How Did the World’s Most Profitable Steel Company Improve Procurement with AI and Machine Learning?

Handling more than 550 daily requests for the creation of new materials

Ordering new spare parts for the first time, such as a particular circuit breaker or drill, was often a significant effort for business users at Severstal. In fact, the Russian steel and steel-related mining company saw returns on approximately 21% of all new material requests, thanks to incorrectly chosen material classes. So Severstal-Infokom, the company’s IT arm, sought a novel approach to support business users when they filled out a new request. It decided on machine learning to improve the process of entering new materials into the material master data in an intelligent and automated way.
Severstal used the Data Attribute Recommendation service, which is one of the SAP Leonardo AI Business Services; SAP solutions for enterprise information management; and expertise from the SAP Digital Business Services organization to:

• Build an AI-enabled software landscape that uses machine learning to help reduce business user errors
• Enable users to correctly fill in a new material request with a system that suggests appropriate field content, such as the correct material class, characteristics, and others, based on the users’ provided input
• Decrease the time needed to create a new material master data request
• Reduce manual master data management efforts by applying machine learning to match hierarchies
• Automate key process steps in master data management as well as master data governance functions for purchased materials

“With Data Attribute Recommendation, we reduced the effort for new material creation by approximately 20%. Hierarchy matching has provided us with the first step to enable intelligent master data governance throughout our enterprise.”

Evgeny Eliseev, Head of Master Data – Automization of Procurement and Logistics Operations, Severstal-Infokom

Severstal improved master data quality through automation to increase accuracy and lead with intelligent processes.
Featured Solutions and Services

Severstal enlisted the support from SAP to build an AI-enabled software landscape that addresses a major business problem in an intelligent and innovative way using the following solutions and services:

- Data Attribute Recommendation, one of the SAP® Leonardo AI Business Services
- SAP Master Data Governance
- SAP Data Services
- SAP Digital Business Services
- The New SAP MaxAttention™ services