

BYTEFABRIK

🛢 Bytefabrik 세

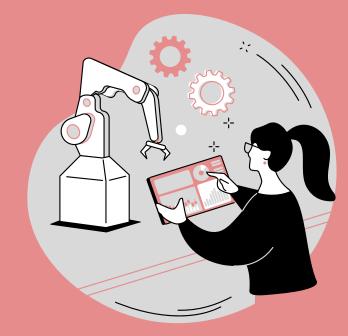
Intelligent data solutions for machines and production lines

Bytefabrik was one of the 5 selected during the **EARASHI Open Call 1**. Based in Karlsruhe, it is a successful technology spin-off of the Karlsruhe Institute of Technology (KIT) and the FZI Research Center for Information Technology. After intensive research work, they have been developing intelligent AI-based software solutions with a focus on intuitive usability for more than 10 years. Their goal is to inspire our customers and users.

CHALLENGES

MANIC develops the Manufacturing Analytics Copilot, a new Al-driven system which addresses the following challenges:

- Stress for shopfloor workers due to permanent "firefighting"
- High process complexity leads to time-consuming problem solving
- Lack of collaboration between maintenance personnel, process experts and data scientists





SOLUTIONS

Automated analysis of process parameters from production lines

Al-driven detection of situations which affect production performance

Generation of interactive data stories, helping to avoid problems in the future



John

Plug Joining

Too high pressure

Screwina

Robot gripper

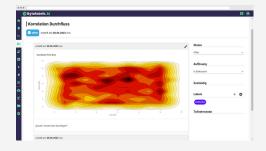
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Uneven silicone application

Load Statior

Workpiece carrier defects

Automatic generation of "Data Stories"





Time-consuming maintenance and permanent "firefighting"

MAIN GOALS

- Enabling full transparency on important problems affecting production performance
- Enabling predictive maintenance
- Improving collaboration and fostering knowledge exchange

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Current industrial analytics solutions are often hard to use and require users to invest time - which shopfloor workers often do not have.

The solution we build - the Manufacturing Analytics Copilot - will significantly foster human-Al collaboration by guiding users towards frequently occurring problems and their avoidance.

KEY NUMBERS

- integrated solution which can be easily installed as an Apache StreamPipes extension
- **2** different feedback mechanisms to continuously improve generated recommendations
 - real-world scenarios used for evaluating the usefulness and performance of the developed systems
- **>10** new algorithms and adapters integrated into the open source product Apache StreamPipes

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As a small company in the manufacturing analytics domain, our customers expect innovative software solutions. With the help of EARASHI and the EU, we are able to incorporate latest research results into our offerings, which help our customers to achieve more sustainable and efficient manufacturing quality.

GET IN TOUCH



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www.earashi.eu