

Stadtwerke Bonn: Using Appian Process Mining to Accelerate Savings and Process Improvements

In the historic city of Bonn along Germany's Rhine River, Stadtwerke Bonn provides gas, electricity, and water, with a focus on "fair and climate-friendly energy" delivered with exceptional customer service. Guided by this mission, Stadtwerke Bonn set strategic goals to reduce operational costs while improving customer satisfaction.

Achieving these goals would require more streamlined, efficient internal processes that support continuous improvement. To determine where to start, Stadtwerke Bonn launched a process mining initiative with Appian. Armed with data-driven insight, they were able to discover and address process inefficiencies resulting in more efficient workflows and time-saving automation. Process mining led Stadtwerke Bonn to optimize its meter-to-cash (M2C) operations.

The challenge.

One way Stadtwerke Bonn demonstrates customer service commitment is through a self-service online portal. Customers can use the portal to self-report their meter readings and perform other tasks. In addition to the online portal, there are other contact channels for collecting meter readings, such as emailing cards, providing customer notifications by phone, using bot-supported system processing, and visiting with customers in person.

The M2C process involves many different activities and stakeholders, including:

- Recording a meter reading, including a plausibility check.
- Creating a billing document, including posting the debit position.
- Printing and sending the billing document.
- Clearing the current account document.

With 367,000 total meter readings that led to invoices between January 2020 and April 2021, it's easy to see how delays can occur and how even small error rates can impact effort. For example, time spent rechecking customer-provided meter readings adds as much as three weeks to the process. This was a big problem for a utility company looking to reduce costs and increase customer satisfaction.



Industry:

Utilities

Process focus:

Process Mining

The approach.

Improved cost reduction and increased customer satisfaction required higher-quality processes and a look under the M2C hood. Were manual checks and rework slowing things down? What cumbersome, time-consuming steps could be automated?

To answer these questions, Stadtwerke Bonn turned to Appian Process Mining to help identify and address problem areas where rework and manual activities were slowing progress.

The solution.

Process mining uses data from event logs and information systems to create a visualization of business processes. This makes it easy to identify bottlenecks, inefficiencies, and other problem areas. For Stadtwerke Bonn, taking a look at their real-world process flows uncovered several opportunities for improvement.

For example, the process mining analysis revealed unnecessary plausibility checks in M2C operations due to grace periods for meter-reading results that were too tightly defined. At 10 minutes each, a worst-case scenario of plausibility checks across 27,448 cases would account for 571 working days. What's more, roughly 75% of Stadtwerke Bonn's plausibility checks were unnecessary.

With this problem identified and quantified, the team was able to take informed action and optimize the M2C system's plausibility limits.

Nevertheless, individual processes and improvements are only one part of the picture. Organizational change management is also critical to process mining success.

To this end, Appian worked closely with Stadtwerke Bonn to integrate process mining capabilities into its optimization projects, embedding process mining controls into its internal control systems. And by using data fabric, which provides unified and dynamic access to all IT systems, Stadtwerke Bonn is able to make changes to external systems such as SAP quickly.

The benefits.

In these first few initiatives, Stadtwerke Bonn and Appian were able to identify areas with optimization potential, including:

- Accelerating plausibility checks and monitoring by seven days, reducing customer service costs and increasing customer satisfaction.
- Accelerating incoming/outgoing payments by seven days, improving liquidity along with customer satisfaction.
- Accelerating the processing of 2,300 cancellations by approximately two months.



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Not only did process mining enable faster operations for employees and customers, but it also enabled Stadtwerke Bonn to find great value in automating manual tasks.

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What's next for Stadtwerke Bonn? Recent success with Appian Process Mining laid the foundation for applying process mining to other problem areas, such as purchase-to-pay, market communication, and other common business processes within the utilities sector. Importantly, the results from these first initiatives made the case for process mining overall and demonstrated its value through streamlining tasks, optimizing operations, reducing costs, and boosting customer satisfaction.



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