

Business Process Mining for Every Enterprise

Process mining empowers enterprises to extract knowledge of their business processes. With a group of experts in process management and mining, the Center of Process Intelligence (CPI) supports companies in various industries to identify the improvement potentials in processes and to develop transformation strategy

Challenges and Objectives

The company faced the challenges of controlling and optimizing their processes with traditional process management. They have identified the power of process mining and want to apply the technology throughout all the subsidiaries worldwide. After several projects with other process mining solution providers, the company was unsatisfied with the results and looked for experts who can further exploit the technology.

After deploying a new system in Asia, they are especially interested in the **differences between the processes using legacy and the latest systems**. Based on the results with the focus of comparing the Accounts Payable Processes in different subsidiaries, the company chose CPI as **their long-term partner in their digital transformation journey**.

The CPI Solution

Achieving process transparency is the first step towards a reliable digital transformation strategy.

As a basis for comparison between conformance and non-conformance, we discover the "As-Is" process model and modify it into "To-Be" process with our customer side-by-side. Providing the violations and deviations identified, we diagnosed the root causes with the customer's domain experts.

The process efficiency is assessed from various aspects, e.g., workload, the complexity of cases, different phases in the processes, and the reviewer's decisions. By analyzing the performance systematically, we provide a reliable base for optimizing their processes. Moreover, we quantify the potential improvements according to the best-practice cases.

Insights and Benefits

We compared the behavior, conformance, and efficiency of the processes. In general, the process using an updated system outperforms the one based on the legacy system in most aspects. The **process using the updated system yields a higher percentage of invoices paid**, the resources are distributed better, and more cases are compliant to the reference process model. However, there is a **higher percentage of duplicated payments**, which is a severe issue.

In terms of performance, the **bottlenecks in the processes can take up to 2-3 months** due to the accumulation of cases for batched executions. Such a delay results in failing to capture discounts, which accounts for **nearly € 500k of losses**.

- The process recorded in the latest system outperforms the one in legacy system with 11% of conformity.
- Handling the payments in time may save up to €500k.
- Taking the latest system as a best-practice, the efficiency of the process recorded in the legacy system can be increased by 33% (the duration decreases 33%).

About the Center of Process Intelligence

We are a team of scientists and experts from business process management and mining. Our founders also founded the PM4Py project, i.e., the largest open-source process mining library in the programming language python. Our Scientific Advisory Board consists of Prof. Dr. Wil M.P. van der Aalst; founder of the field of Process Mining and Prof. Dr. Maximilian Röglinger; world-wide leading scientist in business process digitization.

Center of Process Intelligence: <http://cpi.fit.fraunhofer.de>
Email: cpi@fit.fraunhofer.de

Customer Profile

The company is the one of the leading corporations in production technology across the globe. It is a listed company providing products and solutions for various other manufacturing sectors.

*Industry: Manufacturing
Locations: ~40 Countries
Employees: ~50,000 Employees*

