IBM

Helping ensure a smooth ERP migration

A large automotive company reduces risks with
the IBM Process Mining solution

IBM Automation

4-minute read

Having embarked on a journey of digital transformation, a large automotive company needed to revamp its traditional ERP platform. Critical to the company's global operations, the system was solid but clearly had shortcomings as past-generation software with limited support.

The IT team planned to migrate from this heritage system to a new, cloud-based ERP solution. Yet it needed to do so without losing any existing functionality of what had become the company's

communications backbone. More than 500 users across the organization's headquarters, dealer network and subsidiaries relied on the software to perform functions for sales, spare parts management and post-sales assistance.

To enable a smooth transition, the team sought to improve key business processes before integrating them into

the new system. One of these processes was the service entry process, which contains several diagnostic checkpoints that dealers must follow when performing car maintenance. The process held its own set of workflow challenges that if not addressed threatened migration success. Namely, several ERP system users followed process

steps that had become common but undocumented knowledge.

"We interviewed employees in a few countries and discovered a mismatch between documented and actual workflows," explains the Information and Communications Technology (ICT) Process Manager – Sales & After Sales with the automotive company. "However, we didn't have the resources to conduct interviews in multiple countries, and we couldn't be certain that the people we did talk with had accurately conveyed the steps they followed."

Because the possibility always existed that users would forget or omit them, undocumented steps in the service entry process posed a potential liability. To help ensure a successful migration, the company sought a cost-efficient way to rapidly identify process gaps.

Conducted as-is process analysis up to

70%

faster

Discovered that dealers skipped a best-practice diagnostic step in

15%

of cases

Data-driven process analysis

To analyze its service entry process, the company selected the IBM® Process Mining solution, which applies data-mining algorithms to automatically discover process flows. It also simulates future processes from as-is processes. The Process Mining solution is included as a foundational capability across all IBM Cloud Paks for Automation offerings, including the IBM Cloud Pak® for Business Automation offering.

"We had already established a strong business relationship with IBM, but from a technical perspective the Process Mining solution offered capabilities that other solutions couldn't," says the ICT

Process Manager. "The IBM solution enabled us to easily and effectively streamline the gap analysis process using data from our traditional ERP system and then perform what-if analyses. We could also quickly deploy the solution from the cloud."

As soon as the company loaded service entry process data into the solution, an as-is process model, including all process variants, was automatically generated from the data. The undocumented steps were finally captured and recorded in the process

model to keep them from becoming siloed information or forgotten steps.

The IT team next performed a gap analysis to get a visual comparison of the data-derived process model and the customer's uploaded reference model. By comparing the reference model to the actual process, the customer immediately noticed a compliance issue in scan-in/scan-out activities. During the scan-in activity, workers connect the car to a diagnostic tool. They should also perform the scan-out activity, a best practice in which they check for warning indicators on the car's control unit. The analysis showed that in 15% of the cases, workers did not perform the scan-out activity.

Additionally, by using the Process Mining solution, the IT team found that in about one-third of 75,000 cases, some dealerships abroad had opened the service entry case after the work start activity instead of before, resulting in nonconformance.

"We are extremely happy with the speed and accuracy of analysis performed by the IBM Process Mining solution."

ICT Process Manager – Sales & After Sales, Large Automotive Company

Reducing rollout risks

By using the IBM solution to discover the real service entry process, the company reduced as-is analysis time by 70% as compared with traditional analysis methods. Also, with greater insight into nonconformant activities, the company was able to retrain those employees who were not following documented processes, improving quality management.

The company completed the automated analysis within two months. It then used the data-derived process model as a blueprint for establishing a uniform service entry process to be used globally with the new ERP system. Consequently, the company reduced new system rollout risks while saving a significant amount of money.

"We are extremely happy with the speed and accuracy of analysis performed by the Process Mining solution," says the ICT Process Manager. "The data doesn't lie, and now we know we have created a service entry process that people like to use and follow."

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ICT Process Manager – Sales & After Sales,
Large Automotive Company

About the large automotive company

A long-established automotive company, the enterprise designs and builds cars respected for their innovative design and technology. The enterprise delivers cars to customers worldwide and helps set customer service standards throughout the industry. It employs approximately 5,000 people.

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 Cloud Paks for Automation
- IBM® Process Mining