



AI-powered process discovery helps drive procure-to-pay optimization

How the IBM Process Mining solution pinpoints “sweet spots” for automation

by Dave Fawcett

6-minute read

When it comes to internal procurement processes, conformity is a virtue. To minimize costs and maximize efficiency, most large organizations create policies and standardized workflows that steer employees toward prearranged links with suppliers.

When employees choose to go their own way—a practice known as maverick buying—they’re foregoing all the pricing advantages and other efficiencies that



are built into standardized buying channels. The more widespread the maverick activity, the bigger the impact on the bottom line.

For this global manufacturing company, a producer of advanced cables with operations spread across 50 countries, the incentives for curbing nonstandard procurement practices were significant. As the company’s process owner

points out, so were the challenges. “We recognized at a high level that noncompliant purchasing was a relatively widespread phenomenon,” she says. “What we lacked was a way to pinpoint how, where and to what extent it was happening.”

One particularly potent impetus for action was the desire to apply robotic process automation (RPA) tools to

the procure-to-pay (P2P) cycle. In the realm of procurement, noncompliant purchasing—such as when an invoice is created without a matching purchase order (PO)—generates “exceptions” that require manual handling. Given that automation largely relies on standardized processes, it’s self-evident that exceptions and automation don’t mix. So minimizing exceptions is a priority.

But first you have to find them. And the best evidence at hand is the company’s SAP ERP data flows.

Indeed, to the procurement owner, seeing what’s happening at a granular, data-driven level is critical to real process optimization. “In the context of our long-term digital transformation roadmap,” she explains, “we believe gaining transparency into our process flows is an essential prerequisite to our automation efforts.”

Reduced the
incidence of
maverick
buying, saving

USD 60,000

in procurement order reworking costs

Enabled the
targeted
automation of

75%

of line creation and delivery activities
using RPA tools

Dynamic process modeling yields granular insights

Recognizing the need for a process discovery solution, the company looked at several options. According to the procurement process owner, the company ultimately chose the [IBM® Process Mining](#) solution on the strength of the digital twin of an organization (DTO) technology that it’s built on. “What made the IBM Process Mining offering truly stand out was the flexibility and granularity of its dynamic process modeling framework,” she explains. “Because the IBM framework has digital twin of an organization at its core, it provides a more in-depth, data-driven look at our operational



workflows. And that makes it a powerful tool for accelerating automation.”

Here’s why. The defining attribute of DTO—the ability to accurately mirror processes by analyzing data flows—isn’t

only valuable for finding process flaws like maverick buying. It also provides an AI-powered “what if” simulation mechanism that enables process experts to visualize how specific improvements, including automation,

will impact metrics such as cost, productivity and process cycle time.

For that reason, says the process owner, the IBM Process Mining solution represents an invaluable automation planning tool. “The decision to invest in process automation is ultimately about anticipated business value. But the harder thing is to balance finite resource investments in a way that maximizes the payoff while minimizing risk, which is the essence of making a business case,” she explains. “That’s where the ability to simulate these outcomes makes IBM Process Mining stand out.”

IBM Process Mining is included as a foundational capability across all [IBM Cloud Paks for Automation](#) including the [IBM Cloud Pak® for Business Automation](#).

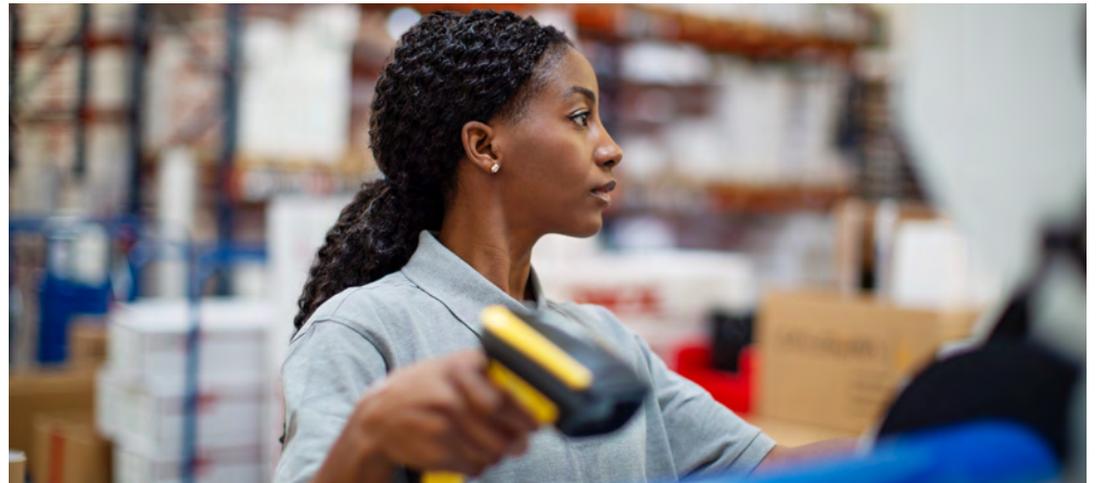
“Because the IBM framework has digital twin of an organization at its core, it provides a more in-depth, data-driven look at our operational workflows. And that makes it a powerful tool for accelerating automation.”

Procurement Process Owner, Global Manufacturing Company

From pain points to automation

To put these capabilities to the test, the company worked with its transformation partner to implement the IBM Process Mining solution as a proof of concept (PoC). Using live data from the company’s ERP system, the solution’s algorithms almost instantly laid bare the process deviations that threatened to complicate its automation efforts.

Looking at the graphs and flow charts generated by the model, the process owner and her team saw that fully half of its key order creation processes—including line creation and delivery activities—were manual



and thus noncompliant. What’s more, the process scan revealed a high incidence of reworking in these activities resulting from human error. In addition to dragging out the procurement cycle, these process

flaws had increased costs by roughly USD 250,000 annually.

Informed by these insights, the company implemented automation tools within both activities. By

automating 75% of delivery activity, the company was able to sharply reduce order reworking, while reducing associated costs by roughly USD 60,000. Comparable automation on line creation activities shortened lead times by three days, representing costs savings of USD 50,000.

Like most companies in the midst of digital transformation, this firm is guided by an overarching vision of making its processes more agile, efficient and cloud-based. To the process owner, the fact that her company is taking a data-driven approach to the specifics of process automation decisions—knowing where the pain points are and how to best address them—makes a big difference in terms of efficacy. “The process transparency we’ve gained through the IBM solution has had a game-changing impact on the automation decisions we’ve made around procure-to-pay,” she notes. “As our broader transformation continues to unfold, we see data-driven decision-making as central to our success.”

“The process transparency we’ve gained through the IBM solution has had a game-changing impact on the automation decisions we’ve made around procure-to-pay.”

Procurement Process Owner, Global Manufacturing Company



About the global manufacturing company

Founded over 100 years ago, the global manufacturing company operates over 100 plants in 50 countries and has over 20,000 employees. The company’s target markets include the telecommunications, energy transmission, construction and transportation industries.

The client featured in this case study initially engaged with myInvenio, which began conducting business as IBM on August 1, 2021. The myInvenio product in this case study, myInvenio Process Mining, is now known as IBM Process Mining.

Solution components

- IBM Cloud Pak® for Business Automation
- IBM® Process Mining

© Copyright IBM Corporation 2022. IBM Corporation, New Orchard Road, Armonk, NY 10504

Produced in the United States of America, March 2022.

IBM, the IBM logo, and ibm.com, and IBM Cloud Pak are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at “Copyright and trademark information” at www.ibm.com/legal/copytrade.shtml.

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates.

The client featured in this case study initially engaged with myInvenio which began conducting business as IBM on August 1, 2021. The myInvenio product in this case study, myInvenio Process Mining, is now known as IBM Process Mining.

The performance data and client examples cited are presented for illustrative purposes only. Actual performance results may vary depending on specific configurations and operating conditions. THE INFORMATION IN THIS DOCUMENT IS PROVIDED “AS IS” WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided.