

What's new  
with

**FACTBIRD**

**01** What is happening in the next hour

**02** Then, now and winning aspiration

**03** Exciting product news

**04** Why security matters

**05** Time to look at edge device and connectivity

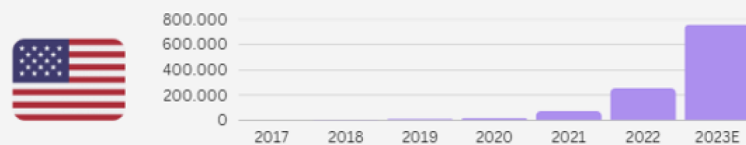
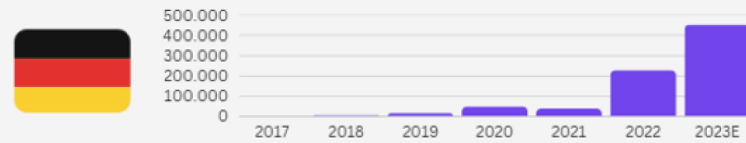
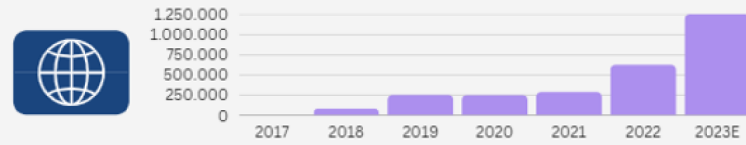
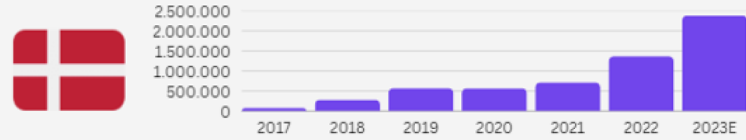
**06** Closing thoughts & questions

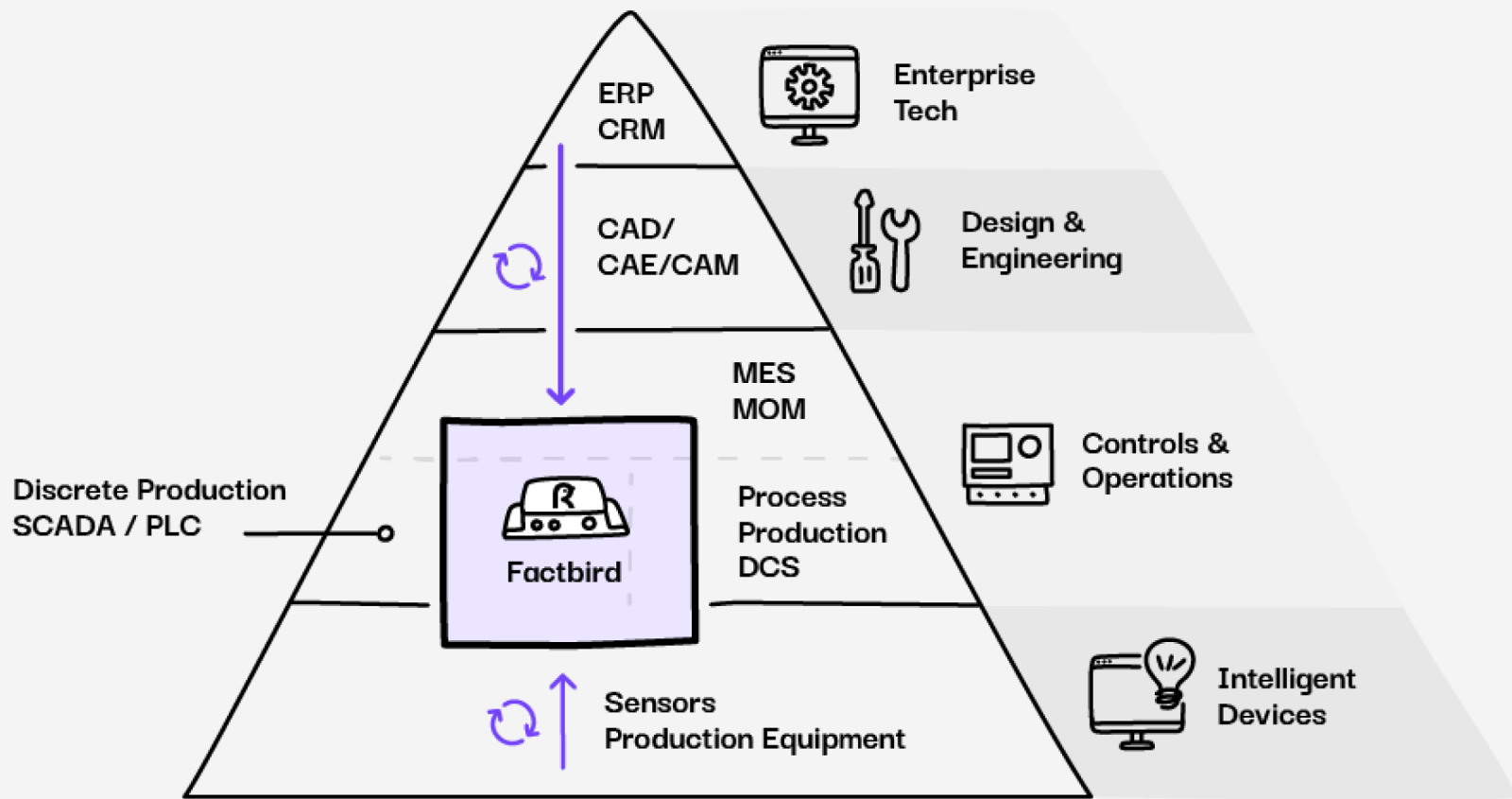




# Our Market Expansion Journey

ARR in EUR





# The Manufacturing Landscape

Peter Juhl Savnik

Chief Product Officer



**Staying competitive**



## Reduce costs



14% average  
reduction

## Improve efficiency



27% OEE increase  
in 3 months

## Enhance quality



Reduced scrap  
from 5% to <1%





**Empower frontline workers**

82% of manufacturers experience labor shortages

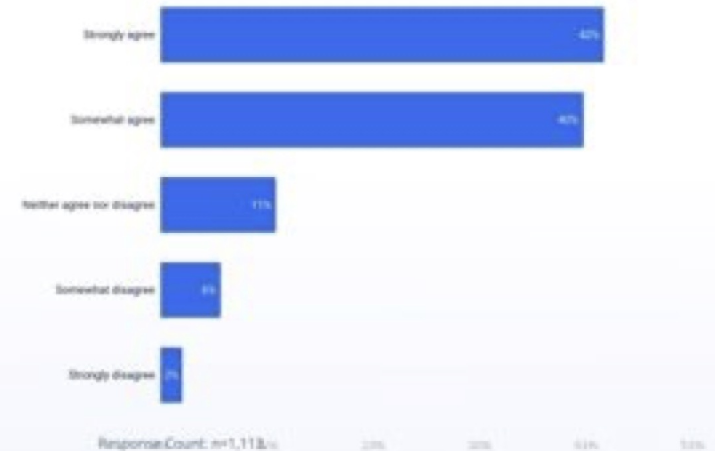
2023 Career Advancement in Manufacturing Report - Xometry | The Women in Manufacturing Association

Do you agree or disagree with the following statement: We are experiencing labor shortages

82% of manufacturing companies are experiencing labor shortages

From 1,113 industry professionals who are active in manufacturing, 42% strongly agreed that their organization is experiencing labor shortages. In the next page of this report, we break down the labor gap by:

- Job function
- State
- Industry



**60% millennials are  
open to changing job**



**Value-added work brings  
happiness and dignity**

**Visibility on Shopfloor  
= Great Decisions**







**Adapt to a changing  
world**



# Consumer ESG awareness

*Danfoss*

33% energy reduction





Lines will reconfigure more often



# Scandi Standard

40% reduction in  
critical changeovers









# Product News

Anders Sindal Stæhr

Product Designer



# Product News



**Preventive  
Maintenance**



**Energy  
Monitoring**



**Organizational  
Structure**



**Other  
Improvements**

# Preventive Maintenance

How can I reduce unplanned downtime?

What are my actual maintenance intervals?

Drive maintenance by  
production cycles



Enable operator-  
driven maintenance

## Work Orders

Filter lines

1 Selected

Thursday  
05/10/2023

**Motor bearings**  
Conveyor, Factbird Live Demo

Overdue 4 days

🕒 Every 3 days

Tuesday  
10/10/2023 (estimated)

**Gasket**  
Filling machine, Factbird Live Demo

Estimated To do in ~2 hours

0 / 60 000 Bottles

🕒 Every 60 000 Bottles

Wednesday  
11/10/2023 (estimated)

**Motor 2**  
Filling machine, Factbird Live Demo

Estimated To do in ~29 hours

0 / 5 000

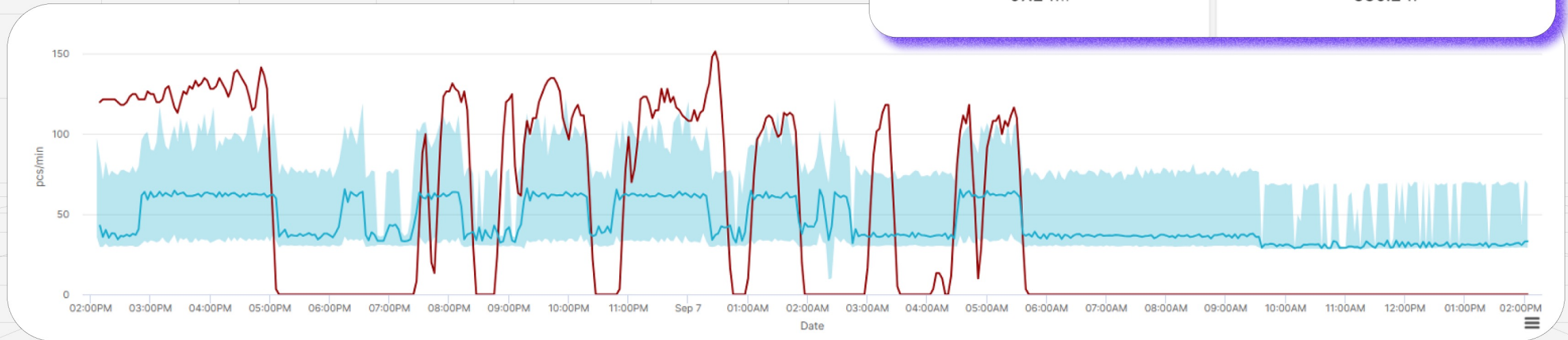
🕒 Every 5 000 units

# Energy Monitoring

How can I reduce operational costs?

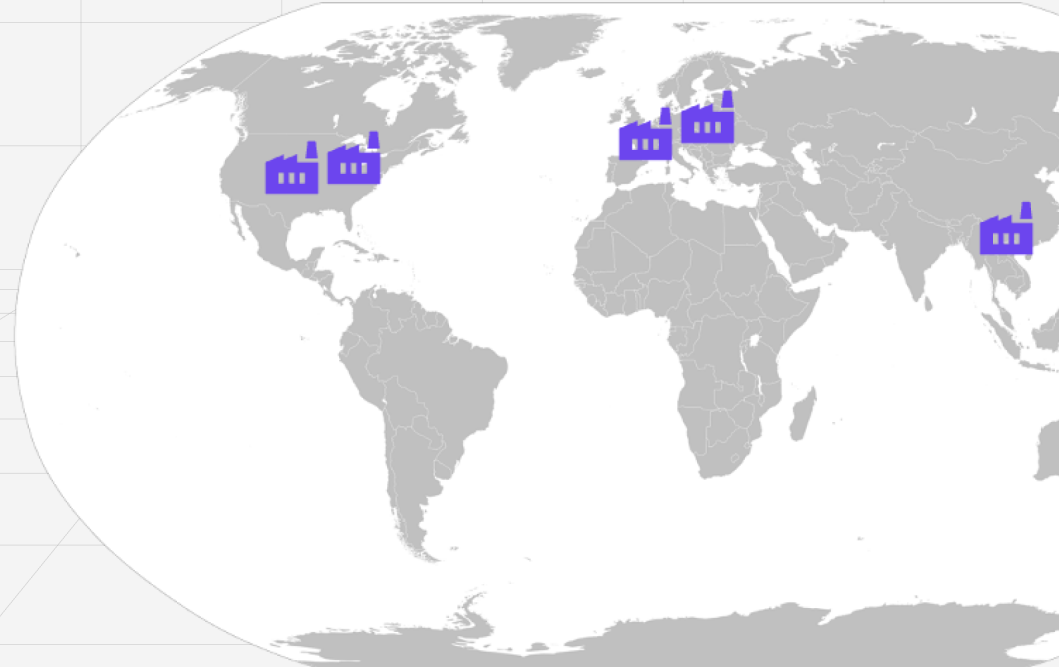
How can I support my organization's ESG strategy?

Energy consumption vs production



# Organizational Structure

How to keep an overview of multiple lines and factories?



Organization

Search... ADD NEW ▾

- ▾ Factbird Company
  - ▾ Denmark
    - ▾ Copenhagen
      - ▾ Emendo - Sundkaj
        - Manual Processes
        - New Demo Line
      - ▾ Head Quarters
        - Factbird Live Demo
        - Smart Factory Expo

# Other Improvements

## Stop Alarms

Set alarms for production stops



Update alarm ✕

**Alarm details**

Alarm name \*  
Technical issue

Name of the alarm

Alarm description \*  
demo

A description of the alarm

Enable alarm

**Alarm configuration**

Alarm type \*  
Stop time > t minutes

The type of alarm

Stop type \*  
Loss during operation

t \*  
60

The type of stop

Stop duration in seconds

**Subscribers**

+ ADD NEW SUBSCRIBER TO ALARM

DELETED ALARM

DISCARD CHANGES UPDATE ALARM

# Other Improvements

## Batch view

Get an overview of how your batches performed

Actual vs expected speed per batch

Filter batches...

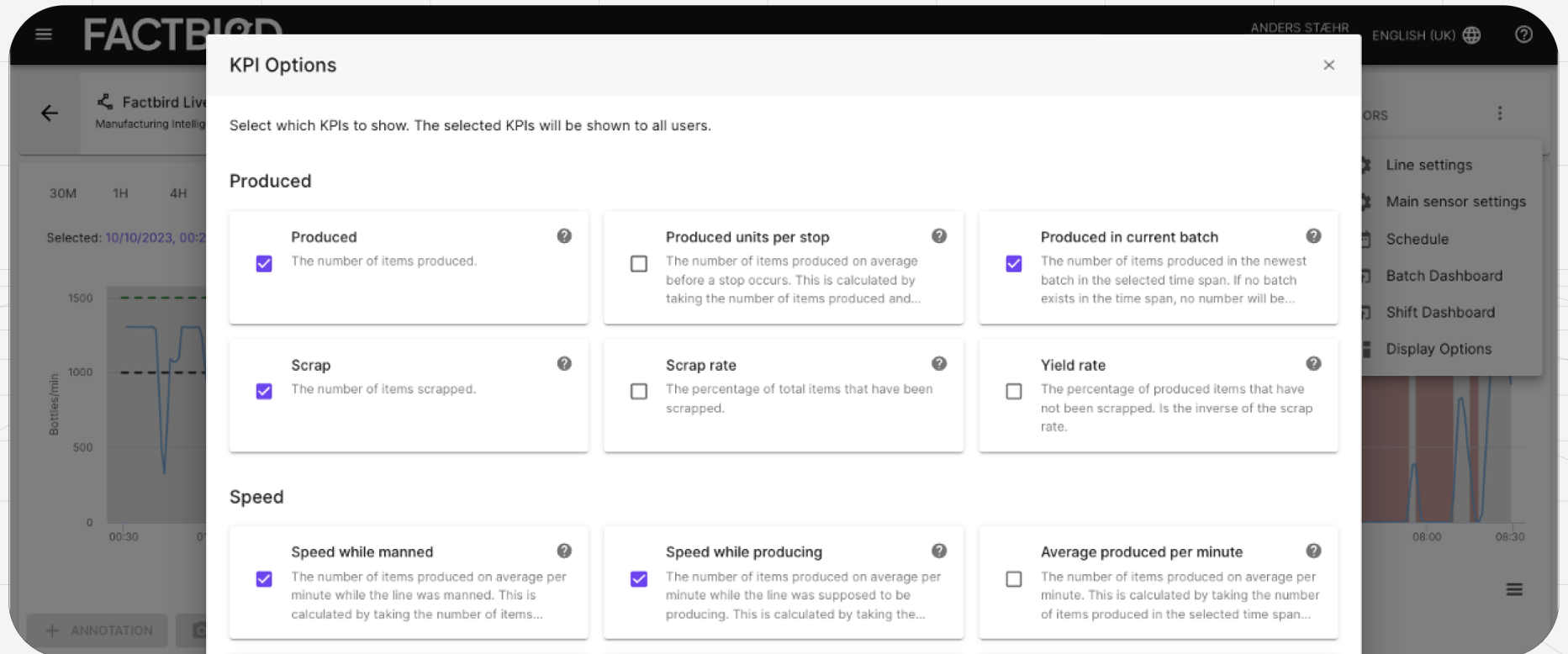
State	Batch/PO number	Product name	Planned start	Planned stop	Actual start	Actual stop	Estimated time of completion	Planned amount	Actual produced	Avg. speed pcs/min	Expected speed pcs/min	Links	Actions
Running	172	BB Beer	06/10/2023, 15:45:30	06/10/2023, 17:25:30	06/10/2023, 15:46:00	■	09/10/2023, 03:20:08	100000	1844171	346.76	1000	📈 🔄 📄	✎ 📄
Done	Nordzucker DEMO	BB Soda	06/10/2023, 07:43:30	07/10/2023, 00:23:30	06/10/2023, 07:45:00	06/10/2023, 15:45:59	--	1000000	250659	521.12	1000	📈 🔄 📄	✎ 📄
Done	214124	BB Cider	03/10/2023, 09:12:00	04/10/2023, 23:57:34	04/10/2023, 14:15:30	06/10/2023, 07:44:29	--	1000000	1024083	411.44	430	📈 🔄 📄	✎ 📄
Done	567	450g Steak	02/10/2023, 11:26:30	02/10/2023, 12:29:27	02/10/2023, 11:27:00	03/10/2023, 14:54:29	--	56667	710760	431.42	900	📈 🔄 📄	✎ 📄
Done	123456	BB Wine	29/09/2023, 10:35:00	29/09/2023, 13:55:00	02/10/2023, 10:49:30	02/10/2023, 11:26:59	--	100000	9641	257.09	500	📈 🔄 📄	✎ 📄
Done	333	BB Beer	27/09/2023, 16:57:00	29/09/2023, 18:57:00	28/09/2023, 09:35:30	28/09/2023, 15:19:29	--	3000000	282413	820.97	1000	📈 🔄 📄	✎ 📄

# Other Improvements

## KPI Options

Choose which KPIs to use on each line

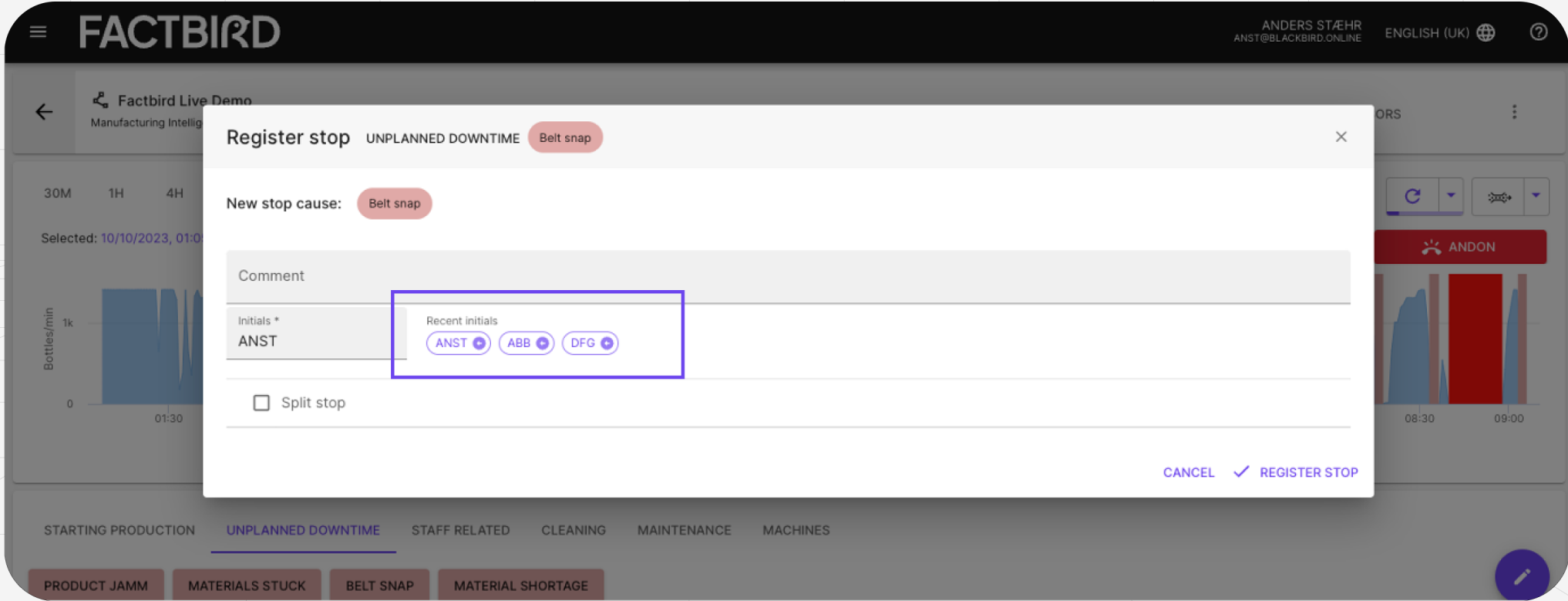
Line KPI visibility



# Other Improvements

## Stop Registration

Improved workflow for entering initials

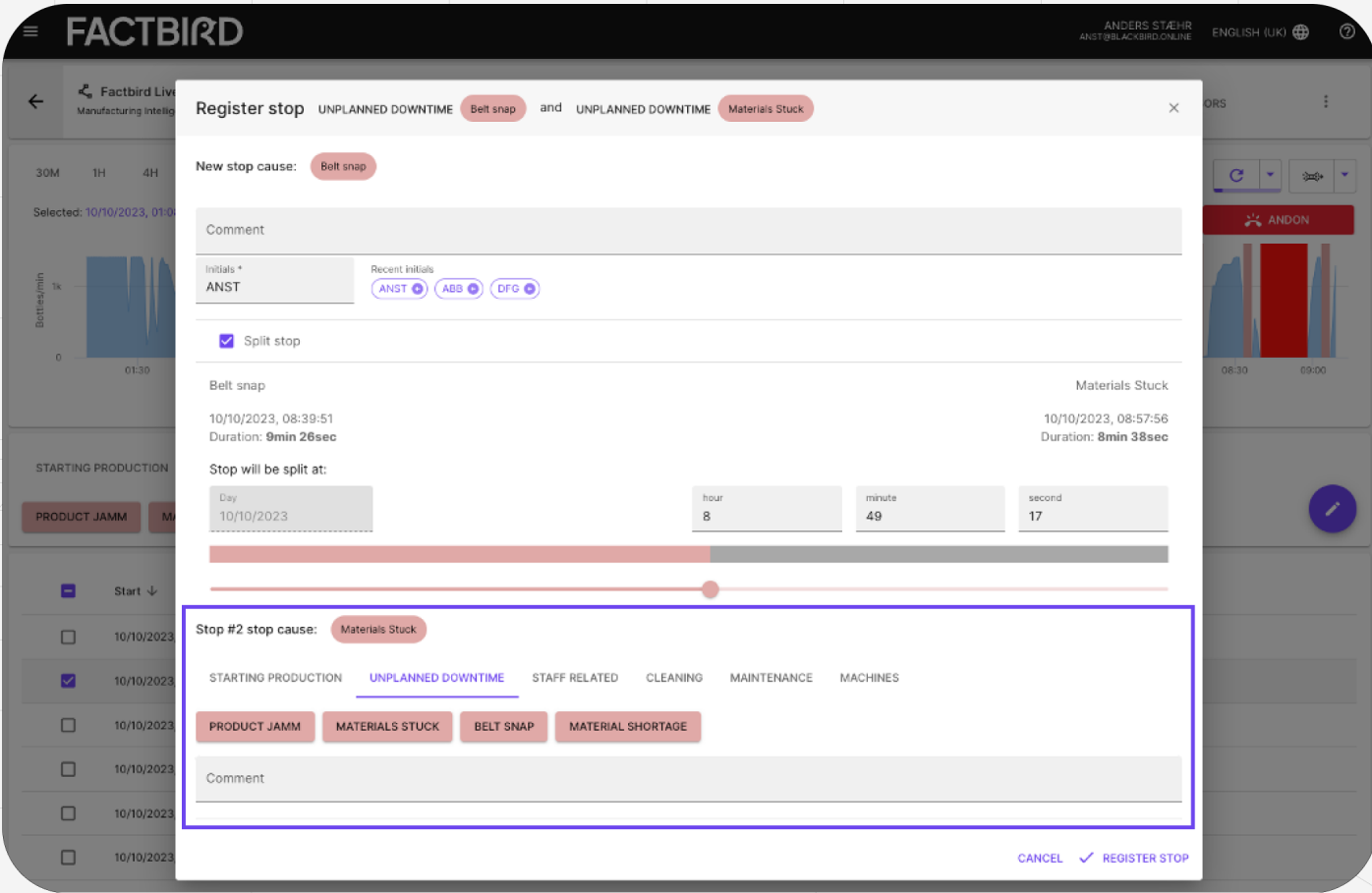




# Other Improvements

## Stop Registration

Improved workflow for register both stops on split



# Other Improvements

- Improved filtering functionality for OEE analysis
- Improved connection status visibility
- Better time selection on lines overview
- And much more...



001

FACTBIRD  
Technical Newsletter

Small changes with big impact



# Product Announcements

Peter Juhl Savnik

Chief Product Officer



**Competitive**

**Empower**

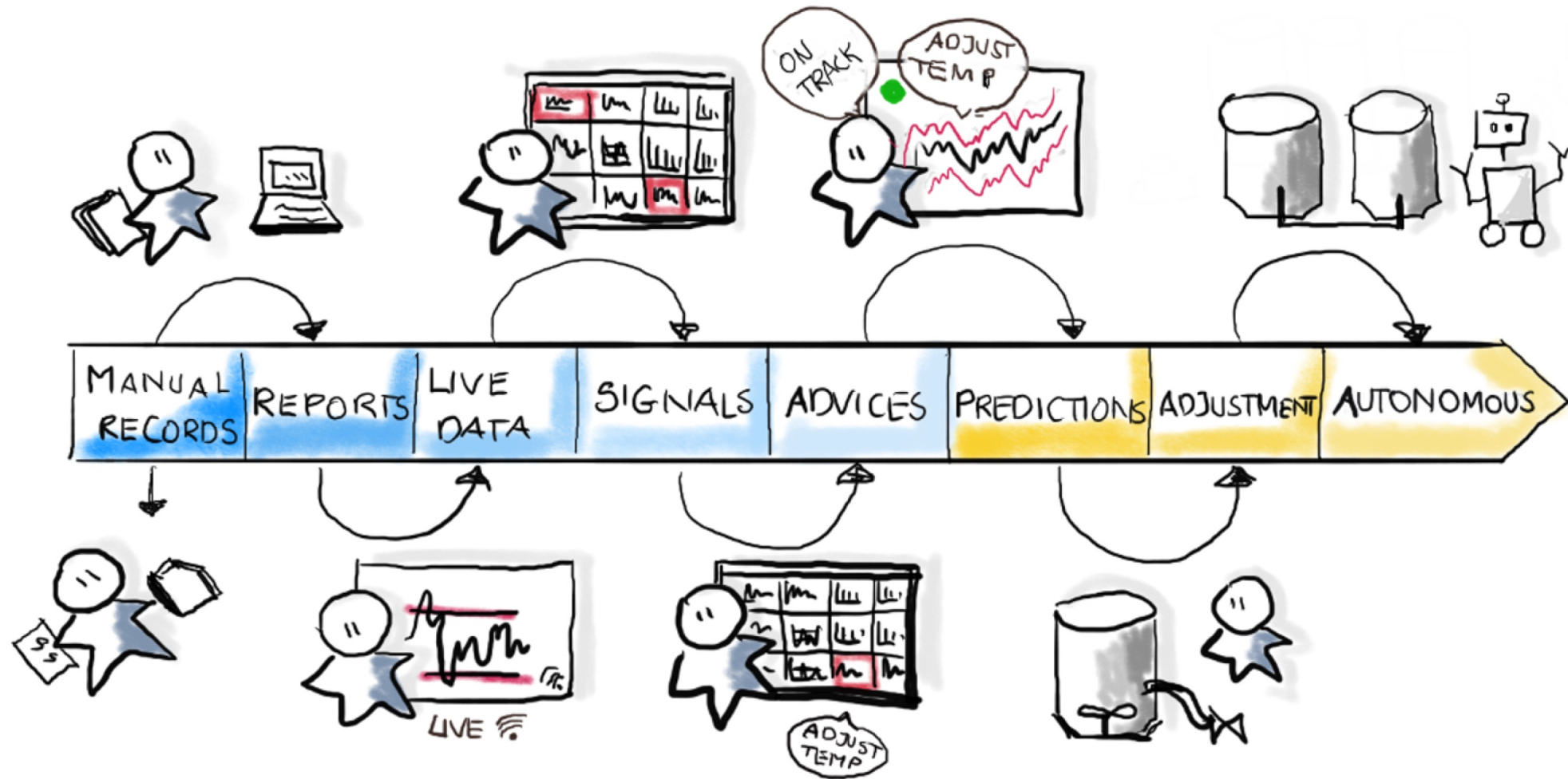
**Adapt**



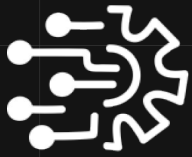
Easy to use

Easy to install

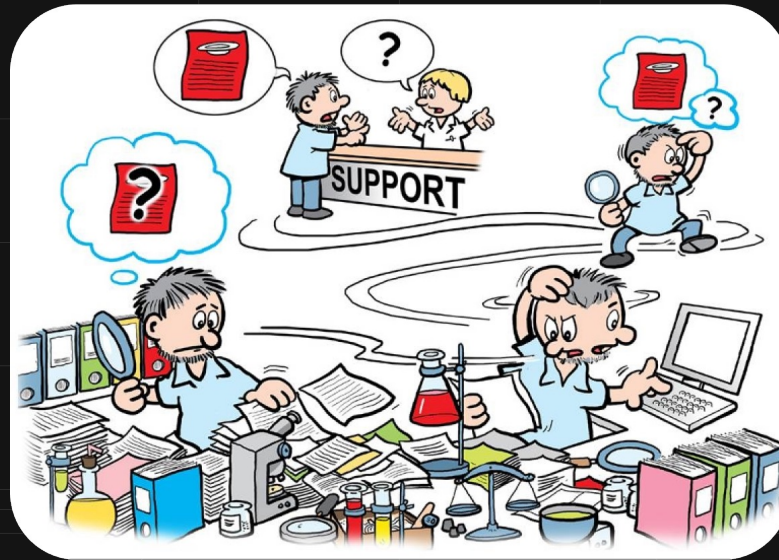
Easy to get  
value of



Source



Data engineers



Consumers



Source

Central Data Access

Consumers



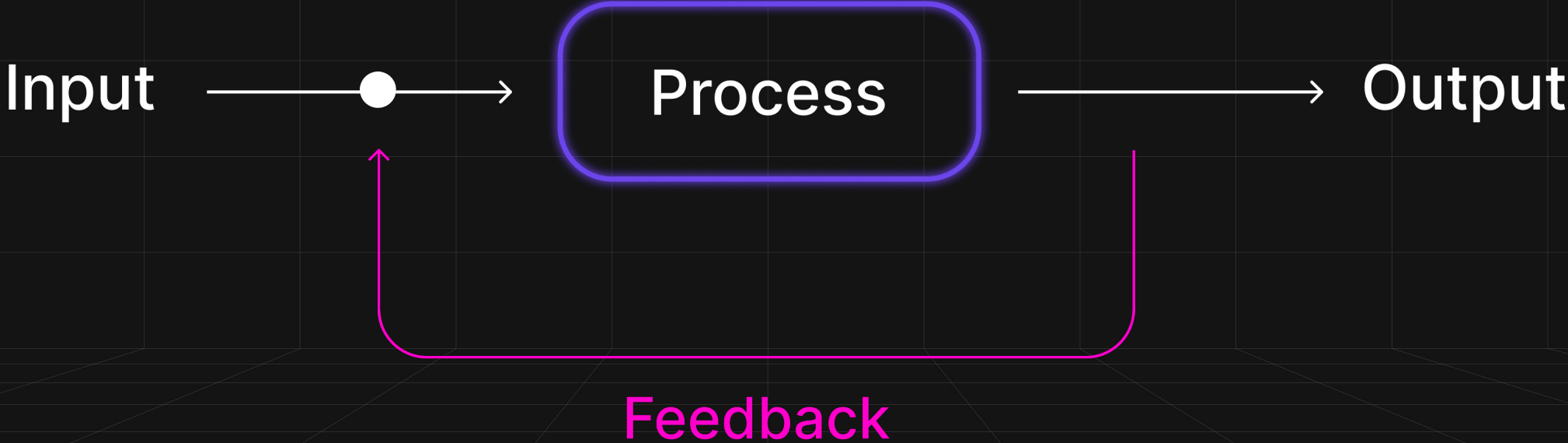


# Coming...



## Data Lake Connector

- Easy Store & Analyze Factbird data joined with Enterprise Data
- Automatic push of data to AWS Data Lake & Azure Data Lake
- Enterprise-Grade Security

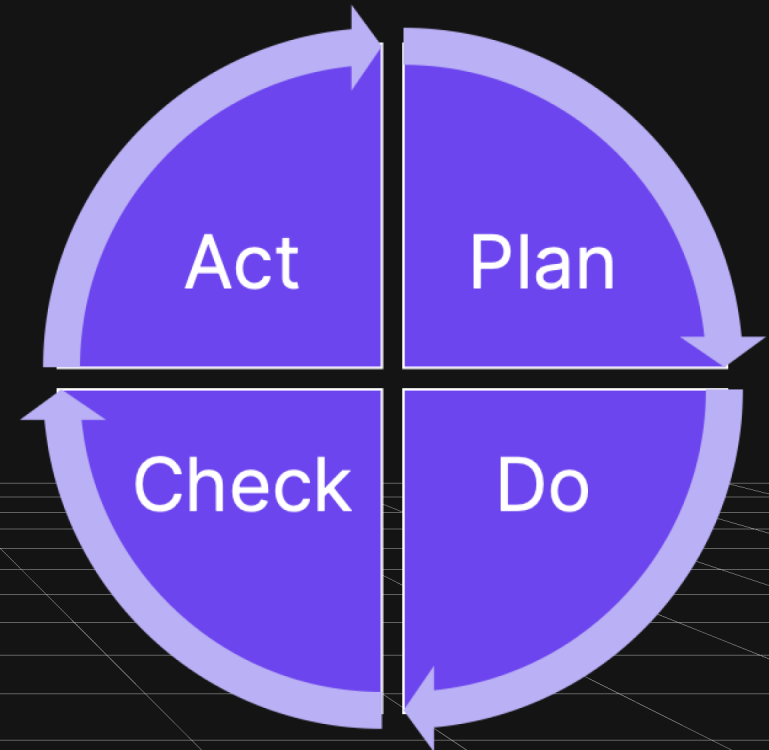


# Coming...



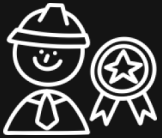
## Factbird Action Plans

- Automatic reminder on follow-ups
- Easy escalation through the organization
- Easy attach documentation & pictures
- Follow-up can be automated to a Line
- AI based knowledge sharing





# Coming...



## Factbird Insight

- Quickly Benchmark Internally
- Opt-in Benchmarking towards industry sectors
- Easily identify risk in poor user adoption





**“ We build the #1 Cloud based Manufacturing Intelligence Software that works out of the box and can be retrofitted into any manufacturing environment. ”**

Peter Juhl Savnik  
Chief Product Officer





# Security Updates

Simon Vandel Sillesen

Head of Security & Senior Full Stack Engineer

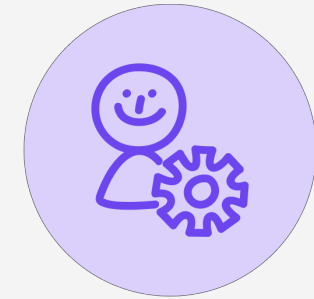
# Single-Sign-On (SSO)



Fewer logins

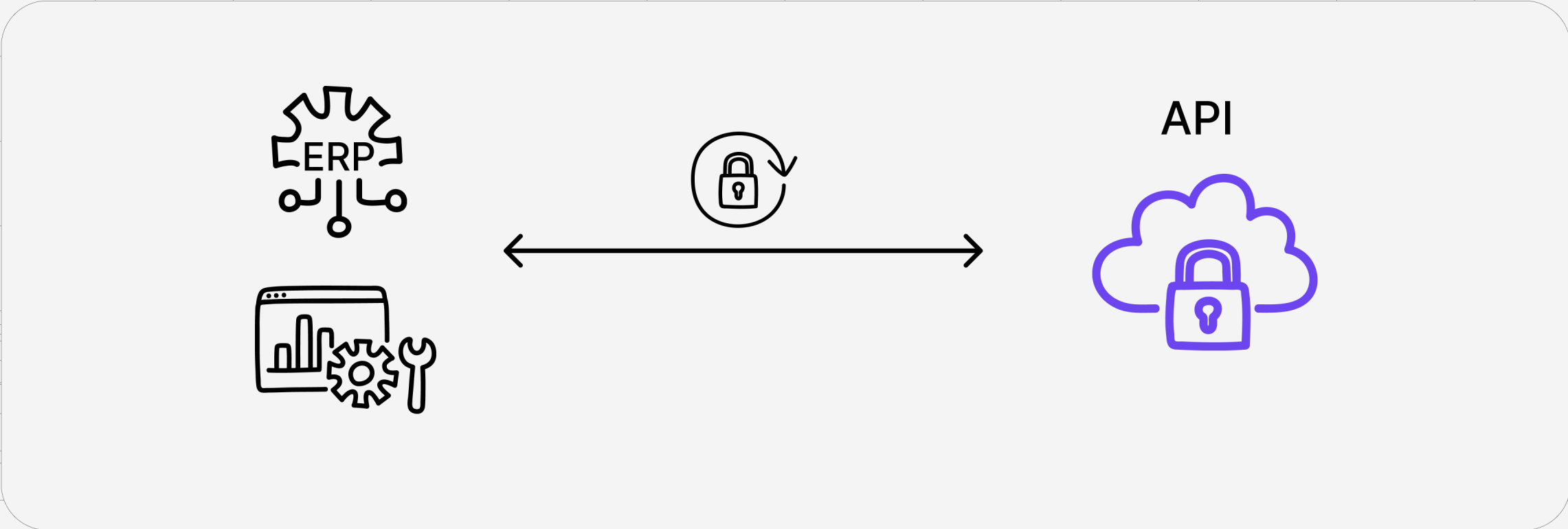


MFA



Central  
administration

# New: OAuth2 Client Credentials





# Analog Sensors

Kenneth Sylvest Knudsen

IoT & Hardware Specialist

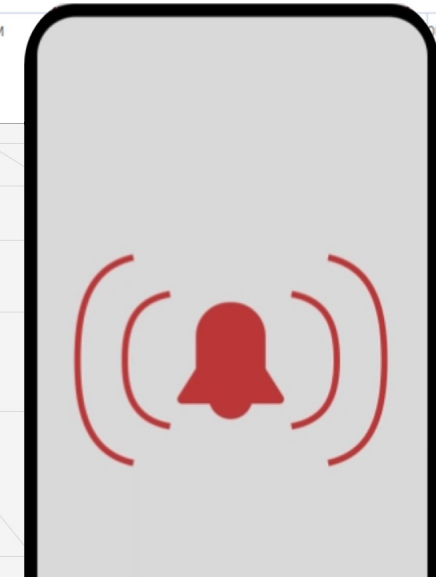
# Analog Sensors

- Support up to 2 analog sensors
- 4-20mA analog sensors



# Analog Sensors

- Alarm notifications





# Energy Monitoring

Nicolai Sahl-Tjørnholm

Full Stack Engineer



# Energy data in everyday production



Saving energy



Reduce operational cost



Reach sustainability goal

# Clamp on energy monitoring



**Non-invasive**



**Fast and easy**



**Adaptable**

**Campaign: Get connected for free!**



# Factbird View

Søren Bønning Jakobsen

IoT & Hardware Engineer

# Factbird View v2

- The importance of video data
- What does the hardware look like?
- IP-cameras



# Factbird View v2 - beta



Improved video  
quality



Viewing  
angles



IP-ratings



Privacy  
Protection

# Factbird View v2 - the future?



**High FPS**



**Wireless  
Connectivity**

# Closing thoughts & Questions