Drawing conclusions from data: the Datalytic Team @ work

An interview with Everton Rocha de Souza, Coordinator of ANDRITZ Automation's Datalytic Team

> "At some mills, we have more than 70,000 variables in the system. We never know which might be of most value to solve a particular problem, so we have a powerful system to collect, track, and analyze data."
>
> **Everton Rocha de Souza**

WHAT IS THE MAIN FOCUS OF THE DATALYTIC TEAM?

Manufacturing plants generate a lot of data within their instruments, distributed control systems, laboratory and business systems. Most of the data is used as a "snapshot" to take a controlling action or similar. Few plants have an efficient, practical way to sift through the data they generate and make sense of it in the longer term.

The Datalytic Team provides these tools – the ability to efficiently track, store, filter, and visualize a plant's data. We discover data relationships and patterns that a human being with a spreadsheet would never uncover. When these are presented to an experienced process expert, decisions can be made to run the plant more profitably. Then we help customers develop models so that these decisions can be automated and integrated into operations.

WHAT RESULTS HAVE BEEN OBTAINED SO FAR?

The results are primarily faster and more profitable decision-making – things like faster start-ups, less downtime, and incremen-

Datalytic Team Graz from left to right: Paul Schneeweiss, Christoph Aigner, Everton Rocha de Souza, Günter Jaritz, Zohil Villa-Carreno, Jaime Pinheiro and Lauri Salminen (missing in the picture)

tal reductions in the consumption of chemicals, energy, and so on. One of the intangible results is the teamwork this approach encourages, bringing data scientists and process experts from ANDRITZ together with the plant's operating, maintenance, and technical personnel – all with a common goal.

WHAT ROLE DOES METRIS PLAY?

Our Metris platform provides a bridge between the types of expertise required – Big Data analysis tools, automatized analysis and data visualization. It supports the evolution from purely physical information (flows, temperatures, pressures, basis weights) to the desired state of adding intelligence to the data. Unlike us humans, Metris is not overwhelmed by massive amounts of data. The longer data is collected, and the more data is collected, the more the system learns – which is the basis for Artificial Intelligence (AI) and Machine Learning (ML) technologies. •

EVERTON ROCHA DE SOUZA

is an electrical engineer and is currently taking a Master's degree in Data and Information Science. With experience as an operator for the Brazilian pulp producer Suzano S.A., he joined the Automation department in Graz in 2011. After planning safety systems for pulp mills, programming distributed control systems and handling Metris OPP contracts in Europe, he has been coordinating the Datalytic Team since 2016. •

Everton Rocha de Souza explaining data visualization in the new *Prime*Line Performance Center.

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