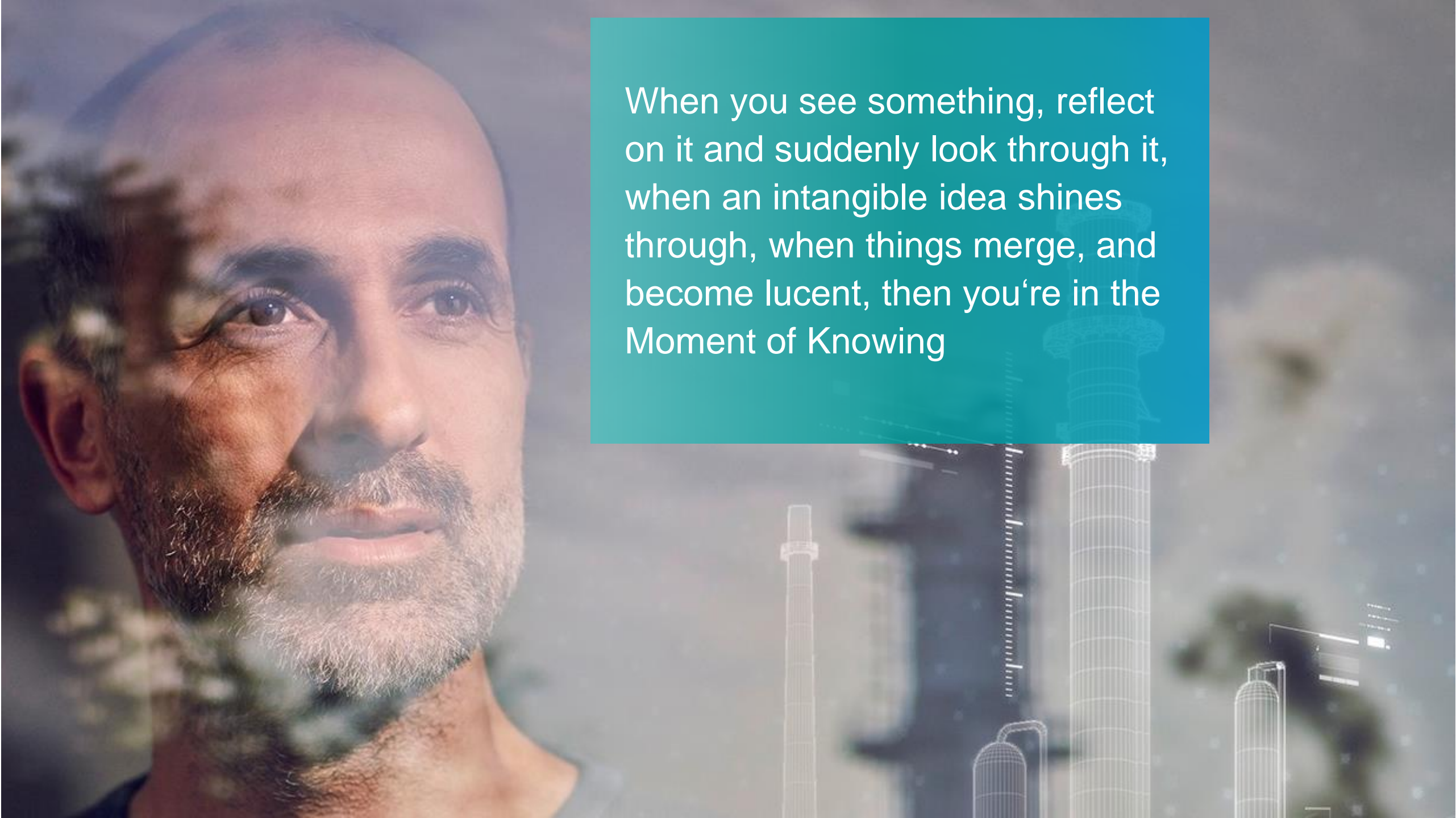


Gaining invaluable insights with PlantSight

Discover the benefit from the Digital Twin
in a brownfield environment

The image is a composite. On the left side, there is a close-up portrait of a middle-aged man with a shaved head and a grey beard, looking slightly to the right with a thoughtful expression. On the right side, there is a wireframe illustration of an industrial facility, including tall distillation columns and storage tanks. A semi-transparent teal rectangular box is positioned in the upper right quadrant, containing white text. The background is a blurred outdoor scene with trees and a building.

When you see something, reflect
on it and suddenly look through it,
when an intangible idea shines
through, when things merge, and
become lucent, then you're in the
Moment of Knowing

Dark Data is the key

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How to manage Dark Data?

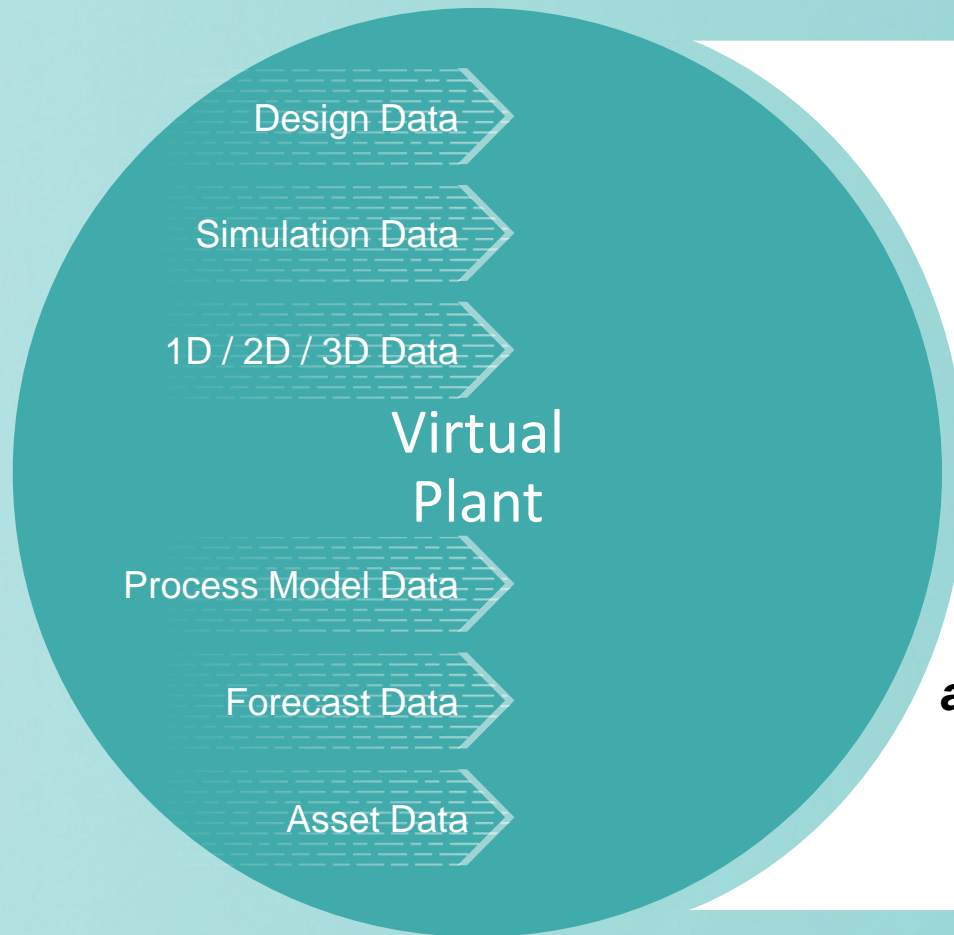
Unstructured and untagged
data and documents

Different data storage locations

Where is the application?

Finding **current** and **valid** status

PlantSight - Digital Enablement



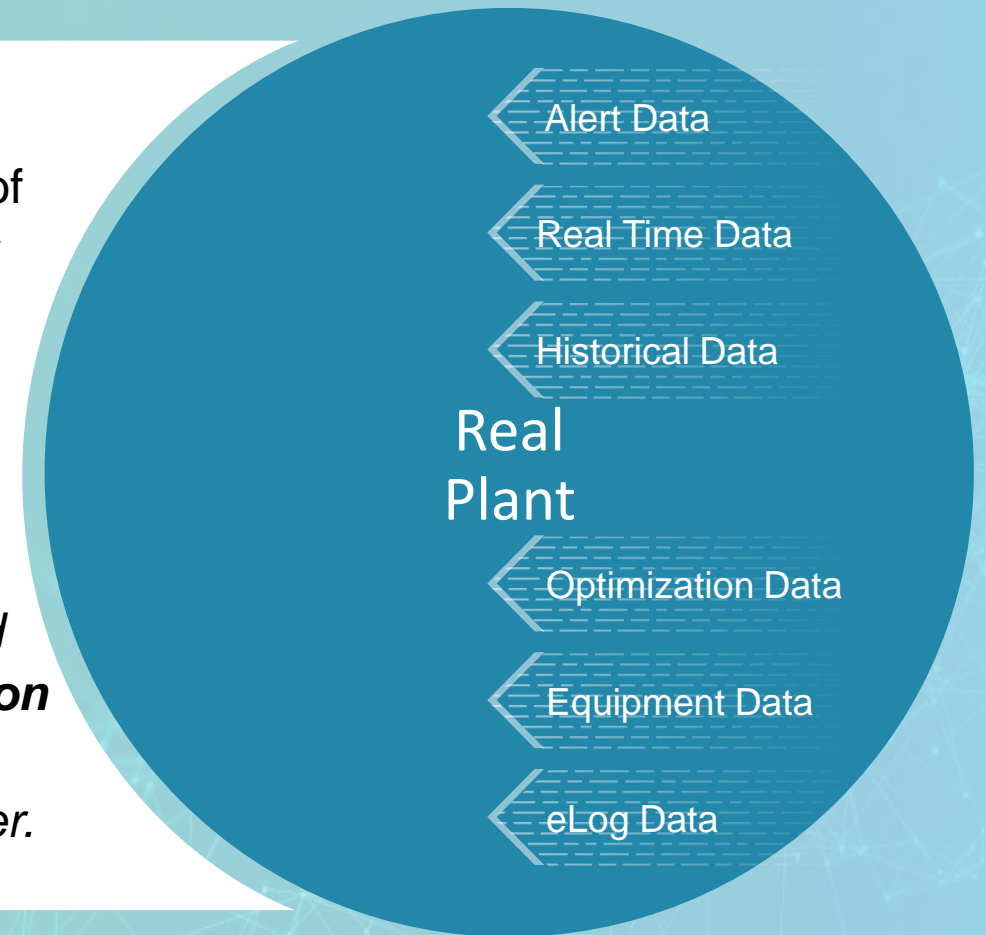
Digitalization

Brings these worlds of information together

- ✓ Quickly
- ✓ Reliably
- ✓ Consistently
- ✓ Seamlessly

Origins of data and access to visualization tools ...should be transparent to the user.

PlantSight - Digital Reliability



Clean handover and continuous change management is essential



PlantSight

One complete, digital twin for the process industry

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Ingenuity for life

Your plant - in data



Capture data from different sources

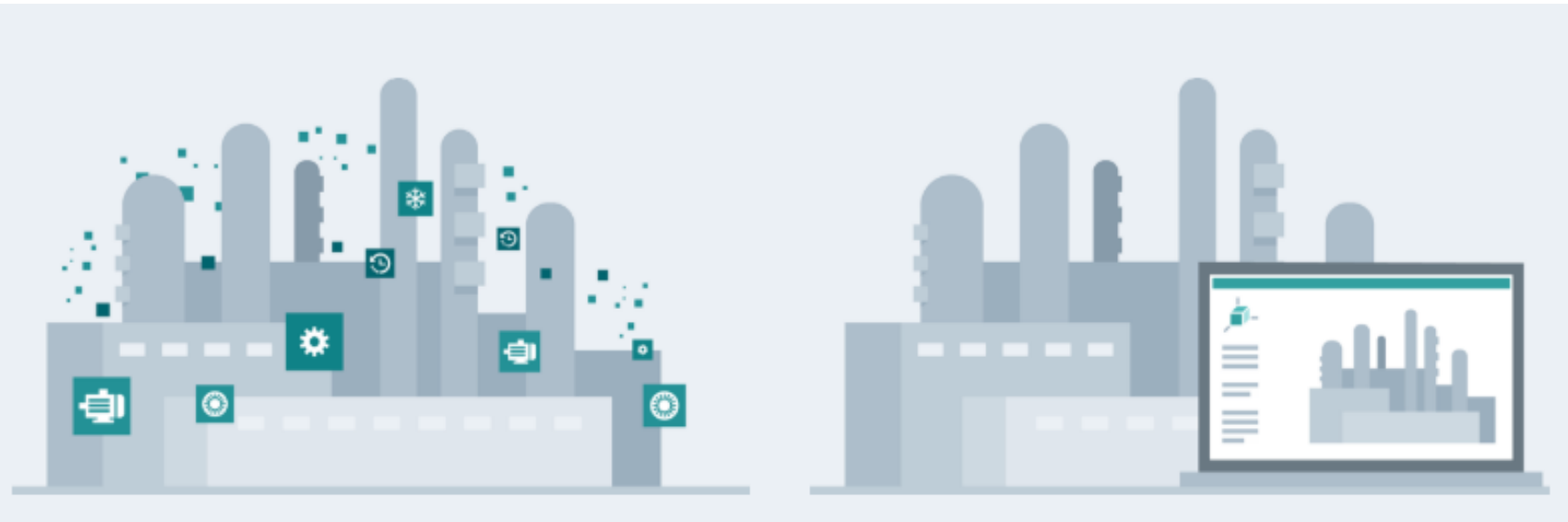
PlantSight

One complete, digital twin for the process industry

SIEMENS
Ingenuity for life

Your plant - in data

One complete, digital twin



Consolidate and validate data

PlantSight

One complete, digital twin for the process industry

SIEMENS
Ingenuity for life

Your plant - in data

One complete, digital twin

Invaluable insights: anytime, anywhere



See everything, discover new possibilities, work purposefully – and profit immediately

Brownfield enablement and asset integrity management



Brownfield
challenge today

Documents and data from
different sources

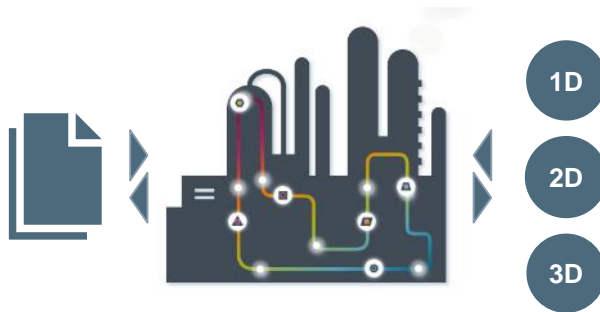
Unstructured and unreliable
engineering data

Data inconsistency

PlantSight
brownfield
enablement
approach



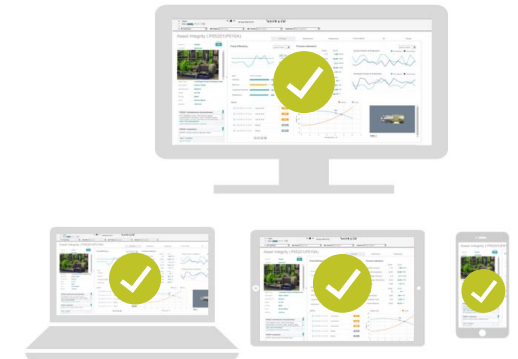
Capture
data from different sources



Consolidate
and validate data



Unify
and access common
asset data portal

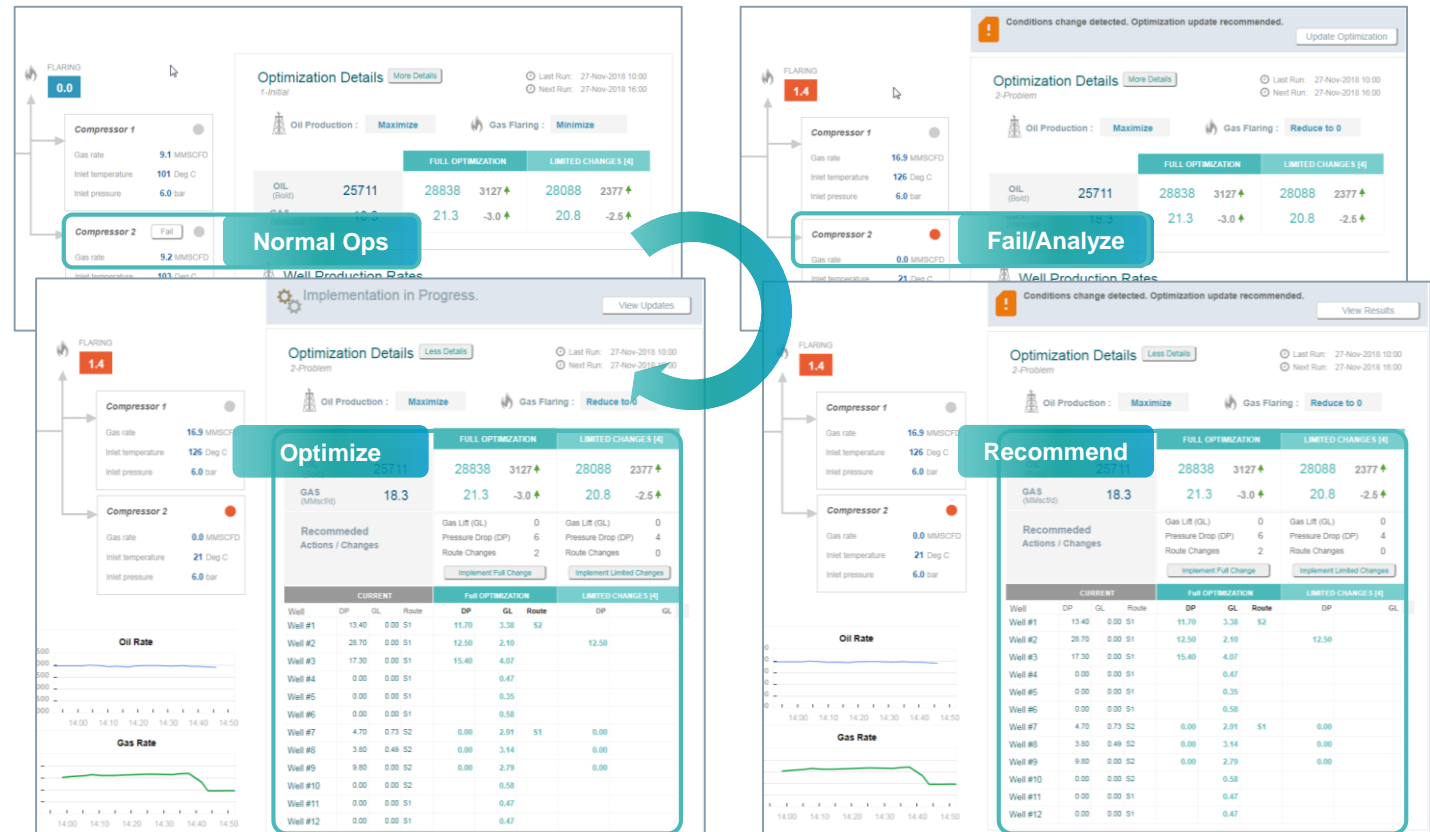


Digital Twin enablement without disruption to existing physical or virtual environment

An intelligent twin for optimization

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- Operational improvements under normal conditions
- Optimized process recommendations for abnormal situations/ unplanned outages
- Deep data level integration to leverage all of your data sources



Open technology: Leverage the simulation and optimization tools of *your* choice

What does it mean for you?



Gaining insights with PlantSight

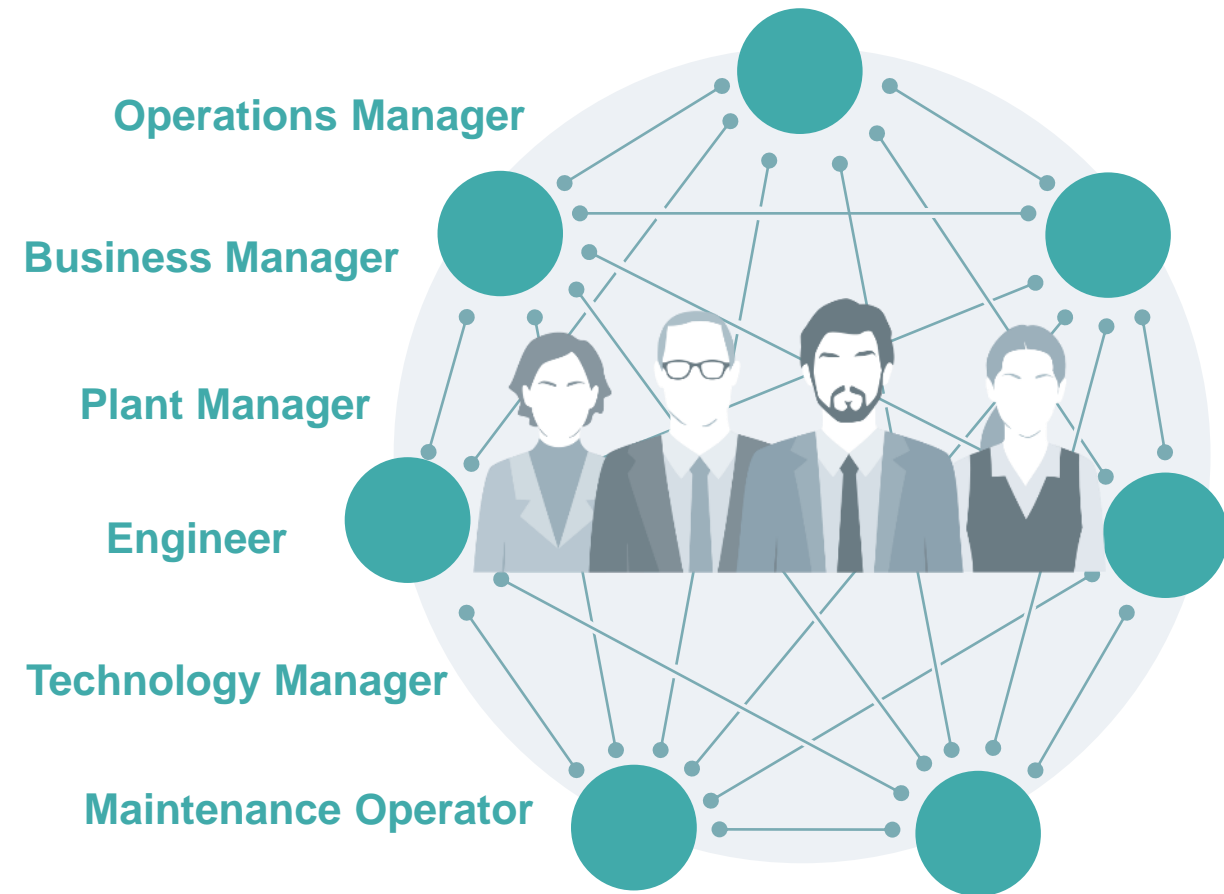
A single point of access for your digital twin



Easy access to updated information considering **your responsibilities and needs**

See the information ***you*** need – **when, where and how** you need it

- ✓ Make better and faster decisions
- ✓ Optimize process and performance
- ✓ Improve your operations



Roll-ups and Visibility for Operations

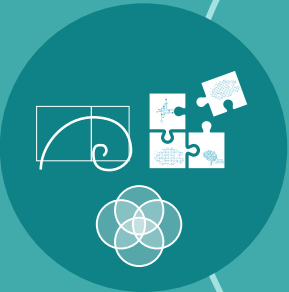
Providing a clear view to the horizon



Mobile Clients

Handover

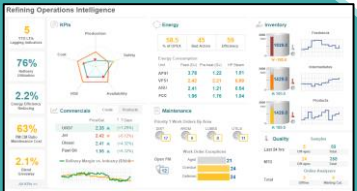
Engineering and Design View



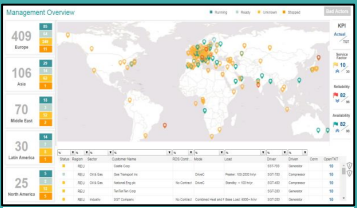
MindSphere



Operations View



Corporate Rollup KPIs



Global Fleet Management



Change Management

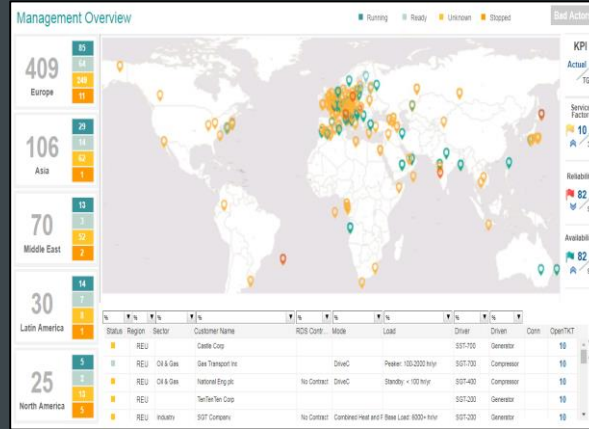


Asset Level Performance & Bad Actors

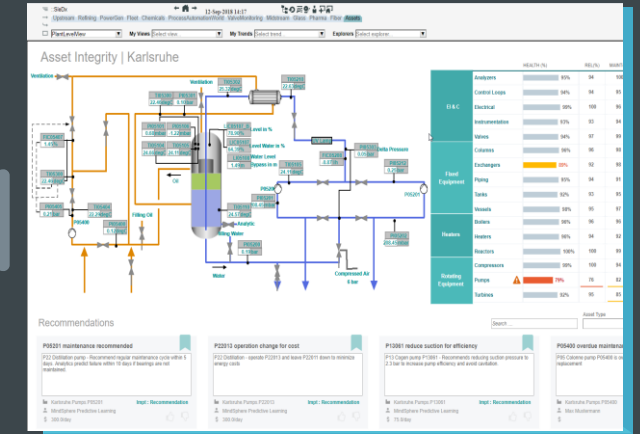
Gaining invaluable insights with PlantSight – dedicated to your requirements!

SIEMENS
Ingenuity for life

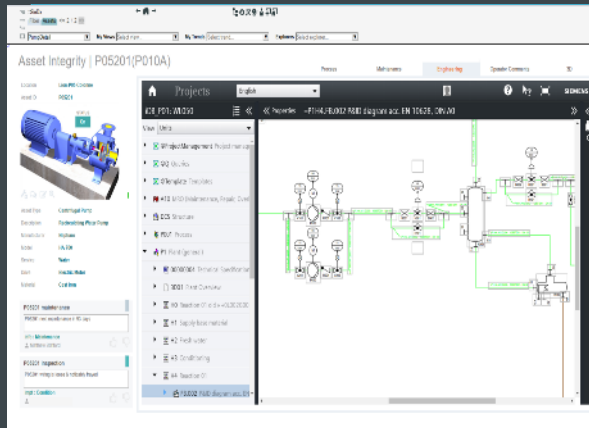
Operations Manager



Plant Manager



Plant Engineer



Maintenance Operator



Key Takeaways

The digital twin with contextualized data from different sources provides better insights to leverage enormous savings potentials



Workflows are triggered promptly and efficiently based on combined input from the DCS and Asset Performance Applications



Replacing disconnected/manual workflows with digital processes



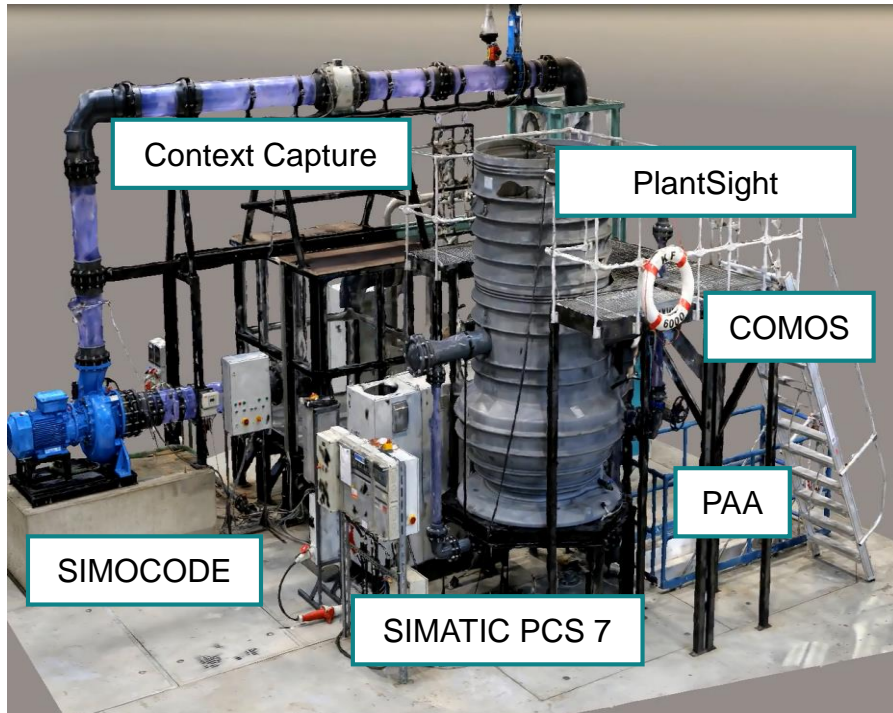


Digitalization of the Institute of Fluid Mechanics and Acoustics at the University of Berlin

Our addressed resource is a global demanded value



Digitalization of the Institute of Fluid Mechanics and Acoustics at the University of Berlin



Benefits

- Digitalization Use Case for Efficient process design and cost reduction due to the networking of data and information using the BIM approach
- “Conservation” of expert knowledge and training for Students
- Consistent documentation as basis for future applications
- Improved process reliability management due to high transparency with a central data management

- Retrofits through Digital Twin for brownfield plants through laser scanning, imagery or photography
- Context Capture – 3D reality mesh courtesy of the Pumping Stations @TU Berlin
- Based on 1,100 digital pictures the mesh model has been created



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