Realizing added value for our customers through innovative IoT technologies

May 15th, 2019

Siemens IOT: We create your unique digital journey – from consulting to design to implementation

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1 Consulting

- Define **strategy** and business priorities at **company level**
- Realize tangible **value in operations** (beyond digital)
- Define promising **IoT use cases & business models**

2 Prototyping & Design

- Create tangible **IoT use case concepts** and move towards realization (mock-up)
- **Prototype innovative IoT solution**, e.g., digital twin

3 Solution Development & Implementation

- **Deploy** commercially **viable solution**
- Help **integrating solutions** and **set-up organizational change through change management**

Interdisciplinary, agile teams to deliver end-to-end consulting and solutions in Siemens industries complementing the Siemens' business unit's portfolio

Your challenge:

How can I increase productivity and throughput and reduce lead times in my production?

Our answer:

Production Throughput Inspector (PTI)

Support different stakeholders with insight statistics of production and Logistics

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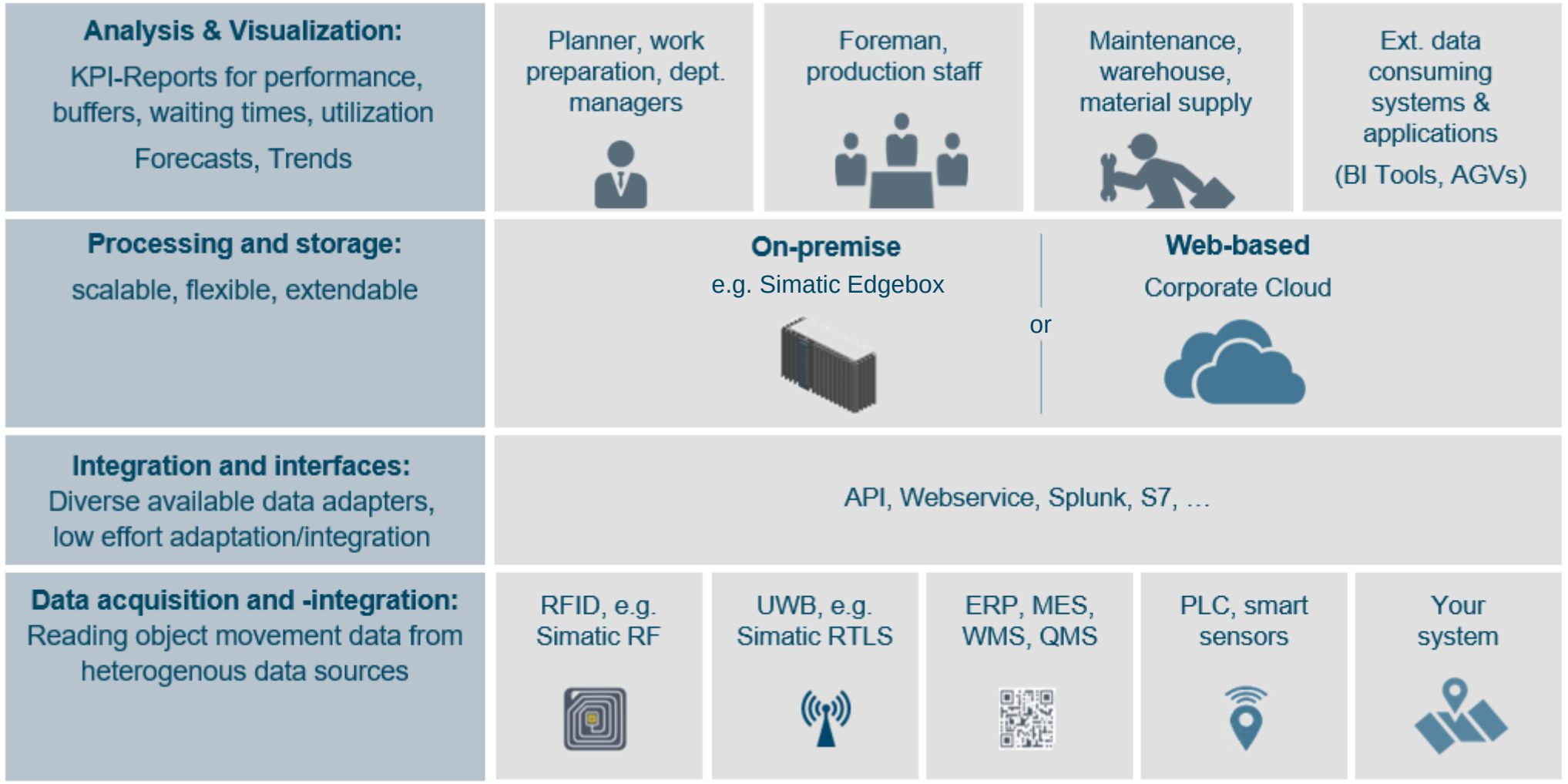

Dashboards can be configured for fast evaluation and improvement - Flow visualization and bottleneck identification (Heat Map)

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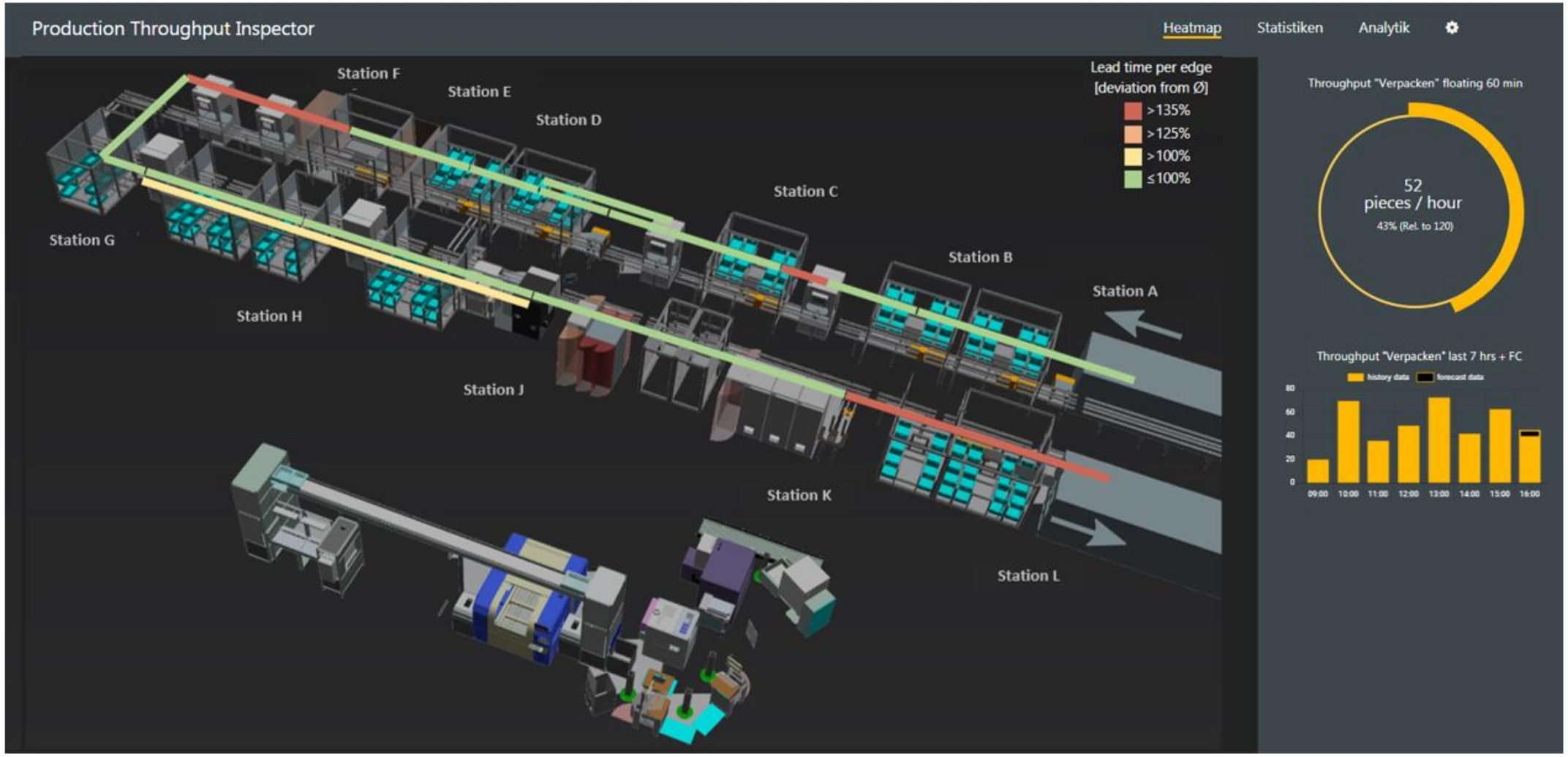
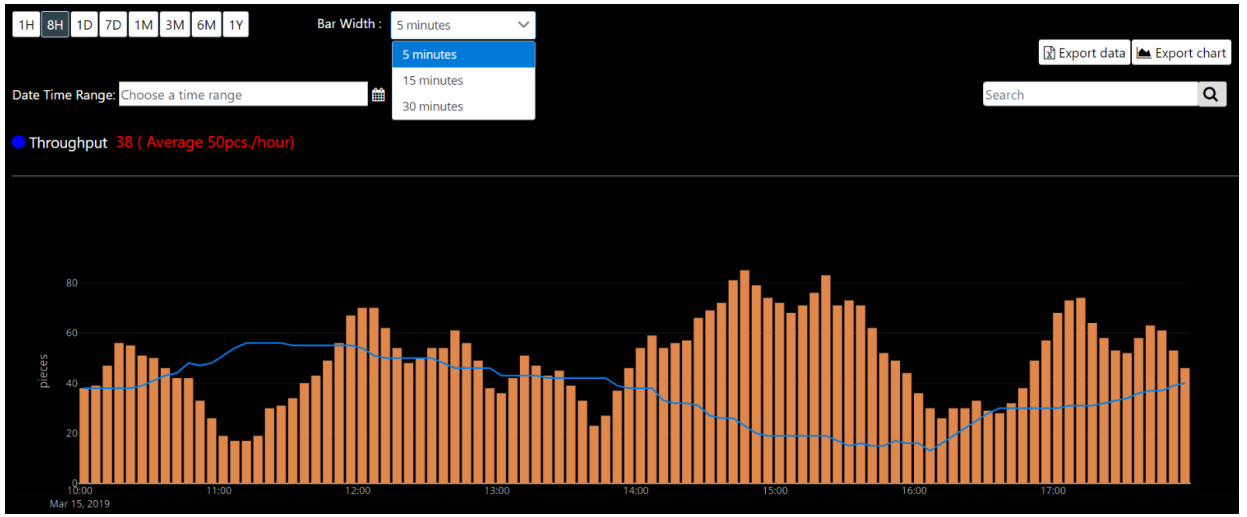
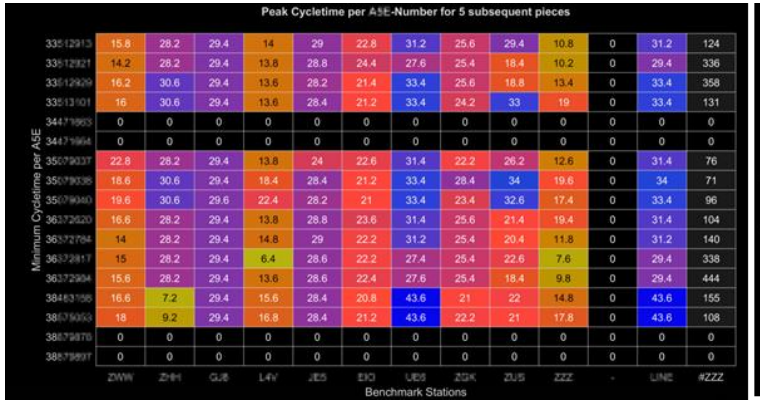
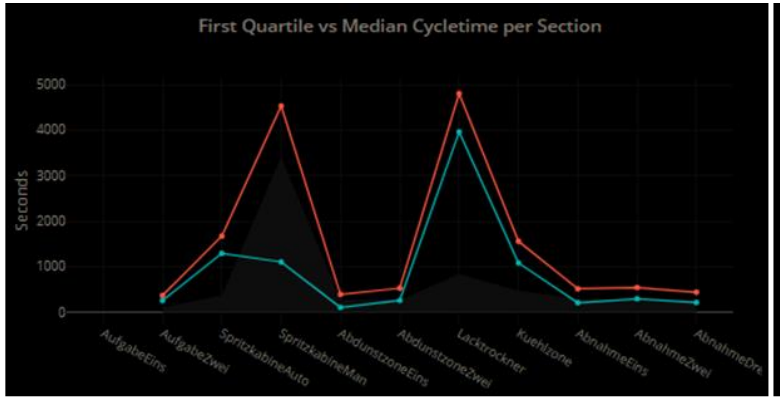
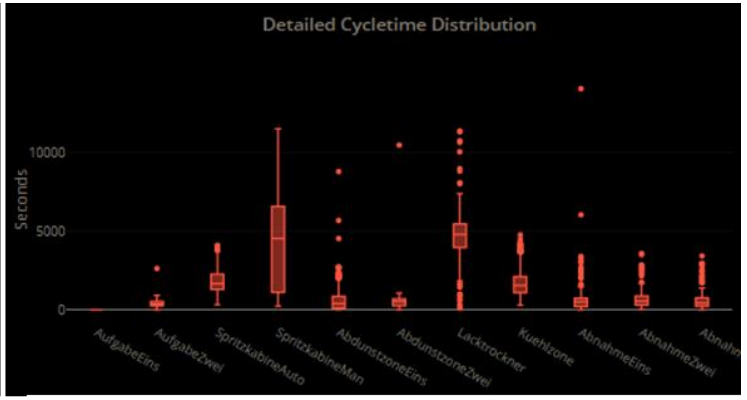


Dashboards can be configured for fast evaluation and improvement - KPIs and Historical Data (Statistic Modul)









Objective view of reality: Mapping planned and unplanned events to production performance

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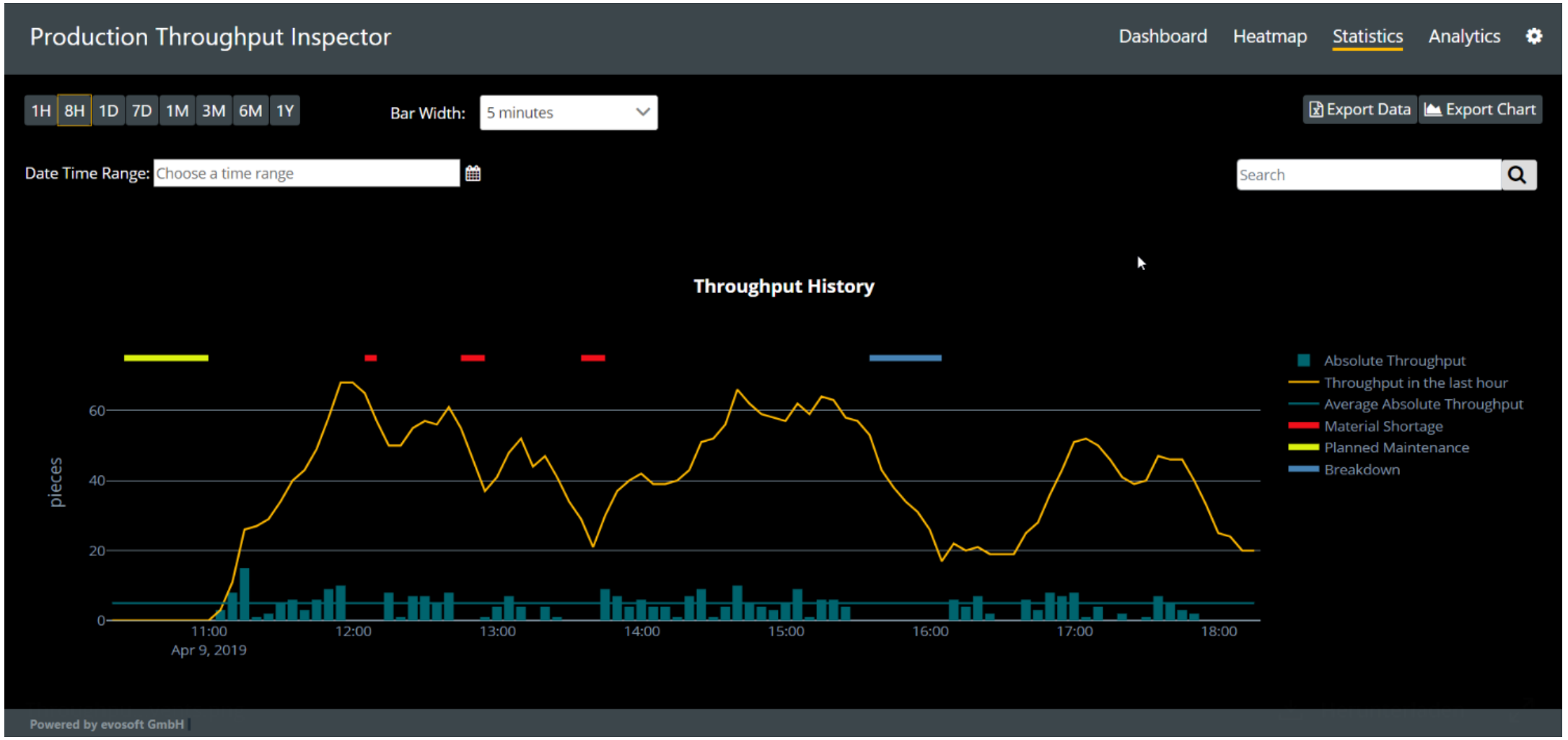

Managing WIP and buffers: Display inventory indicators

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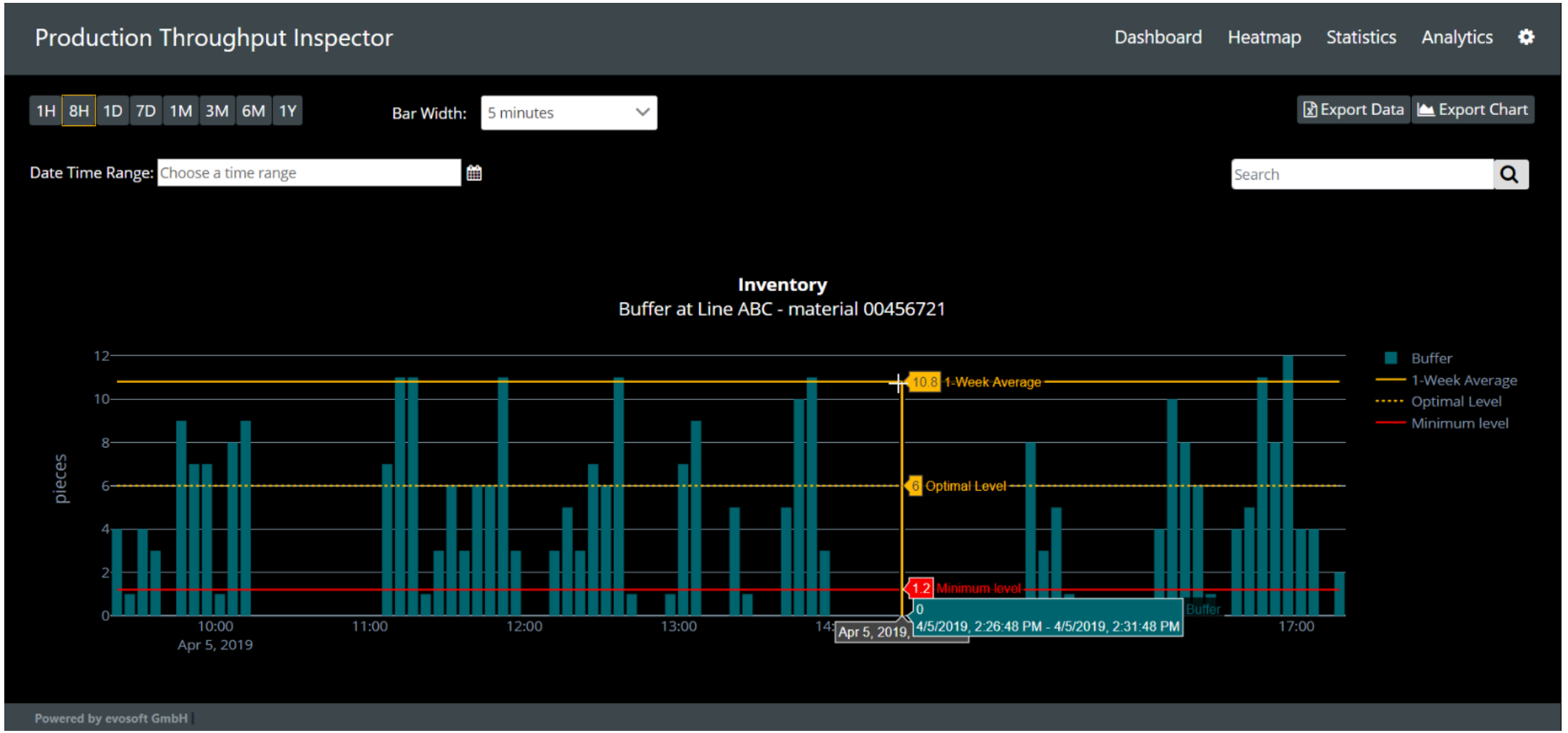

Your challenge:

How can avoid blockades or inefficiencies in your production flow?

Our answer:

Advanced Flow (AdvFlow)

Using MindSphere to optimize an assembly line

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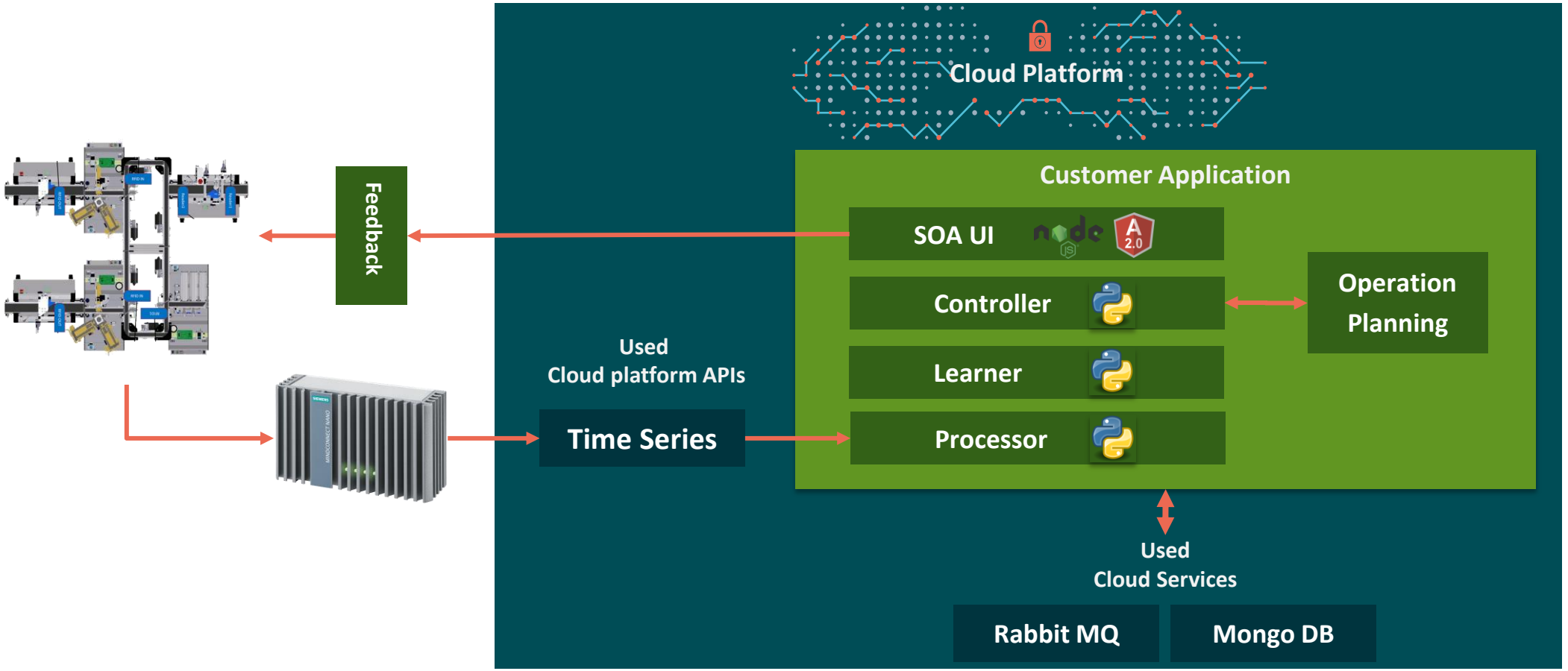

Bottlenecks in in production flow are avoided - Products and parts are at the right time and at the right place available

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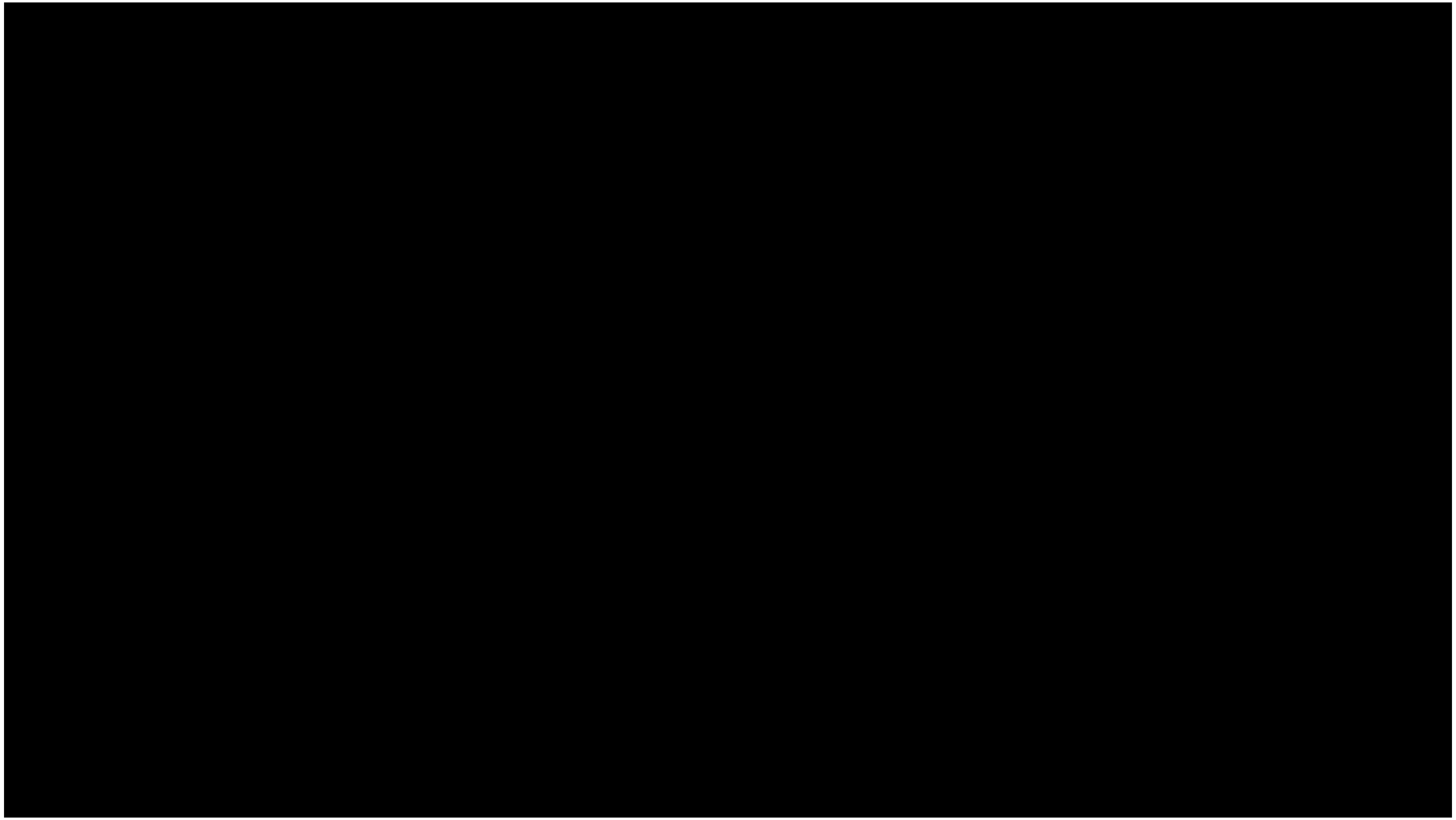

With AI we gain significant efficiency increases with nearly no invest of the customer

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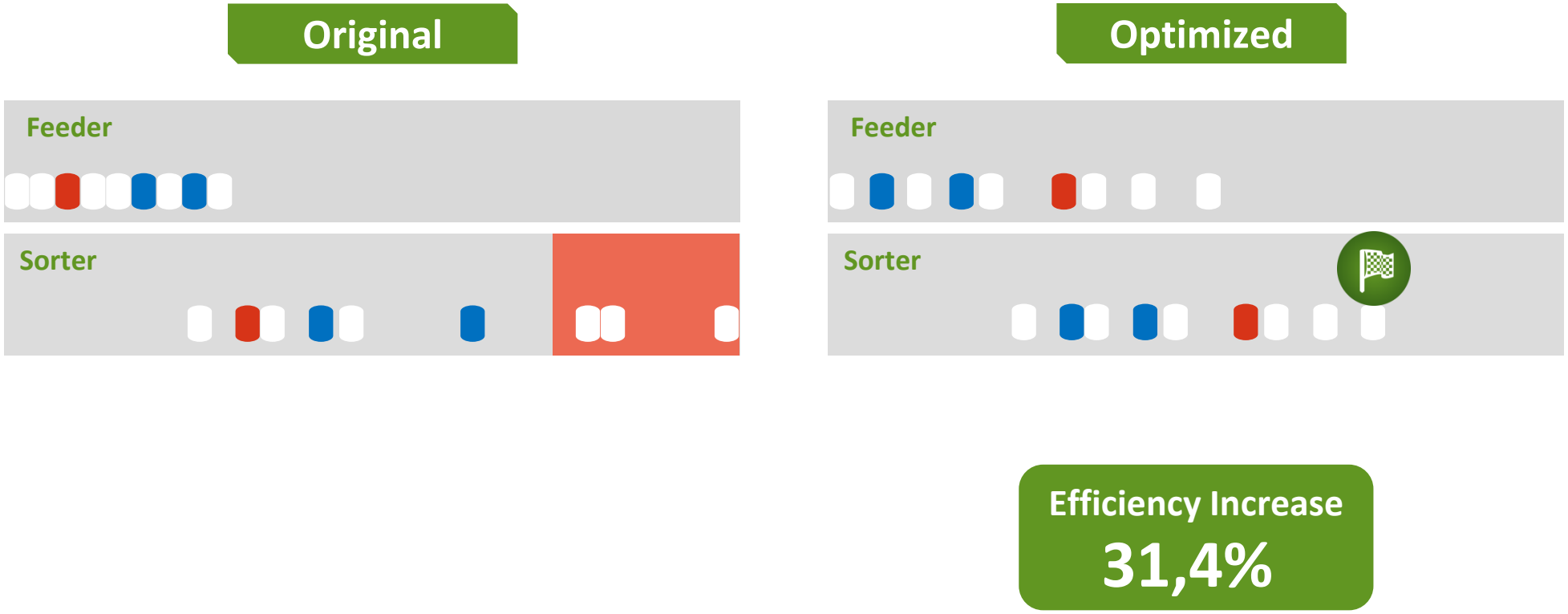

Your challenge:

How can I sync data between a physical and virtual environments?

Your challenge:

Augmented Machine Vision

It is an easy way to generate a real-time digital represenation

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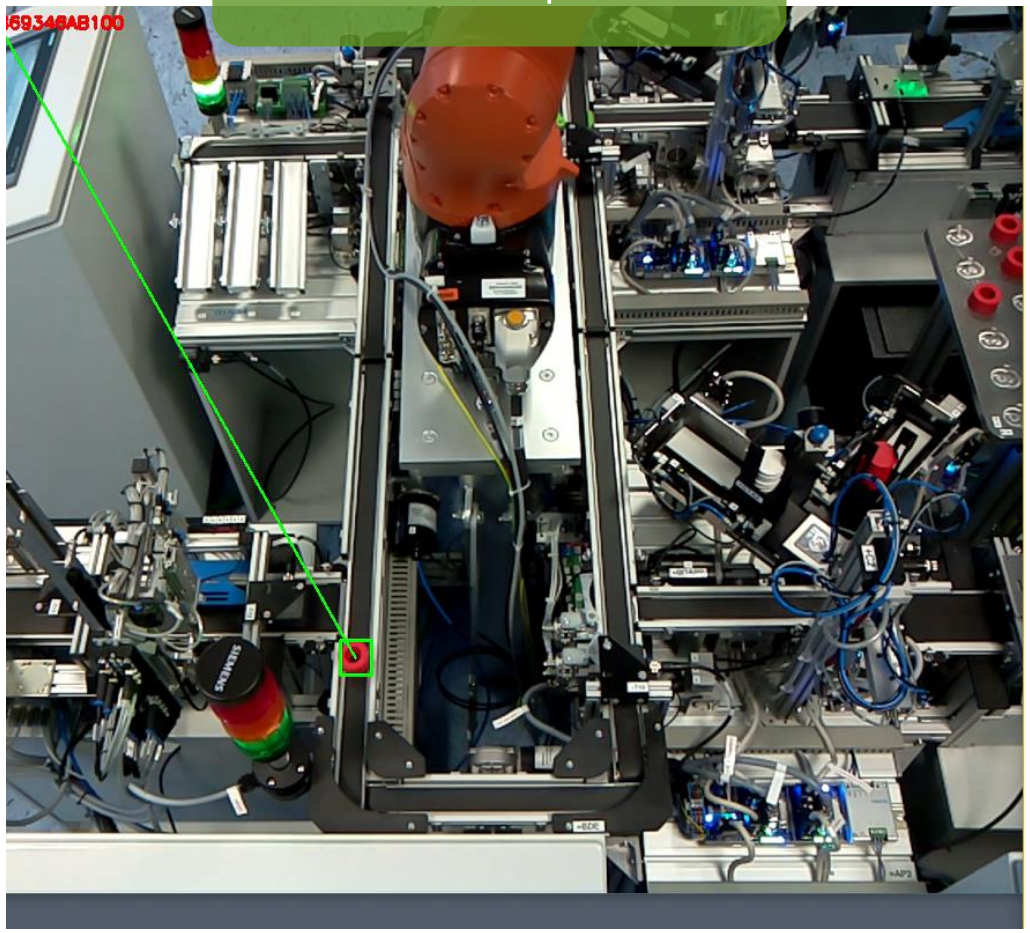
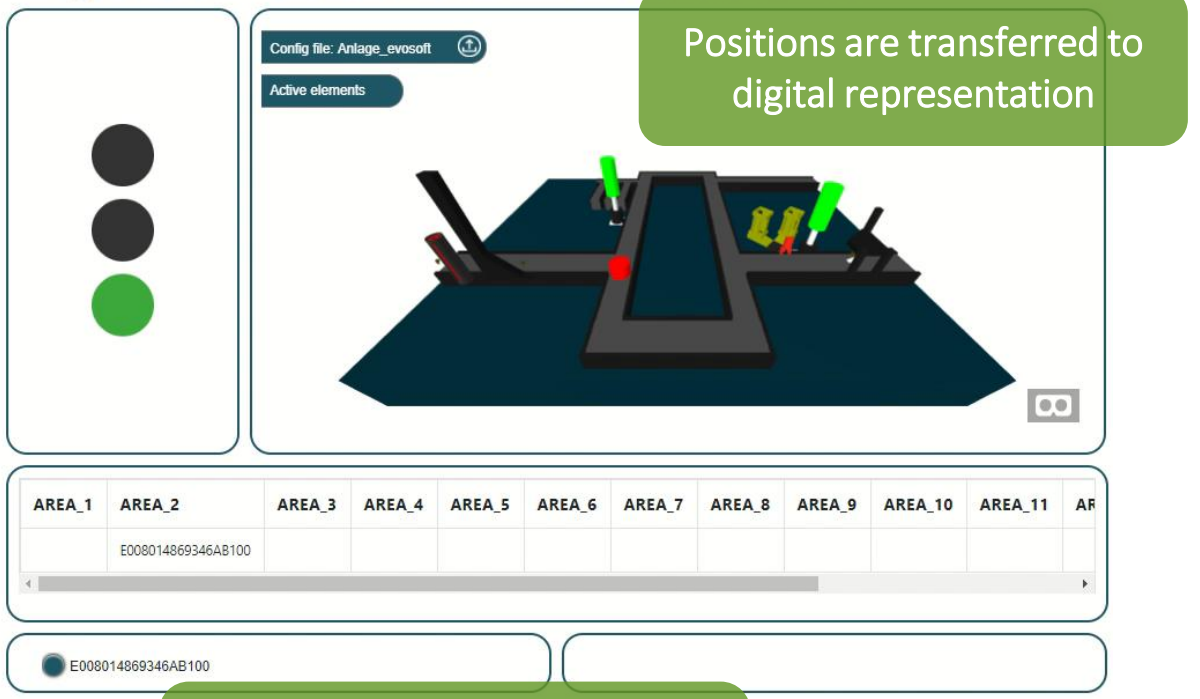
Cameras track movements on the whole plant



Augmented Machine Vision Control Interface



Positions are transferred to digital representation

Workpieces on feeder are linked with data of MES

Real-Time digital twin using edge computing

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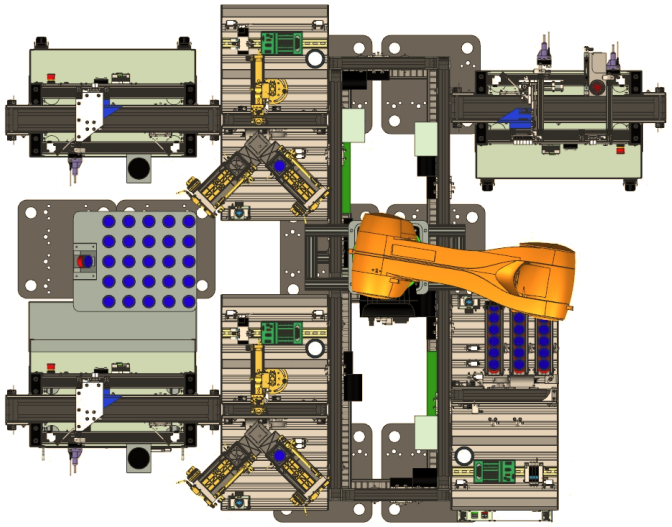
Physical Plant → Visual Data → **Computation on Edge** → Position Data, Status Data, Asset Data → Digital Representation



Smart Camera

Smart Camera

Summary

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- Set focus on customer value
- Leverage through reusuable buildings blocks
- Adapt solutions by flexible integration concepts

Thank You!

Siemens Innovation Day China 2019 | May 14th - 15th Chengdu

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Thank you for your attention!