Hand in hand for tomorrow

### SCHUNK goes Al KI Anwendungen bei SCHUNK

**Dr. Martin May Director Innovation** 





### From mechanics to autonomous services



"Maps"

A CONTRACTOR OF THE PROPERTY O

"Google Maps"



"Autonomou Vehicles"



"Autonomous

Manual planning and Autom

Automated planning a manual control

Automated planning and decentralized control

Network"

Automated planning and



"Mechanic Devices"

Motion



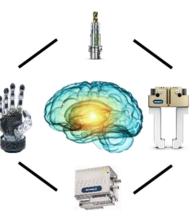
"Mechatronic Devices"

Motion control



"Connected Intelligent Devices"

Automated planning and control



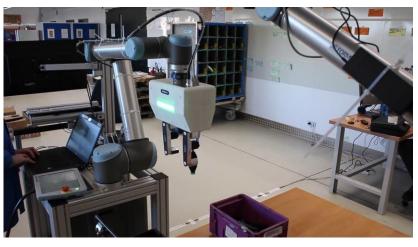
"Autonomous Solutions"

Al-enabled Processes, online-learning

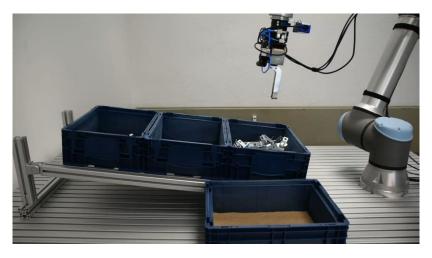


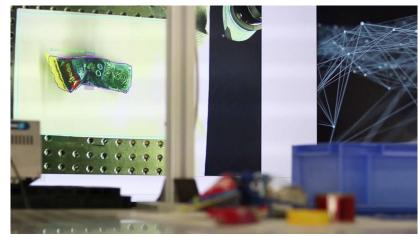
# From components to services







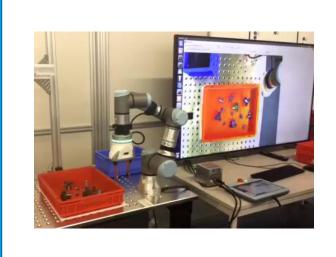






### One software platform for multiple applications





Commissioning



Tooling

# SCHUNK

### Platform for new services

 Cloud Level Online Learning

**Trend Analysis** 

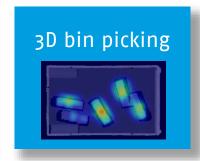
Recommender Systems Next Big Thing

Edge Level









Next Big Thing
?

Physical Devices











SCHUNK Shop



Chuck jaw quickfinder



Toolholder quickfinder



ePLAN



CADENAS



Start tomorrow's Engineering with SCHUNK



Online design and calculation tool



Digital Twin



Online commissioning assistant



PLC function module



Auto-learn function



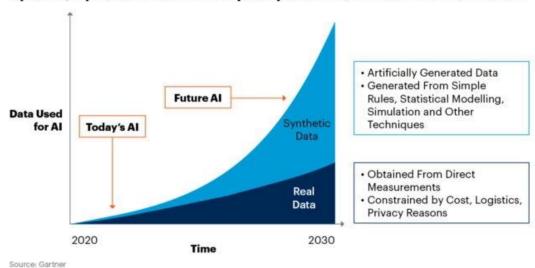
GripConnect



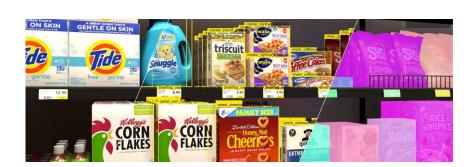


### The next AI challenge?

#### By 2030, Synthetic Data Will Completely Overshadow Real Data in Al Models



**Gartner** 

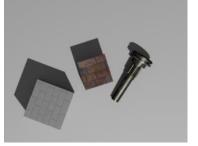


750175 C





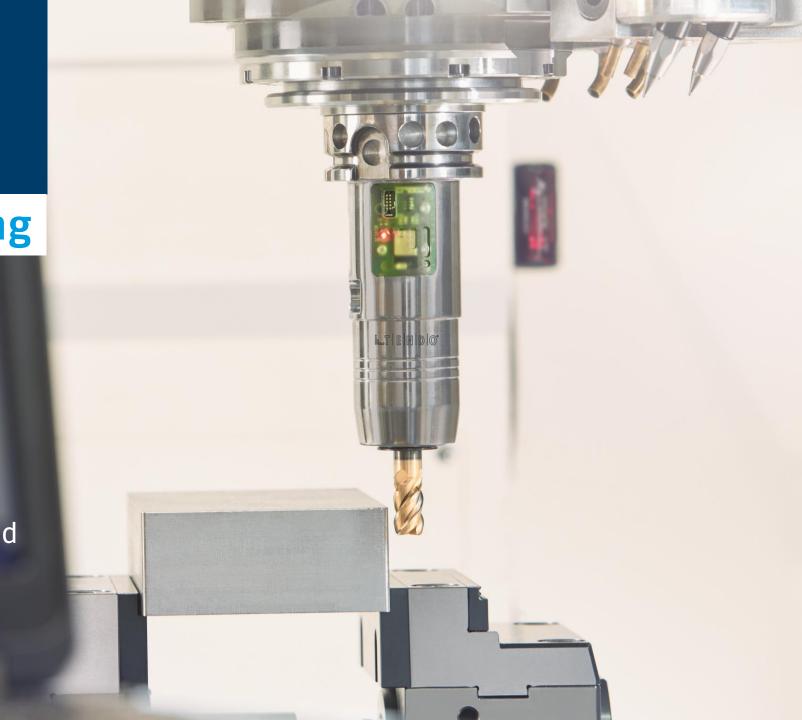




# i...T | E | N | D | O°

### **Autonomous Cutting**

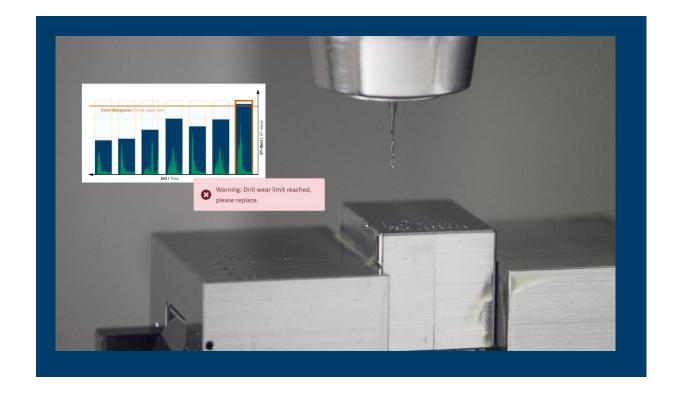
- Integrated accelerometer
- Detect vibrations closest to the part
- Enable autonomous cutting and milling





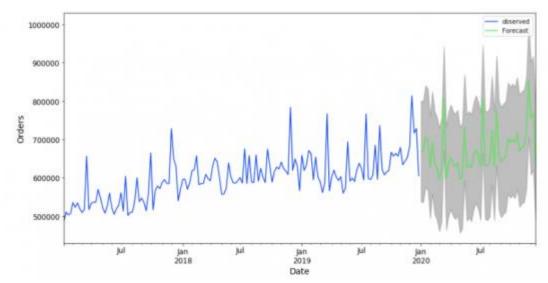
### Predicting wear in drilling processes

- Wear monitoring of small tools is very difficult
- Requires manual tests with external tools
- → Case for predictive maintenance
- → Extend service life
- → Exchange tools before they break

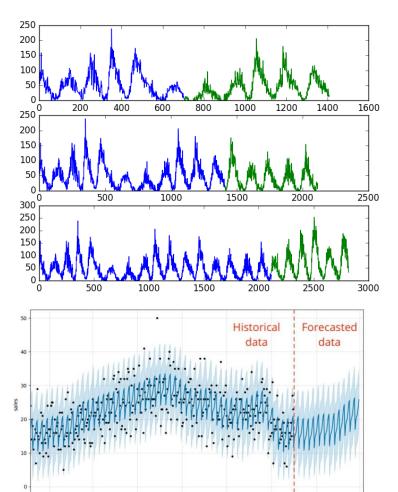




# **Time Series Analysis**

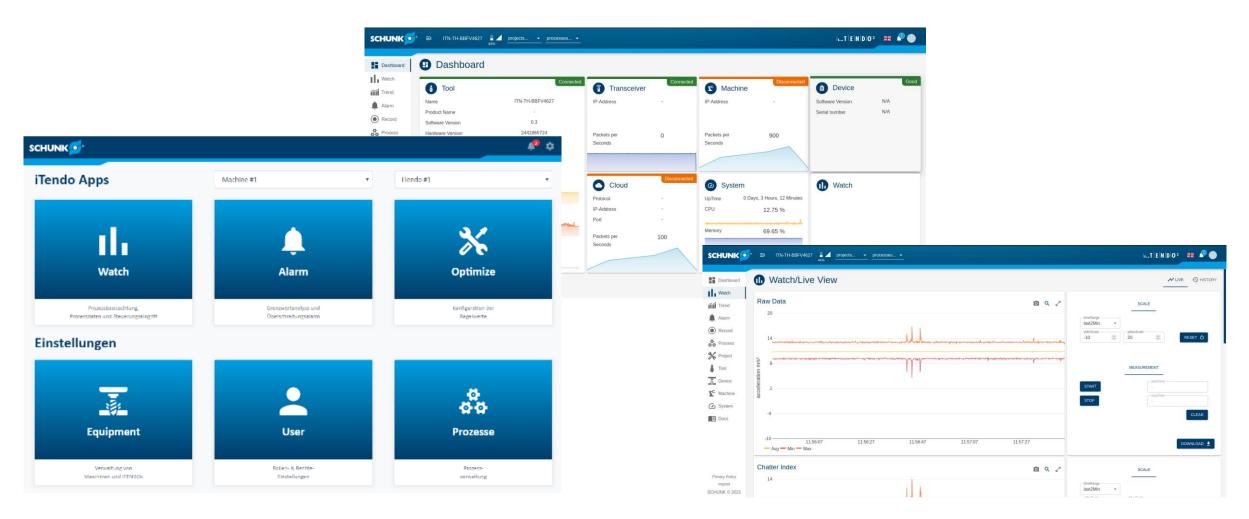


- Advanced Monitoring
- Predicting wear





# **AppStore for iTENDO**



# SCHUNK

### Please contact us



Martin May

Director Innovation SCHUNK GmbH & Co. KG

+49-7133-103-2988 martin.may@de.schunk.com