: Manual → Robotic → Agentic Automation

| Feature | Manual Workflow | Robotic Workflow | Agentic Workflow |
|---|---|---|---|
| Invoice Matching | Manual | Automated (RPA) | Automated (RPA) |
| Dispute Investigation | Manual | Manual | AI Agent (autonomous) |
| Supplier Communication | Manual (email) | Manual (email) | AI Agent (autonomous) |
| Financial Updates | Manual | Automated (RPA) | Automated (RPA) |
| Processing Speed | Hours–Days | Faster, but limited | Minutes |
| Error Rate | High | Reduced | Minimal |
| Human Effort Required | High | Medium | Minimal |

✓ **Final Conclusion:** Agentic Automation eliminates bottlenecks, allowing businesses to process invoices in minutes, reduce errors, and free up employees for higher-value tasks.