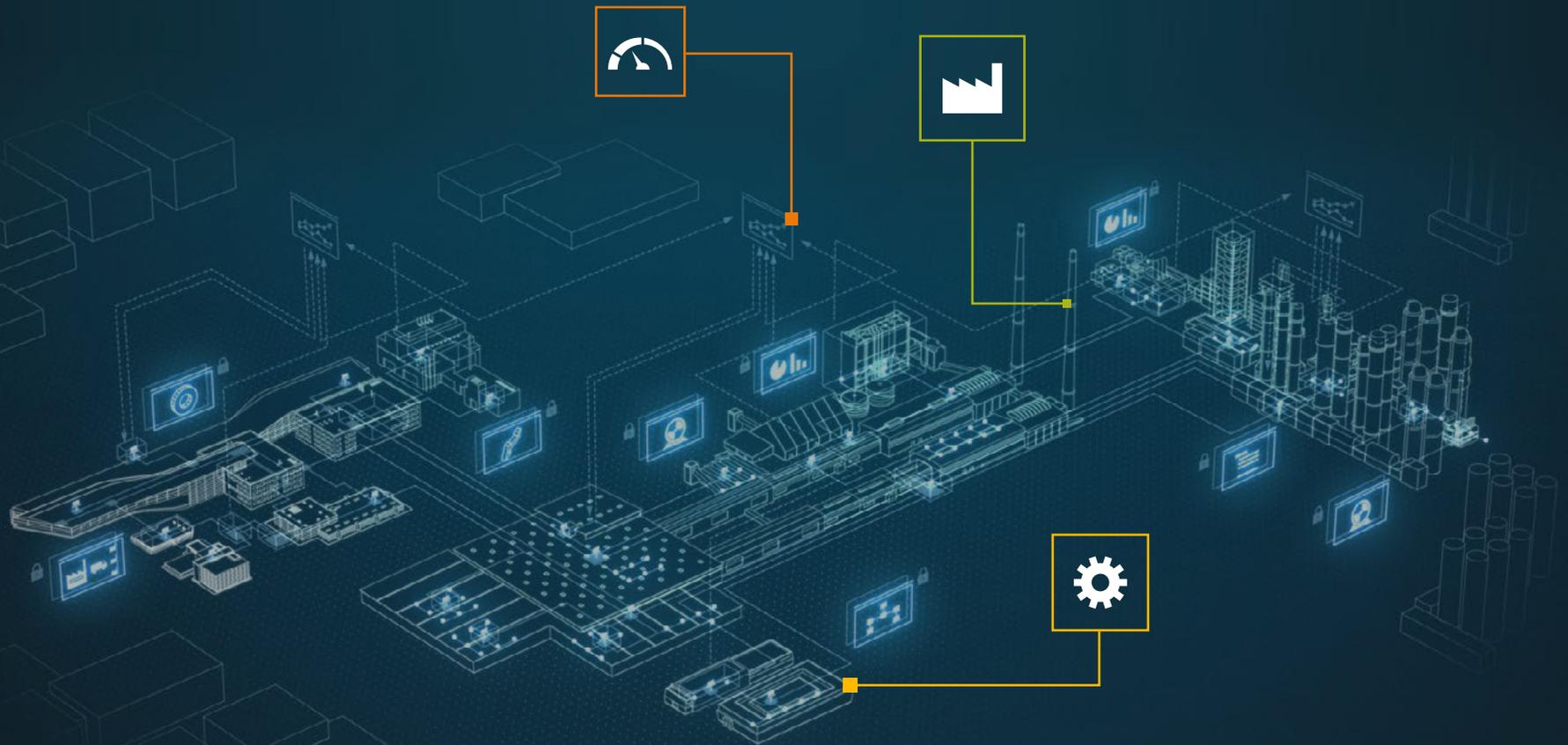


# Modernize your factory

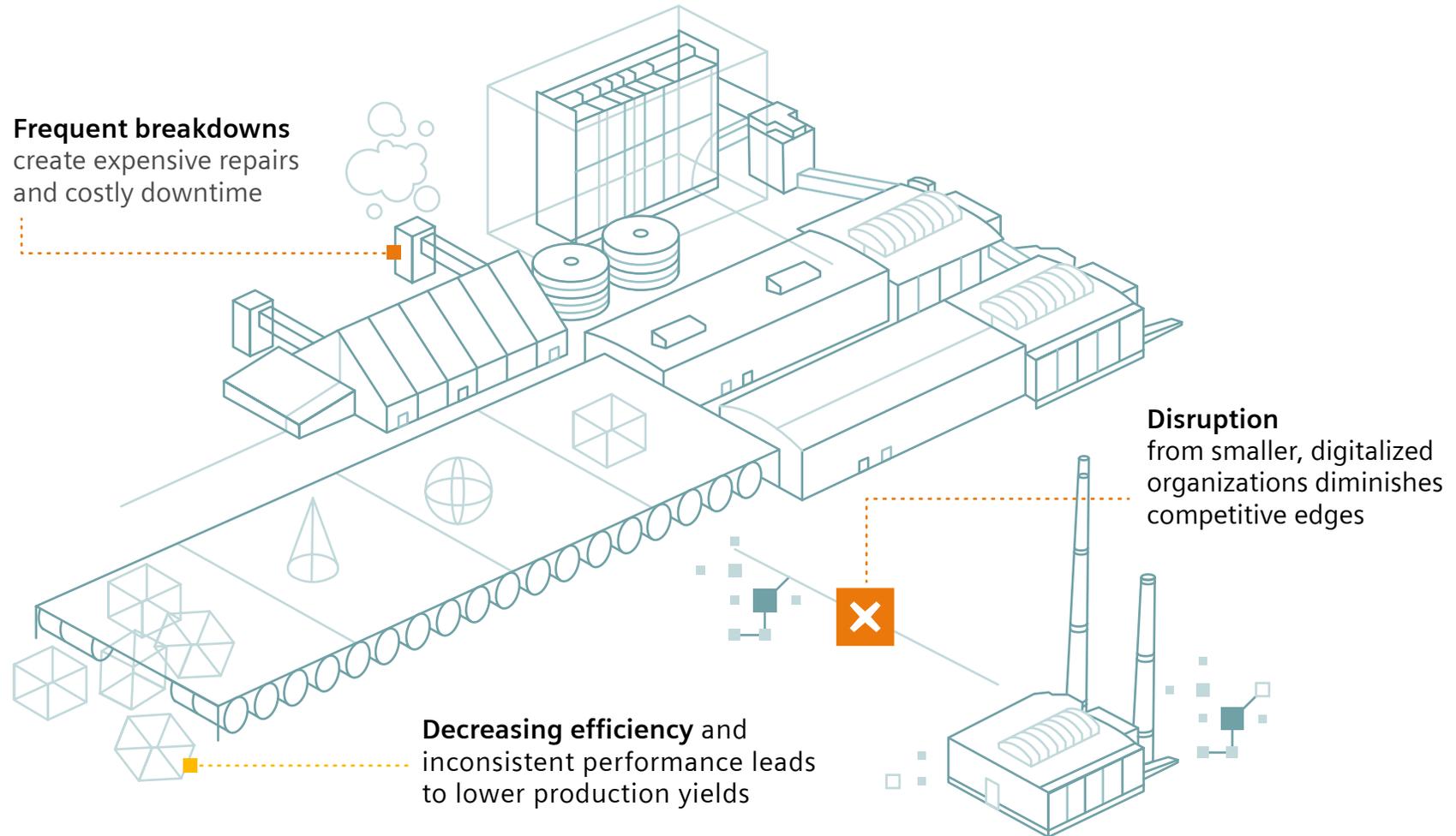
Create new value from aging plant assets

**SIEMENS**  
*Ingenuity for life*

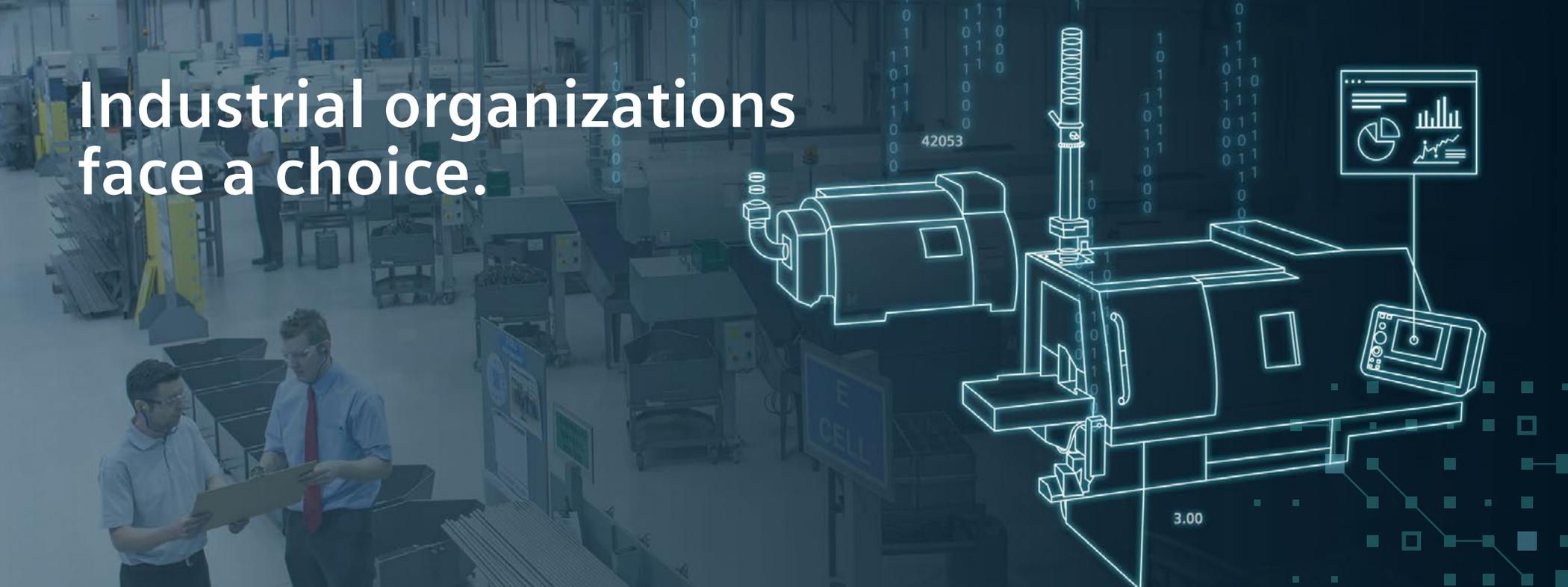


There is no stopping an asset from getting older...

## ...and aging plant assets can create a number of challenges for industrial organizations:



# Industrial organizations face a choice.



*To keep up in the ultra-competitive industrial landscape, organizations must decide: replace assets altogether, or modernize them to limit the impact of aging.*

## Replace

For most industrial organizations, replacing assets with state of the art machinery is not an option. While this modern machinery will deliver better performance and reliability than aging assets, it comes with massive upfront costs, and significant downtime as old assets are taken down and new ones installed. It may even require entirely new facilities and disruptive process changes.

or

## Modernize

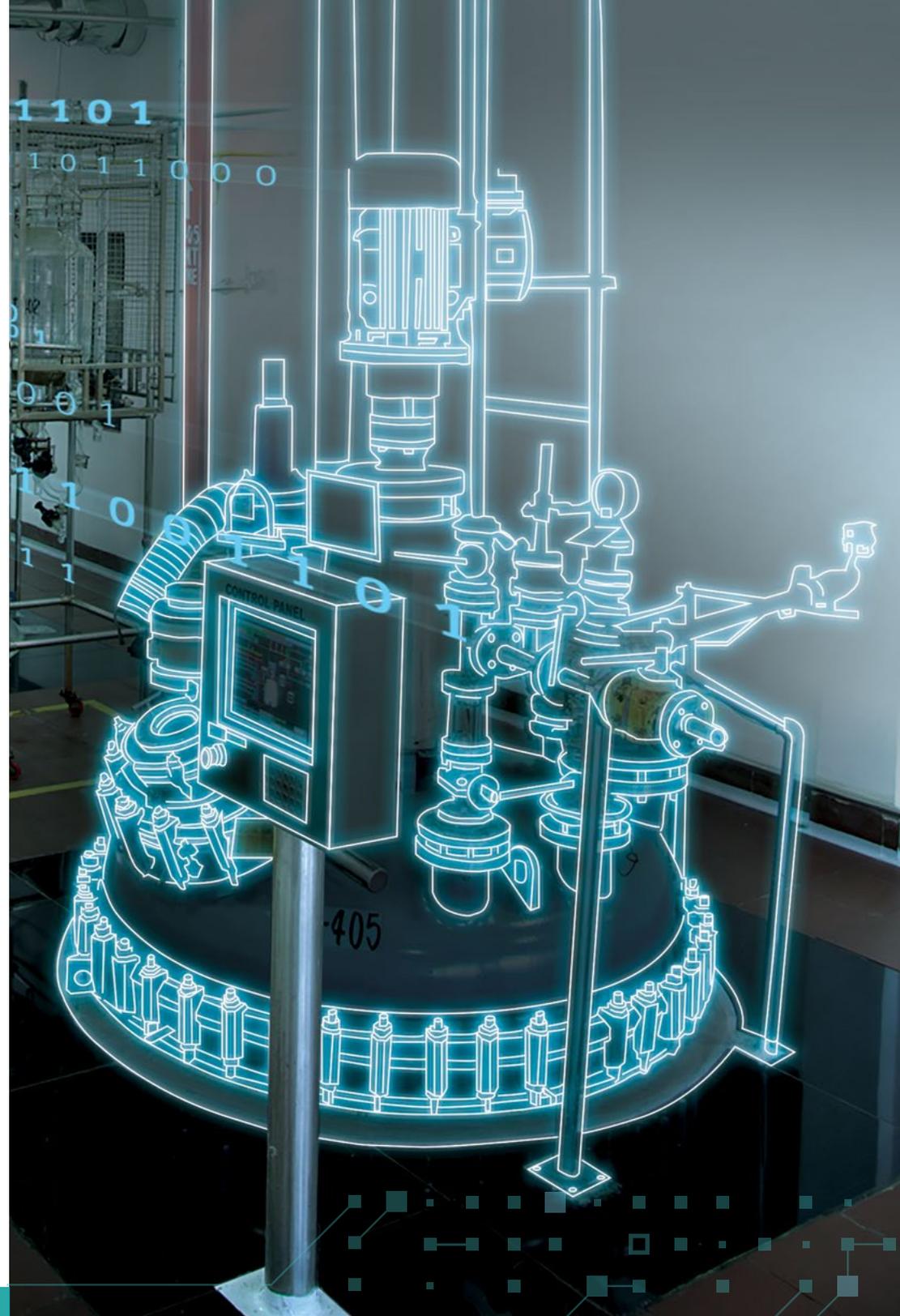
Believe it or not, most assets have a lot of life left in them and replacing them may not be necessary. A small technology upgrade is often all that is needed to increase factory efficiency. This route entails using your existing machines, but adding sensor technology to capture data on key operating conditions. This data can then be analyzed to provide greater transparency and insight into your industrial environments.

# Choose to modernize with the industrial IoT.

## What is the industrial IoT?

The industrial Internet of Things (IIoT) is built on synergies between operational technology (OT) and information technology (IT) that enables you to connect your physical assets to the digital world. With this technology, you can collect, send and act on data from industrial environments to fundamentally boost operational efficiency and production.

Many industrial organizations are using the IIoT to improve the health and performance of their existing assets and drive new operational insights that enable them to boost productivity.





The IoT can help you:

# Proactively maintain aging assets

*With the IoT, you can implement proactive maintenance strategies, like condition monitoring, predictive maintenance, and prescriptive maintenance, to service assets at the right time and frequency – before downtime occurs.*

-  **Maximize asset availability and productivity**
-  **Prolong asset life** by reducing mechanical failure
-  **Eliminate costs** incurred from inefficient maintenance practices

# The IoT can help you: Optimize the performance of aging assets

*Optimize the performance of your factory assets by gaining real-time visibility into key performance indicators (KPIs), identifying precise performance thresholds, and quickly diagnosing deviations from these thresholds.*



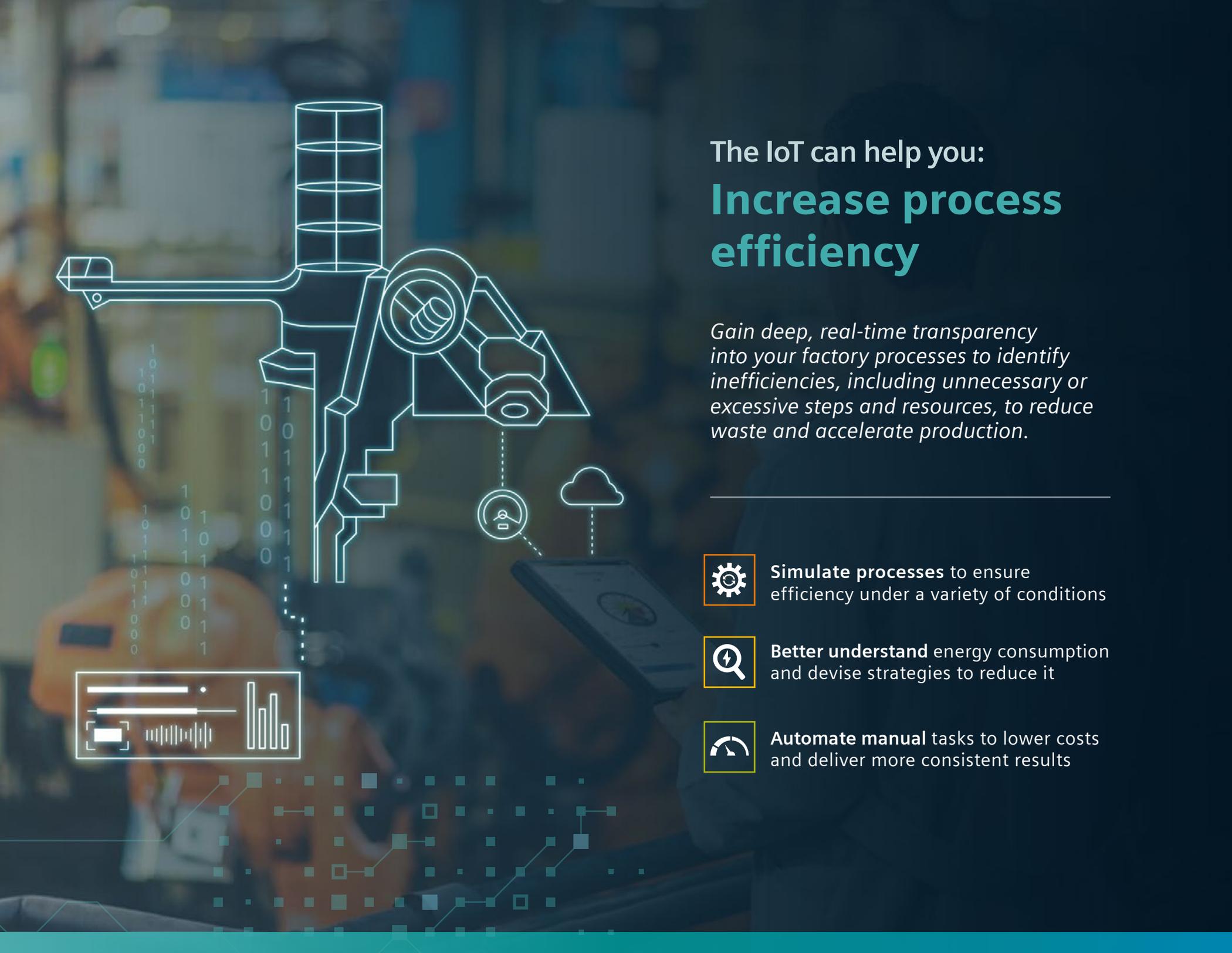
Continuously improve asset performance based on refined KPI baselines



Rapidly identify and service assets that are performing sub-optimally



Utilize assets at their peak production rates without incurring downtime



## The IoT can help you: **Increase process efficiency**

*Gain deep, real-time transparency into your factory processes to identify inefficiencies, including unnecessary or excessive steps and resources, to reduce waste and accelerate production.*



**Simulate processes** to ensure efficiency under a variety of conditions



**Better understand** energy consumption and devise strategies to reduce it



**Automate manual** tasks to lower costs and deliver more consistent results



# MindSphere for IoT

*Implement the IoT and begin creating new value from your aging assets with MindSphere – the purpose built IoT platform from Siemens. MindSphere enables you to easily and securely connect both existing and new factory assets to gain real-time transparency into health and performance.*

## Easy to adopt

Delivered as a platform as a service (PaaS), you can pursue IoT strategies without the time and cost traditionally associated with implementing new technologies into your assets and processes.

## Universally transparent

MindSphere is compatible with both Siemens and third-party assets, helping you continually derive new value from your entire device fleet– no matter how diverse it is.

## Built with expertise

With decades of experience in industrial automation, Siemens knows the unique ins-and-outs and how to best provide value to a number of industry verticals.



To learn more about MindSphere, visit [www.siemens.com/mindsphere](http://www.siemens.com/mindsphere).

