



# Advantage AI—how to visualize and optimize workflows

Using the IBM Process Mining solution to streamline order-to-cash processes

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When a business operates facilities on five continents, with supply chains stretching for thousands of miles, interruptions at any step in the order-to-cash (O2C) process can result in product delivery delays. But due to the complexity of its far-flung operations, a large Multinational Manufacturing Company (MMC) was having trouble finding the root causes of delays occurring in its logistics activity.

“We noticed significant differences in average lead times and delivery costs between different customers and the



reasons for these differences were not well understood.” says the VP of Logistics for the MMC. “We also saw many orders being put on hold, but we couldn’t always determine who was inserting the blocks or why they were not conforming to standard processes.”

Although MMC logistics managers tried repeatedly to minimize delays,

corrective action was hamstrung by incomplete and disconnected information. Since deviations from standard processes were not being monitored, there was no way to understand how these deviations impacted delivery schedules and costs.

“Until we had a better view on where and why delays were being put in the

system, we would be unable to take the necessary actions to correct deviations,” says the MMC VP. “We also believed that if we had a detailed and holistic view of the actual processes being used, we could start automating more processes and reduce human effort.”

Through interviews and informal methods, MMC logistics managers tried to map O2C processes, identify bottlenecks and correct anomalies, without success. “But then, while we were deploying our ERP platform, our systems integration partner recommended a new tool,” says the MMC VP. “It could provide us with a detailed view of all the processes and people involved with O2C and be modeled on real-world data derived from our ERP system. We were intrigued with the possibilities.”

Reduced number of Changed Delivery Date instances for a cost savings of

USD 50,000

and shortened lead time by 3 days

Adopted an RPA solution to reduce reworking and automated

75%

of Delivery Activity to realize USD 60,000 in cost savings

# Drilling for deep insights

After reviewing a proof of concept (POC), the MMC chose the IBM® Process Mining solution and deployed it through IBM Cloud Pak® for Business Automation software. IBM Process Mining is also included as a foundational capability in the IBM Cloud Paks for Automation solution portfolio. “We wanted to see a ‘digital twin’ of our logistics organization,” says the MMC VP, “so we could identify the bottlenecks in our O2C processes and spot opportunities for automation.”

When MMC executives saw their O2C process mapped for the first time, they had the same response that many clients have with AI-powered simulation technology. “Our first reaction was, ‘You drew this. We don’t



believe it was created automatically from the data.’ The second reaction was, ‘It isn’t true—the data is incorrect,’” says the MMC VP. “But as soon as we drilled into the simulation, we could see how well this model was built, based on the real-world data from our ERP platform. It was a real eye-opener.”

Working with the tool to study all the activities, touchpoints and employees involved in the O2C process, the MMC logistics team was able to:

- Analyze process behavior, find nonconforming activities and identify opportunities for improvement

- Identify critical activities in terms of cost impact and lead time variability
- Discover the key users of the processes and check the segregation of duties
- Monitor rework to find out where mistakes and improper procedures impact delivery schedules
- Discover costs related to manual activities and where there was potential for automation

Analysis of employee behavior provided revealing insights. For example, a logistics manager was manually overriding schedules in an attempt to help her factory meet production targets. “She was trying to help out but she was actually delaying,” says the MMC VP. “We talked with her and explained that her team was doing a much better job without her intervention.”

“You always need to stay ahead of the competition. And by increasing the automation of our business processes with IBM Process Mining, we intend to widen the gap between us and our competitors.”

**VP of Logistics, Multinational Manufacturing Company**

# Opportunities for automation

After analyzing the O2C process model created by the IBM Process Mining tool, and using the tool's dashboards to monitor activity, MMC logistics managers were able to:

- Reduce the number of Changed Delivery Date instances, saving USD 50,000 in costs and shortening lead time by three days
- Continuously monitor customer lead time variability, which increased KPI alignment by 25% for Logistics Block Removal and Changed Delivery Date activities
- Redesign the process to reduce Logistics Block Removal activities, which realized over USD 100,000 in cost savings and reduced average lead times by two days



The IBM Process Mining platform also enabled the MMC to deploy robotic process automation (RPA) tools, a long-time goal of the organization. By monitoring RPA performance, the company:

- Automated 75% of the Delivery Activity, yielding USD 60,000 in cost savings and

significantly reducing reworking

- Automated 75% of the Line Creation Activity to realize cost savings of USD 50,000 and reduce lead times by three days

“Automating processes where feasible represents a huge opportunity for us,” says the MMC VP. “Due to the

work volume we have in logistics, we sometimes struggle with the human resources we have available. By reducing the number of times that orders are blocked or rescheduled, we can free up time for our staff to work on other tasks.”

“One of the steps we want to take in the future with IBM Process Mining is to understand customer behaviors and

how these can add delays and related costs to the process,” says the MMC VP. “We think that this tool will help us change these behaviors so we can compress delivery schedules and be more cost-efficient.”

As a large global enterprise, the MMC subscribes to a range of business intelligence services for performance monitoring and planning. “We already

have a lot of information to work with but there are several business-critical KPIs that we monitor with IBM Process Mining that we can’t get anywhere else,” says the MMC VP. “You always need to stay ahead of the competition. And by increasing the automation of our business processes with IBM Process Mining, we intend to widen the gap between us and our competitors.”

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## About the Multinational Manufacturing Company (MMC)

Founded over 100 years ago, the MMC operates over 100 plants in 50 countries and has over 20,000 employees. It is a leading supplier in 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® Process Mining
- IBM Cloud Pak® for Business Automation

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