

# Leverage industrial IoT for energy optimization



## The pressure to cut energy consumption

Rising energy costs, environmentally conscious consumers, and stringent regulatory requirements are forcing industrial organizations to reduce energy consumption.

**~50%**

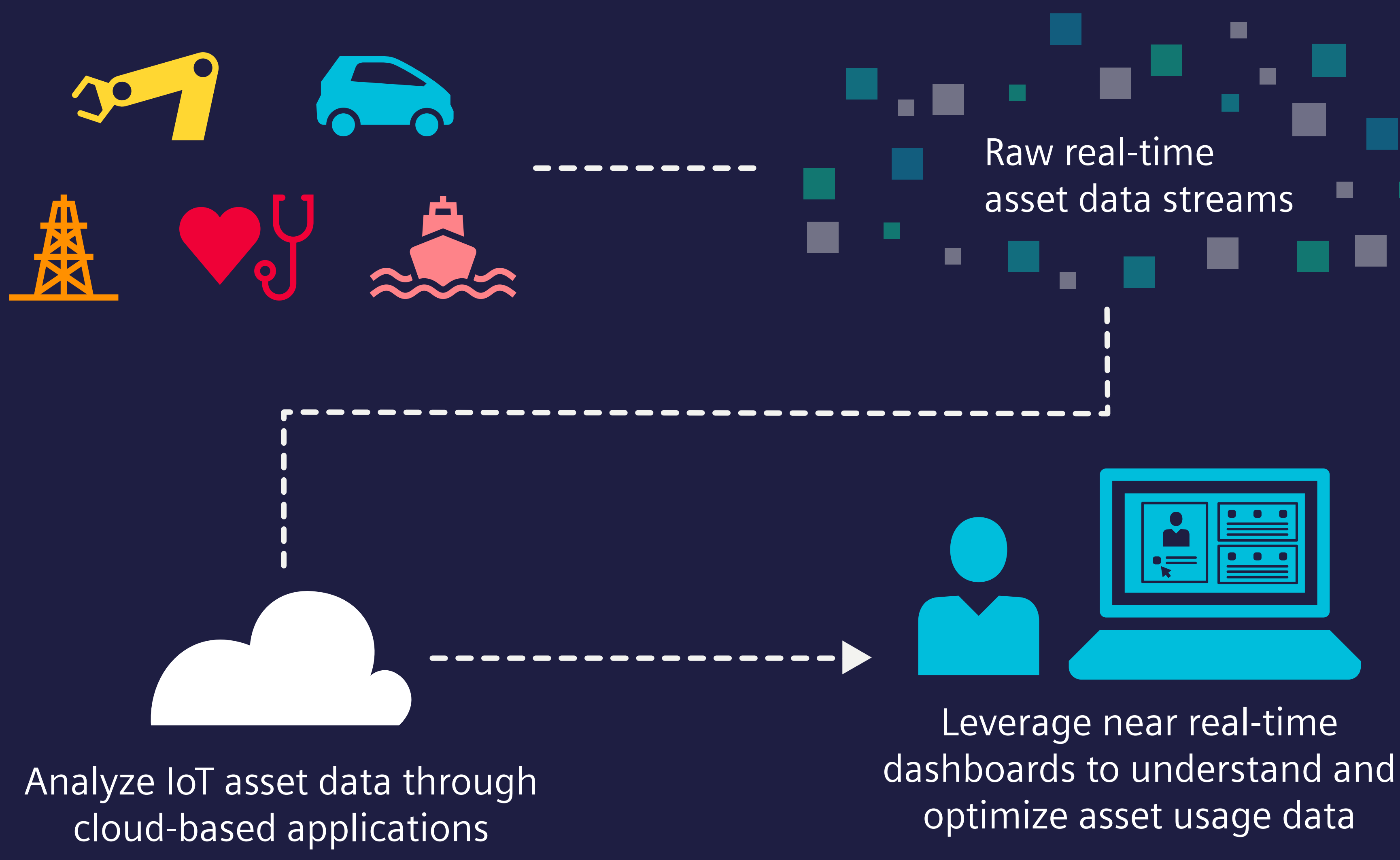
The industrial sector currently consumes roughly half of all global energy and feedstock fuels.<sup>1</sup>

**45%**

Heavy industry contributes to over 45% of the total investment toward global industry energy efficiency.<sup>2</sup>

## The path to energy optimization starts with industrial IoT

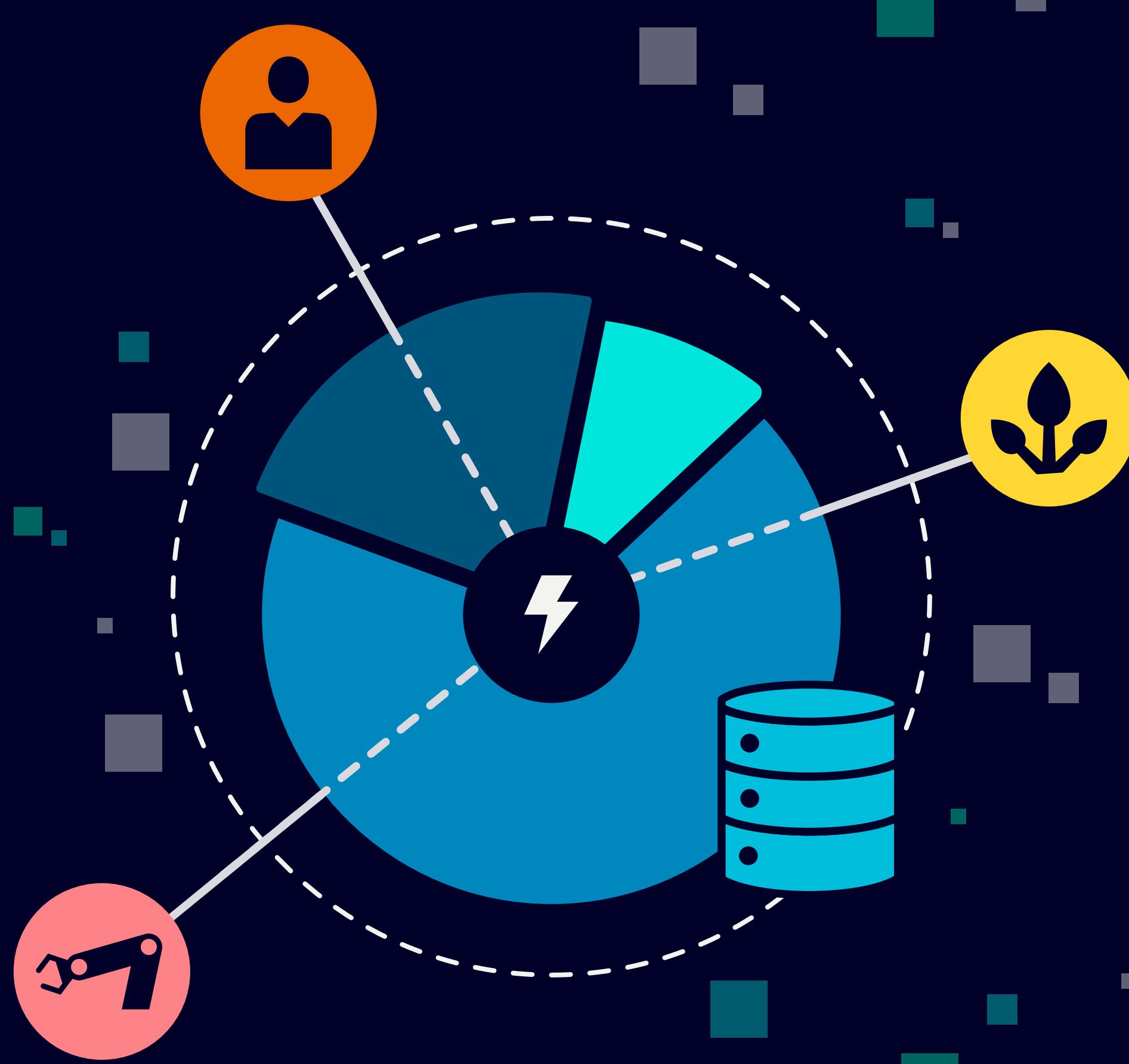
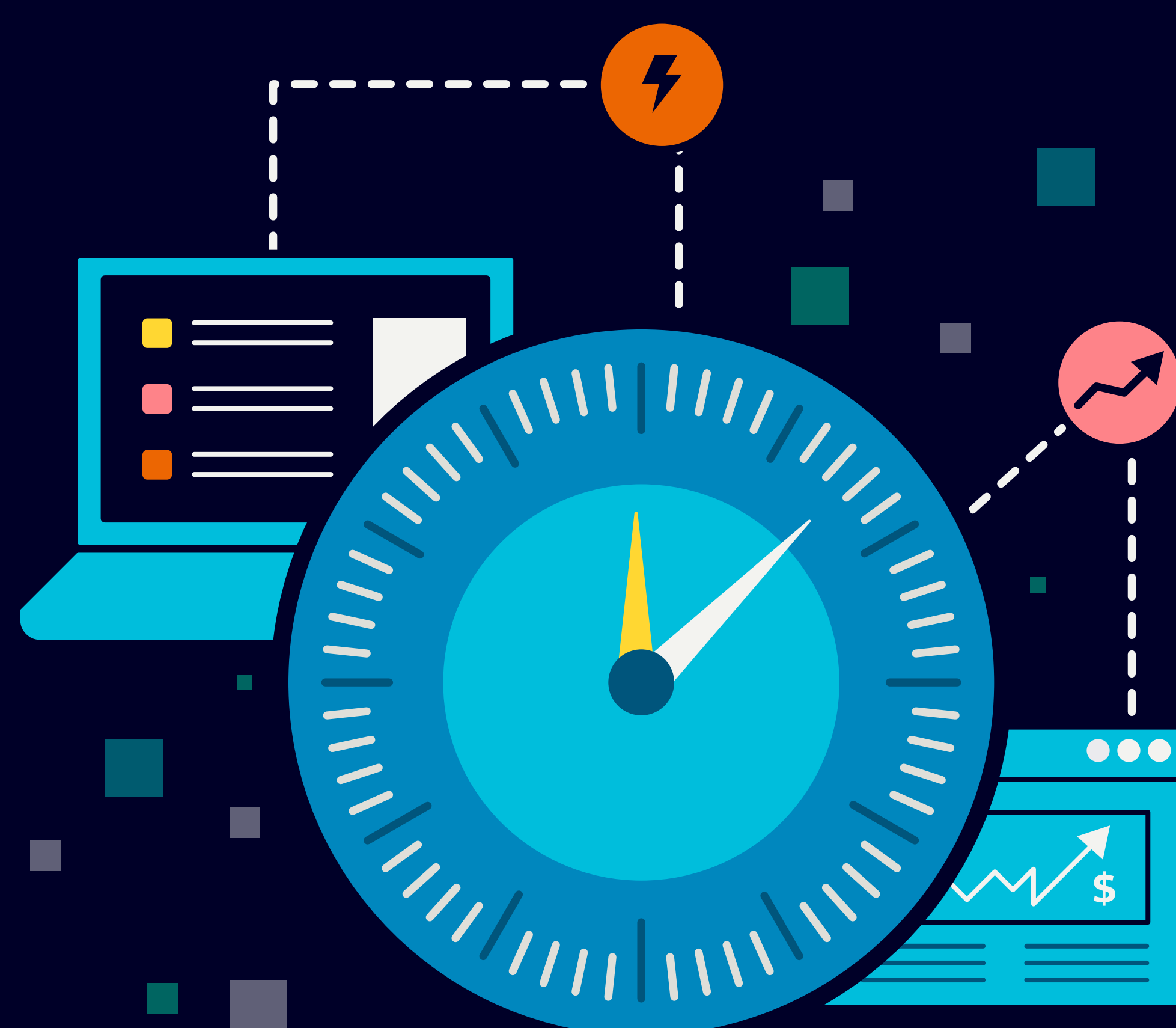
The industrial Internet of Things (IoT) enables organizations to gain transparency across plants by capturing and analyzing data to generate actionable insights for each asset in every facility.



## How industrial IoT helps organizations understand energy optimization pathways

### MONITOR ENERGY COSTS

Connect assets, products, plants, and systems, so that organizations can collect energy usage data in near real-time and begin to get a clear picture of actual energy usage.

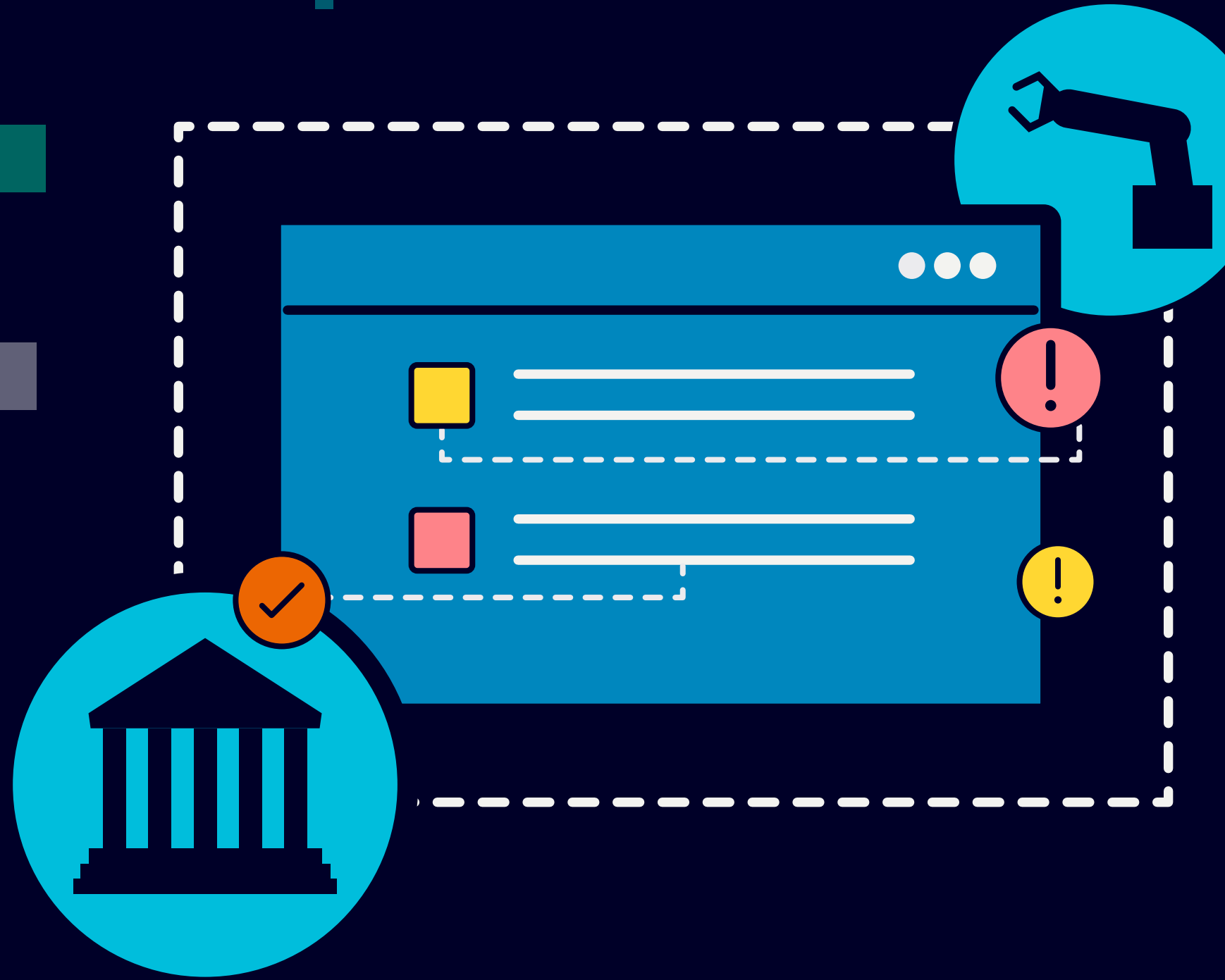


### OPTIMIZE ENERGY USAGE

Define KPIs and utilize analytics tools to continuously refine energy usage for maximum optimization.

### GENERATE ACTIONABLE ENERGY INTELLIGENCE

Make data driven decisions that will reduce energy usage to meet regulatory requirements and save costs.



## MindSphere® is a leading industrial IoT as a service solution that enables companies to unlock actionable insights to reduce energy usage and lower costs

Understanding energy usage is the first step towards building an actionable plan to reduce energy costs and comply with regulatory requirements. Enable transparency and gain insights into energy usage across factories and assets.



### Gain visibility into every asset, everywhere

Visualize, track and analyze metrics, such as kilowatt-hours used, energy inefficiency losses, performance deviations, temperatures, vibrations, and status – for each asset across factories.



### Define KPIs, alerts, and regulatory targets to measure

Get notified in near-real time when energy usage deviates from the norm and gain transparency into issues which may drive inefficiencies leading to higher energy costs.



### Optimize energy use and reduce energy waste

Leverage asset energy usage data to identify opportunities for optimization, such as identifying assets that use too much energy and running non-critical assets during off-peak hours when it is less expensive.

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

Sources:  
1. BP Energy Outlook 2019  
2. IEA World Energy Investment 2019