



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

To operate at a large scale, inter-organizational communication between different branches of the company is critical. The interaction between the branches located in different regions introduces challenges in process management: it is impossible to identify non-compliance and bottlenecks for hundreds of distinct pathways without investigating each case.

The insurance company consulted CPI to better understand their insurance policy management processes, operated by thousands of users in hundreds of branches. With the longterm goal to create a data-driven culture within the organization, together with CPI, the company developed a transformation strategy based on a **true understanding** of their insurance polity management processes' operational quality.

The CPI Solution

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

As a basis for comparison between conformance and nonconformance, 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

CPI identified the rework and missing executions as the major non-compliance in the processes, i.e., among hundreds of distinct process executions detected. Meanwhile, the main difference between different claims is **the necessity to modify the insurance policies**. The duration of the claims requiring modification is **five times higher** than the ones not requiring further executions.

Most of the claims are handled within half a workday. However, **some claims may take up to 2 months to review**. The root causes of the inefficiencies are the sequential execution design and the uneven distribution of the resource among branches. **Optimizing the process speeds up the claim handling time by 50%**.

- Among nearly 500 of the different pathways detected, 20% of the policies require further modifications.
- Nearly 90% of the policies are processed within 4 hours.
- 99% of the policies are handled with 2 hours of delay on average, due to an uneven distribution of resources.

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 opensource 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.

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Customer Profile

As a global insurer, the company provides a wide range of insurance services and solutions for corporations from various industries to minimize their business risks.

Industry: Insurance Locations: >100 Countries Employees: ~4,000 Employees

