RHEINENERGIE LEVERAGES PROCESS MINING TO OUTLINE FUTURE TRANSFORMATION

RheinEnergie harnesses process mining to sustainably improve its Purchase-to-Pay (P2P) process by leveraging transactional data for continuous monitoring and optimization of their processes' performance.

RheinEnergie strives to constantly offer a high quality service

RheinEnergie is a leading German regional energy provider primarily operating in the field of electricity, natural gas, and water supply. With its strong regional presence and focus on sustainable energy, the company plays a crucial role in providing reliable and environmentally friendly energy solutions to its customers in the Cologne region and beyond.

To ensure that it can always provide high-value customer service, RheinEnergie is focused on constantly advancing its internal functions and processes. By analyzing process activities as well as their interdependence and impact on one another and the inherent data flows, RheinEnergie strives for operational efficiency, asset management, compliance, and customer service, ultimately driving better performance and sustainability in the industry and for its clients.

Overview

Client: RheinEnergie AG

Industry: Energy Transition and Utilities

Region: Germany

Client Challenge:

As part of its digital procurement transformation, RheinEnergie was looking for ways to continuously monitor the process performance of its Purchase-to-Pay (P2P) process and drive cross-departmental collaboration.

Solution:

RheinEnergie partnered with Capgemini Invent to implement a process mining solution in procurement and develop use case specific dashboards to visualize the existing process with all variants, provide end-to-end transparency, and support the analysis of P2P and AP friction.

Benefits:

- Identification of critical process inefficiencies
- Visualization of process variants by creating a digital twin of current process activities
- Enabling more effective cross-departmental collaboration between procurement and finance teams
- Future cost savings of approximately 2 million EUR five years after implementation of identified optimization measures

Unlocking hidden insights in procurement data

RheinEnergie was facing challenges in optimizing its operational procurement and accounts payable (AP) processes. In particular, the company wanted to expand process transparency, become more efficient, and reduce costs associated with manual work and undesired process deviations. Because its departmental structure had led to operational friction, RheinEnergie also desired a solution that would provide a comprehensive understanding of its procurement and accounts payable processes at the transactional level, identify bottlenecks, and streamline their workflows.

To accomplish all of this, the company set out to leverage process mining, a cutting-edge technology that utilizes event log data to visualize, analyze, and optimize processes. By implementing this solution, RheinEnergie would validate its presumed pain points and make better-informed, data-driven decisions to streamline its procurement operations.

A digital process twin to monitor real-world results

With its plan established, the company partnered with Capgemini Invent due to its strong track record in successful procurement transformation projects and the pre-existing, long-term partnership enjoyed by both organizations.

Driven by collaboration and a mutual understanding of the project's key goals, the project team provided a solution utilizing Celonis EMS process mining technology, which enabled procurement and AP process visualization. This approach relied on establishing a data connection to RheinEnergie's ERP system and implementing an Extract, Transform, Load (ETL) pipeline. Additionally, the project team prepared and transformed data while developing a data model for both Purchase-to-Pay (P2P) and AP processes. Finally, custom dashboards were developed for use-case specific analyses.

By creating a digital twin of the company's P2P process, the solution offered an end-to-end view from creation of a purchase order, to goods receipt and invoice clearing. This enabled RheinEnergie to identify the root causes of unwanted process activities, deviations, manual rework, and process loops, while simultaneously delivered full transparency of targeted operations, enabling RheinEnergie to derive insights through continuous process monitoring.

The analysis of the digital process twin resulted in quantitative and qualitative benefits

In joint workshops, RheinEnergie and Capgemini Invent identified process inefficiencies as well as their causes and optimization measures for each respective use. The project team performed a cost-benefit analysis for each potential measure and recommended a coherent implementation plan.

The identified quantitative measures yielded an approximate value of 350 thousand EUR one year after implementation and 2 million EUR five years after implementation.

As a result of this investigation, the recommended optimization measures that were outlined for RheinEnergie included the automatization rate of process activities regarding the verification of invoice data, documenting received goods, and no-touch invoice bookings. In addition, the company recognized the need to define suppliers and product groups suitable for being managed through and ordered from an implemented e-Procurement solution. The qualitative optimization measures analyzed have a positive effect on the quality and accuracy of the data in the P2P process, its throughput time, and the overall end-to-end process understanding. These measures include, among others, regular cross-functional meetings, and the digitalization of the order release. Digital process analysis enables transparency, monitoring, and cross-departmental collaboration between purchasing and accounting in a data-driven manner.

The project results pave the way for jointly created value

The proposed implementation plan recommended that RheinEnergie undertake qualitative optimization measures to be able to quickly benefit from improved data quality and transparency. As a result, future efforts, such as process automation, will have a more profound effect on the company's P2P process. By providing additional insights into the actual sequence of process activities and their measured throughput time, the project presents RheinEnergie with the opportunity to make more objective and targeted decisions about firstly, the use of their employed resources and secondly, the process flow and current operating model itself. Furthermore, it became apparent to management level that the technology of process mining can also be leveraged for further business processes, for example supply chain processes by tracking the flow of outgoing goods and services until invoicing and incoming payment, customer relationship management by analyzing the customer experience journey, human resource activities in the field of recruiting and onboarding, or in the field of auditing by tracking compliance and uncovering fraudulent activities. The outcomes of our joint process mining project in P2P process build a favorable case for further usage.

Furthermore, the successful project execution strengthened the long-standing relationship with the client. During the most recent project, Capgemini Invent supported the procurement department of RheinEnergie in analyzing its perceived performance and more effectively supporting its internal clients and stakeholders. We are currently in discussion regarding the imminent steps on how to leverage the results most efficiently. Capgemini Invent highly values the relationship with RheinEnergie and is most determined to maximize the value for the client.

About Capgemini Invent

As the digital innovation, design and transformation brand of the Capgemini Group, Capgemini Invent enables CxOs to envision and shape the future of their businesses. Located in over 30 studios and more than 60 offices around the world, it comprises a 12,500+ strong team of strategists, data scientists, product and experience designers, brand experts and technologists who develop new digital services, products, experiences and business models for sustainable growth.

Capgemini Invent is an integral part of Capgemini, a global leader in partnering with companies to transform and manage their business by harnessing the power of technology. The Group is guided everyday by its purpose of unleashing human energy through technology for an inclusive and sustainable future. It is a responsible and diverse organization of nearly 350,000 team members in more than 50 countries. With its strong 55-year heritage and deep industry expertise, Capgemini is trusted by its clients to address the entire breadth of their business needs, from strategy and design to operations, fueled by the fast evolving and innovative world of cloud, data, AI, connectivity, software, digital engineering, and platforms. The Group reported in 2022 global revenues of €22 billion.

Get The Future You Want | www.capgemini.com/invent