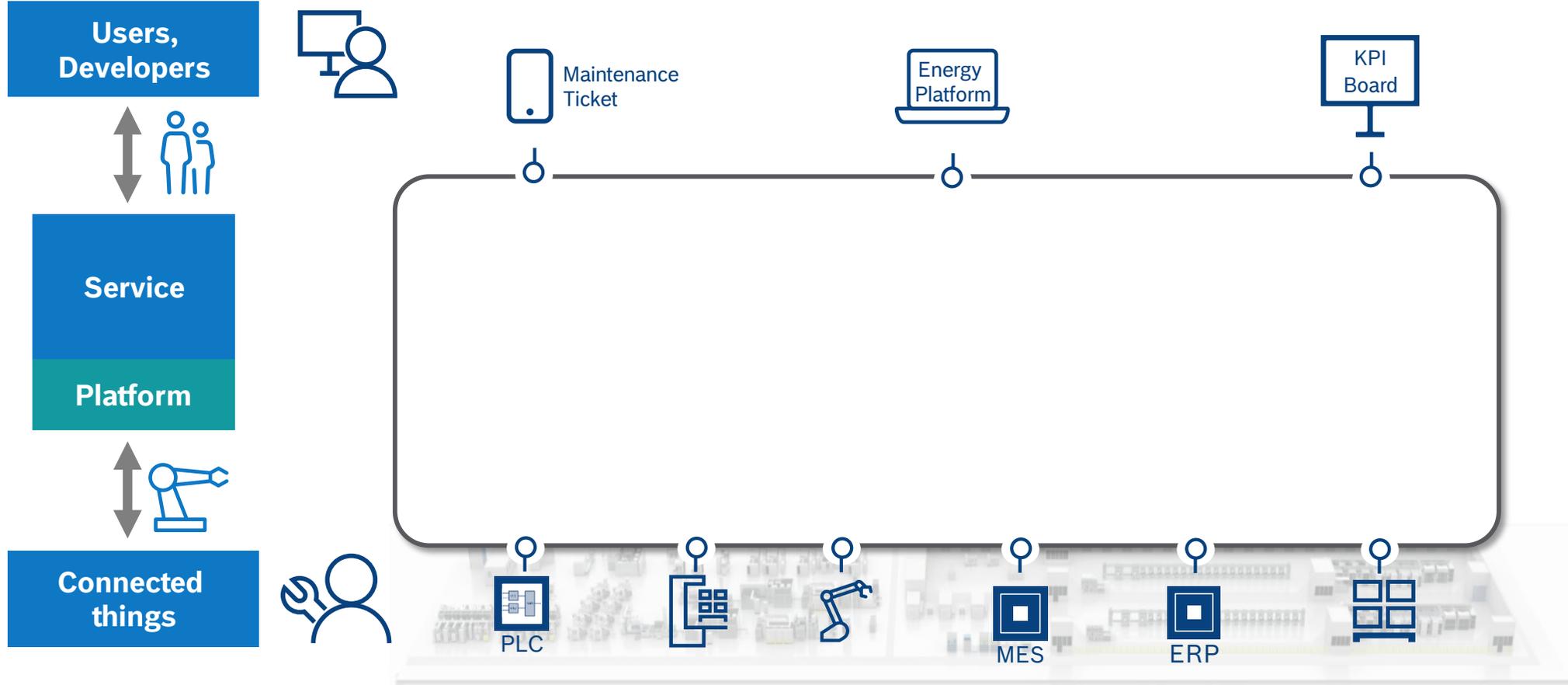


# LERNREISE INDUSTRIE 4.0

“DIGITALISIERUNGSPHILOSOPHIEN IN  
DER FERTIGUNG -  
MIT DEM DIGITAL TWIN”

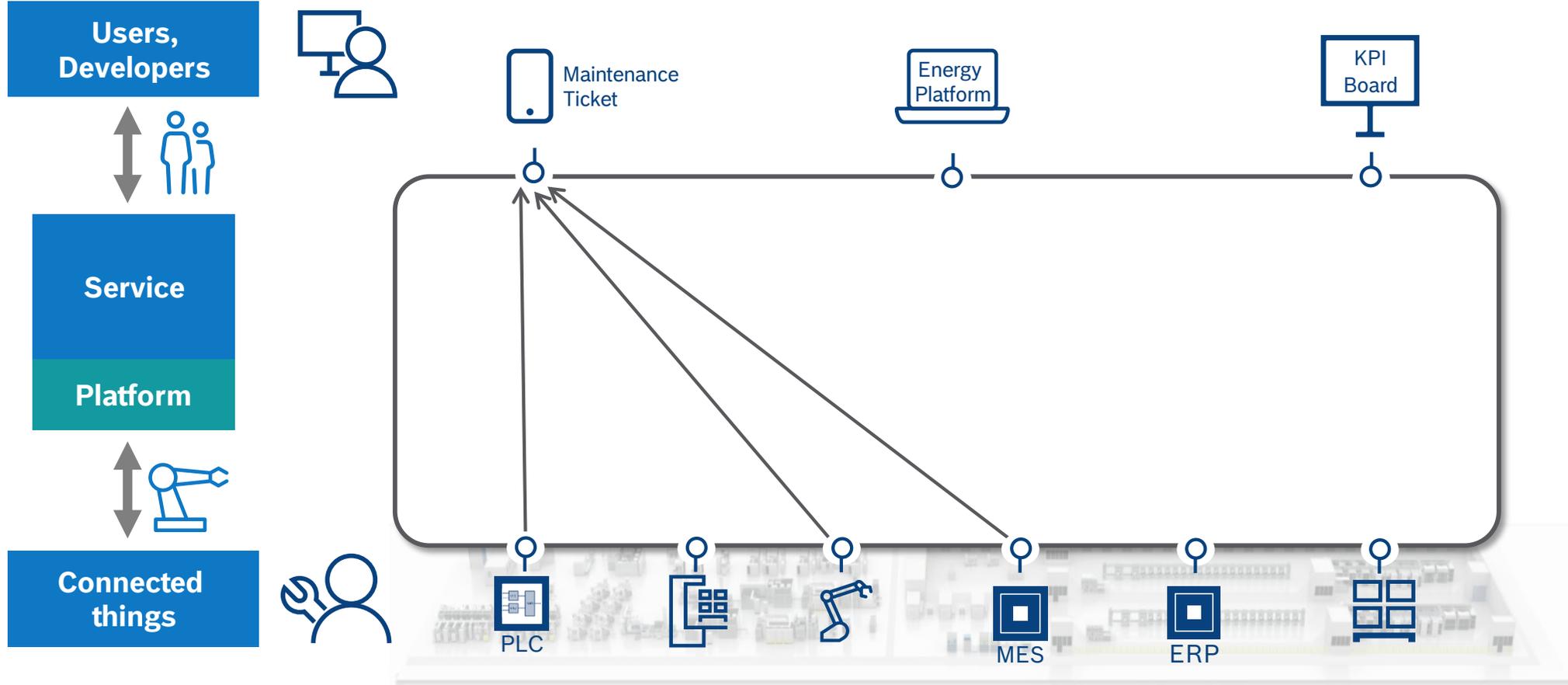
# Lernreise Industrie 4.0

## The heterogeneous world of manufacturing IT



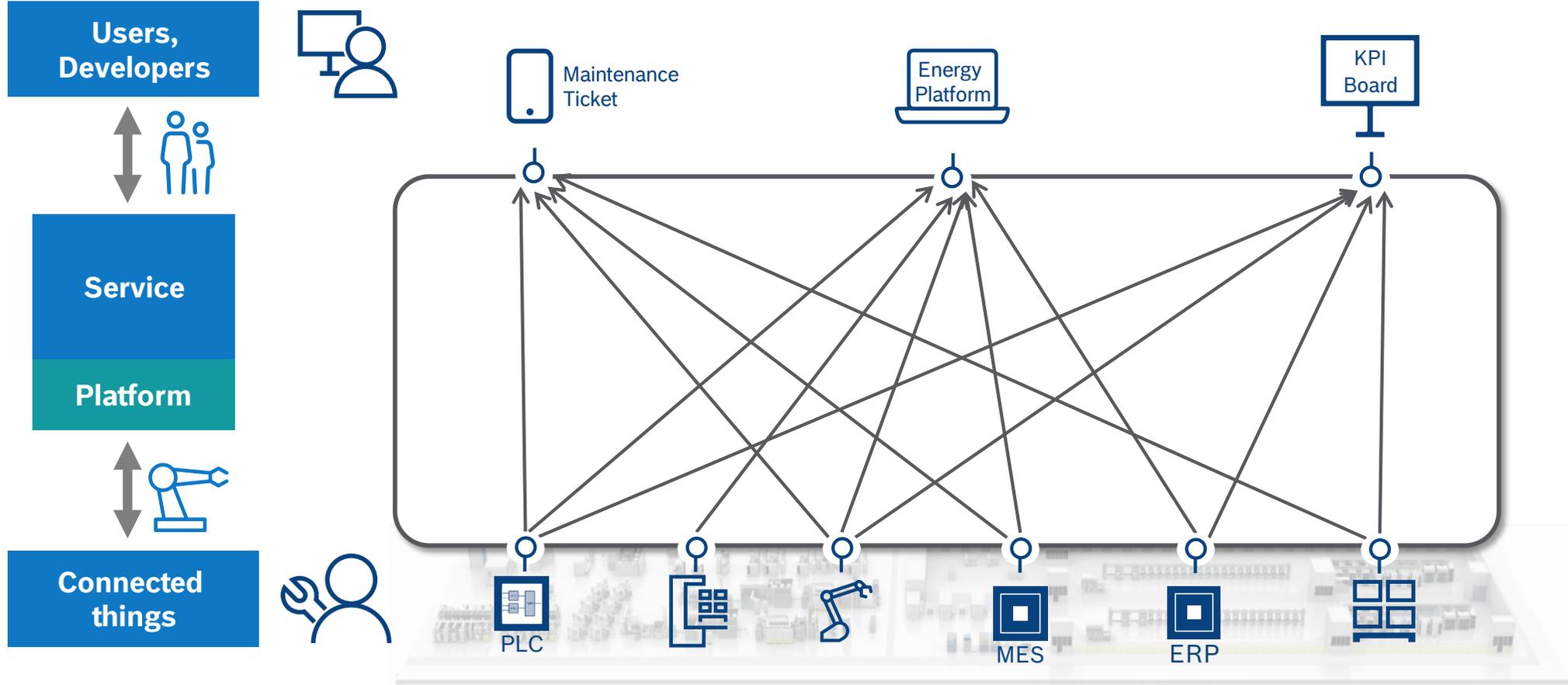
# Lernreise Industrie 4.0

## The heterogeneous world of manufacturing IT



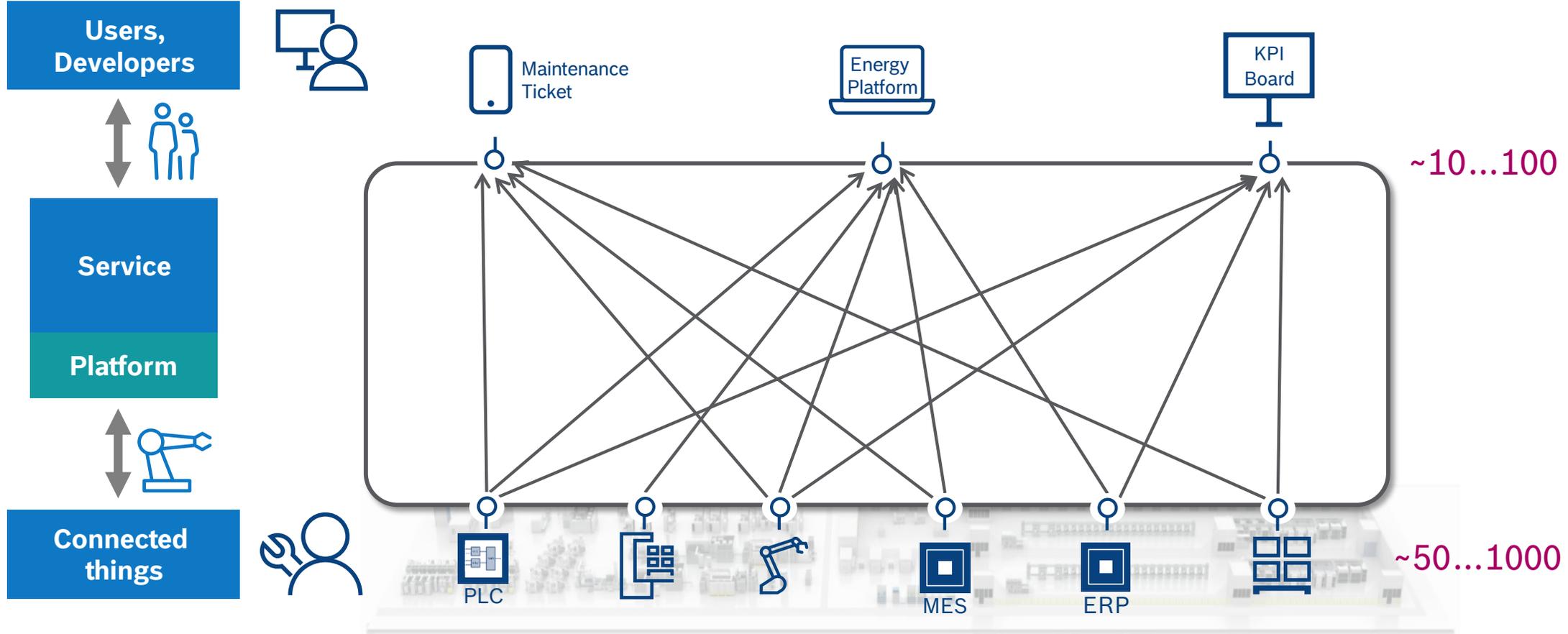
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## The heterogeneous world of manufacturing IT



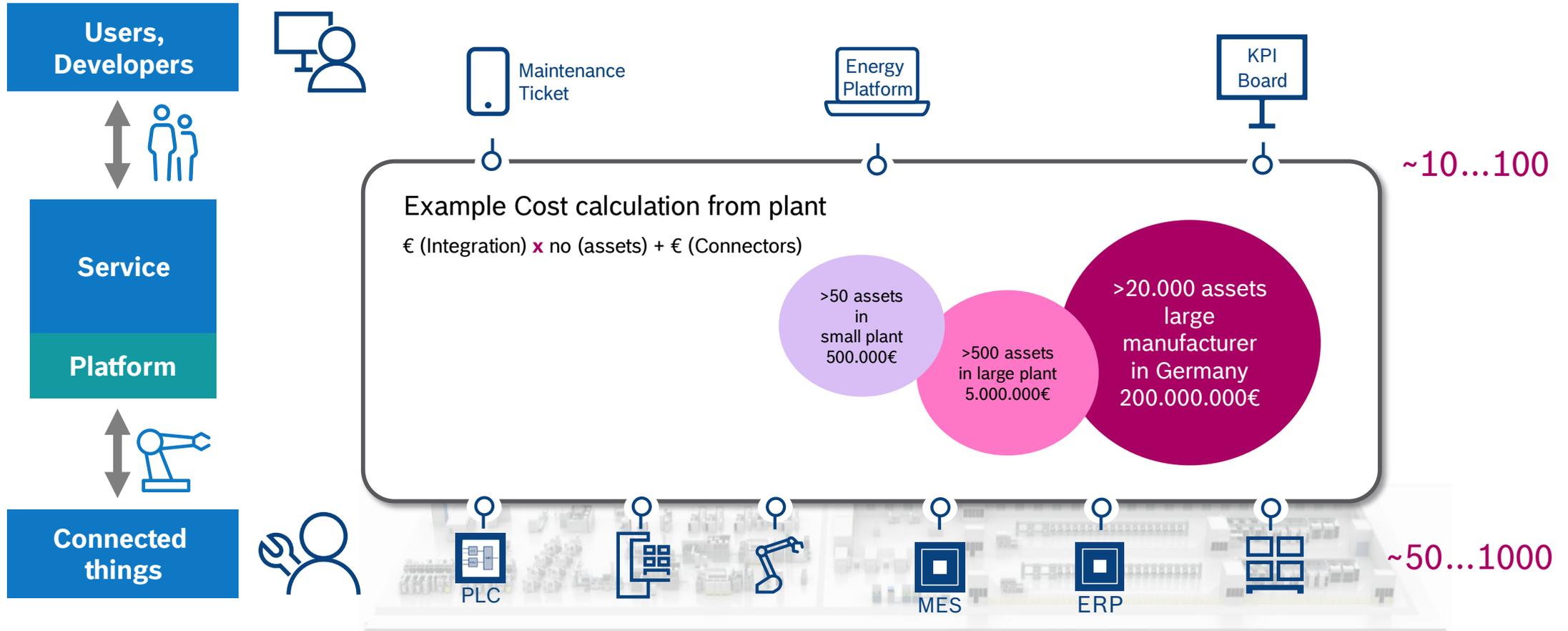
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## The heterogeneous world of manufacturing IT



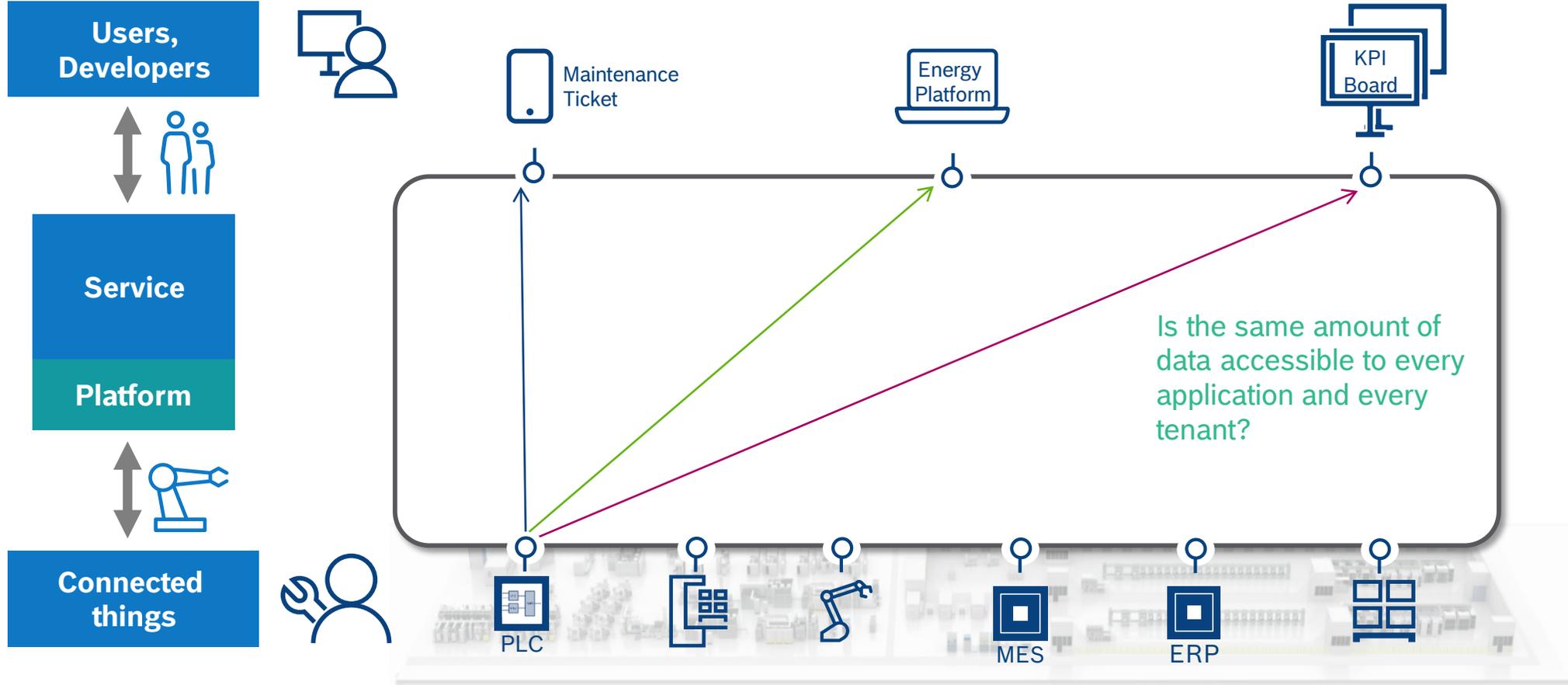
# Lernreise Industrie 4.0

## The heterogeneous world – real hidden costs



# Lernreise Industrie 4.0

## Data Sharing across Stakeholders



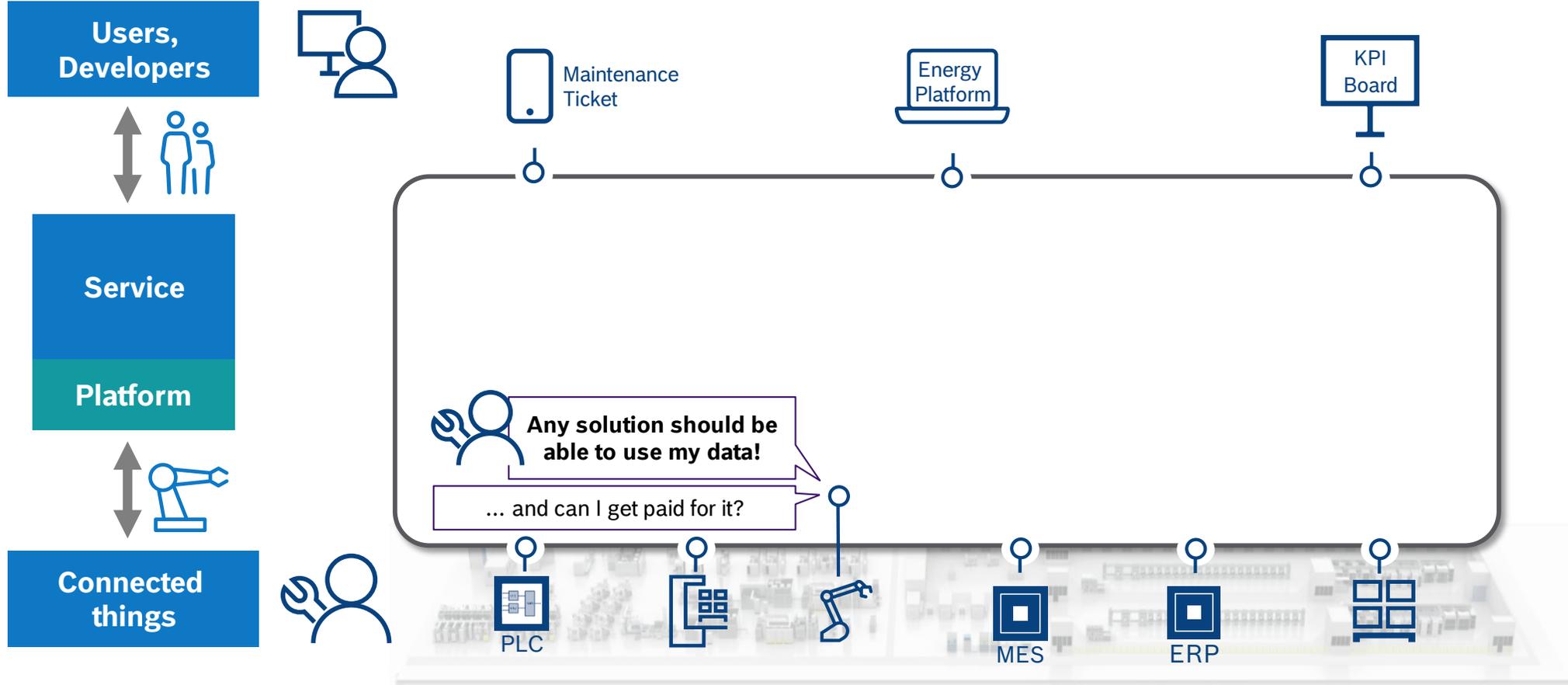
# Lernreise Industrie 4.0

## Workshop

- ▶ Gruppenarbeit 20':
  - ▶ Wo haben Sie das Problem der heterogenen Fertigungs-IT?  
Bzw. wenn Sie Maschinen OEM sind, wo hat Ihr Kunde dieses Problem?
  - ▶ Wie gehen Sie Lösungswege an?
  - ▶ Austausch zwischen den Gruppen
  
- ▶ Vorstellung 20':
  - ▶ Nexeed Open Integration von Bosch - Digital Twin

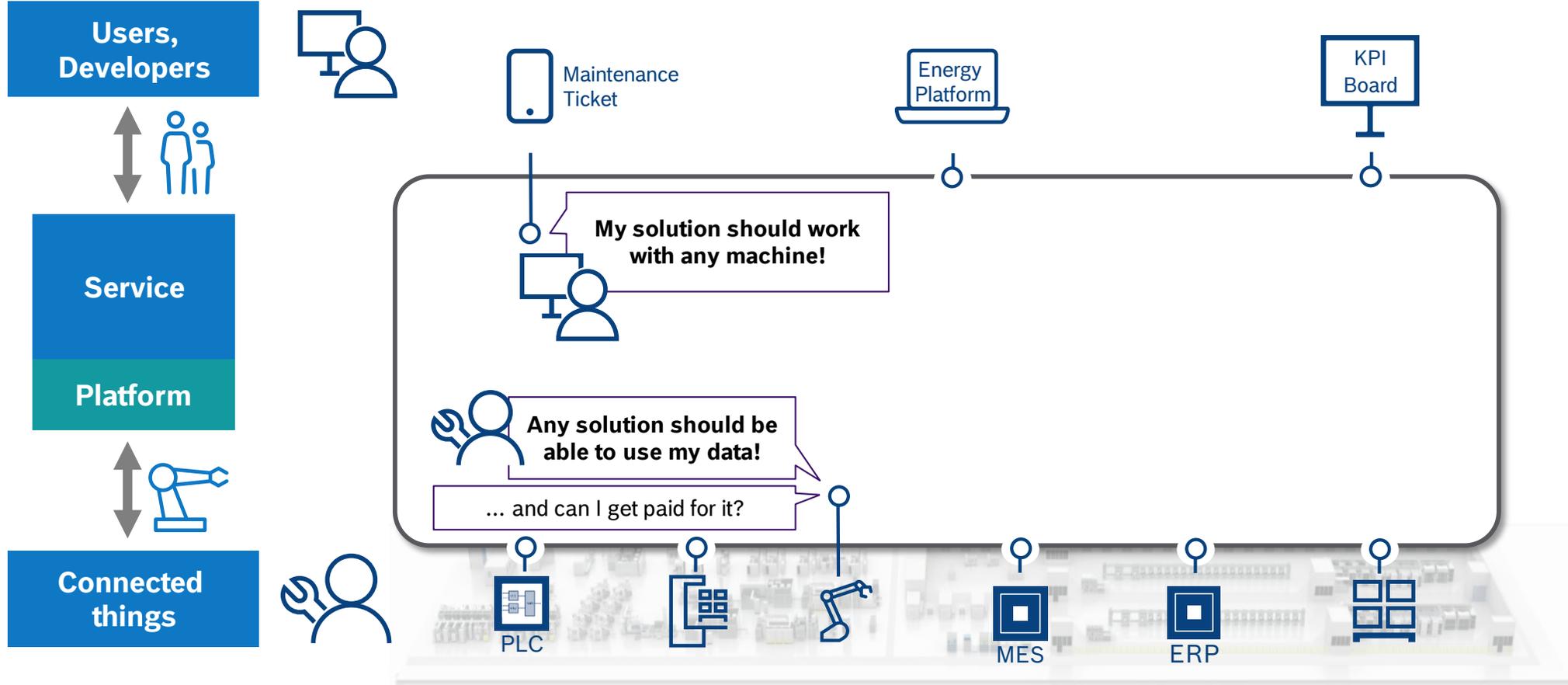
# Nexeed Open Integration - Digital Twin

## The heterogeneous world of manufacturing IT



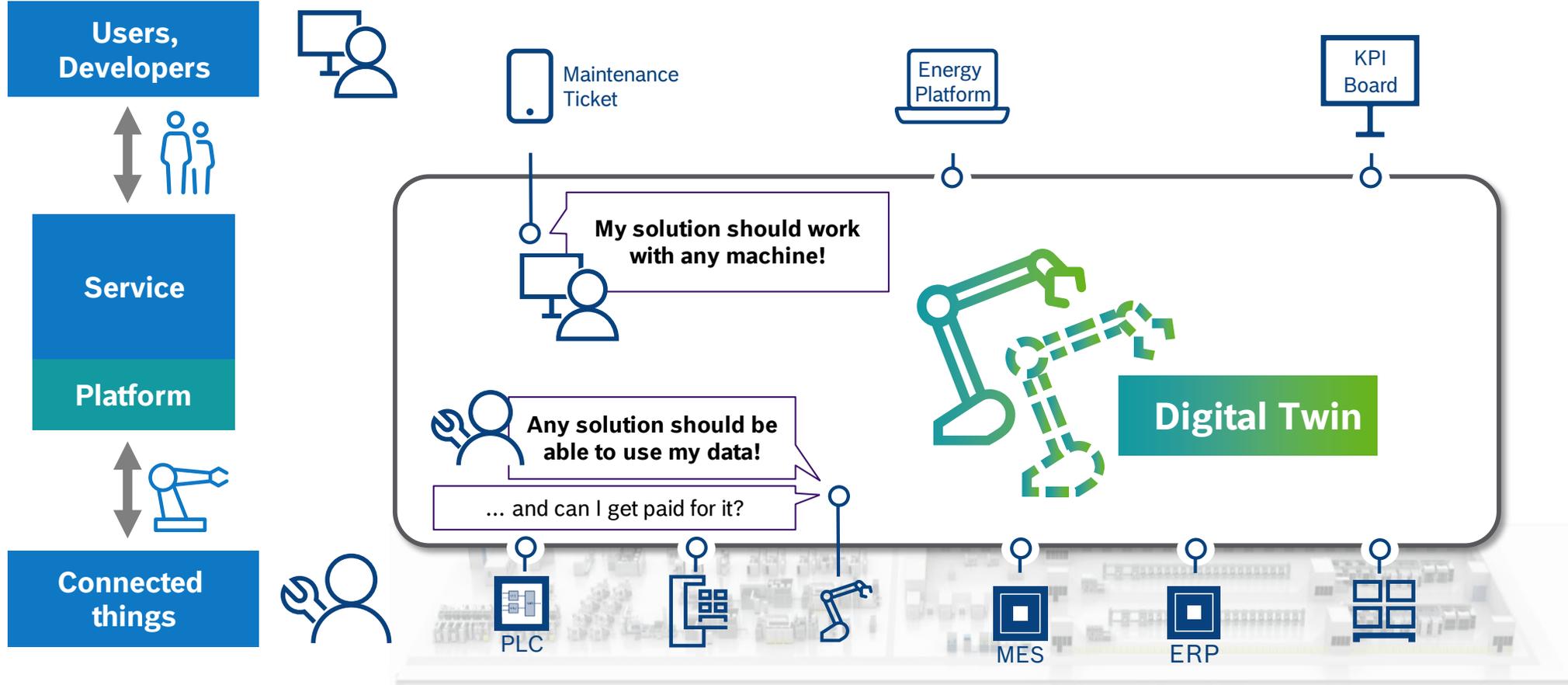
# Nexeed Open Integration - Digital Twin

## The heterogeneous world of manufacturing IT



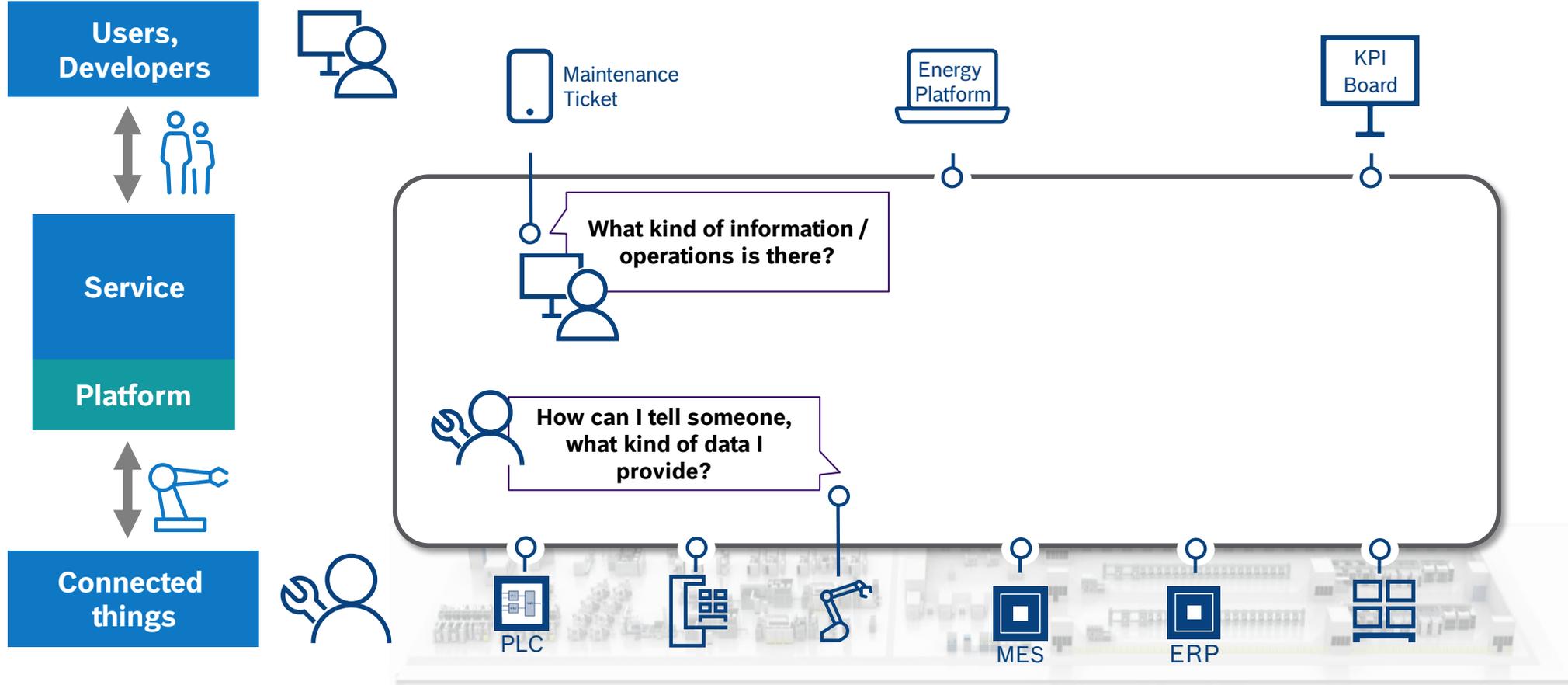
# Nexeed Open Integration - Digital Twin

## The Digital Twin as an answer



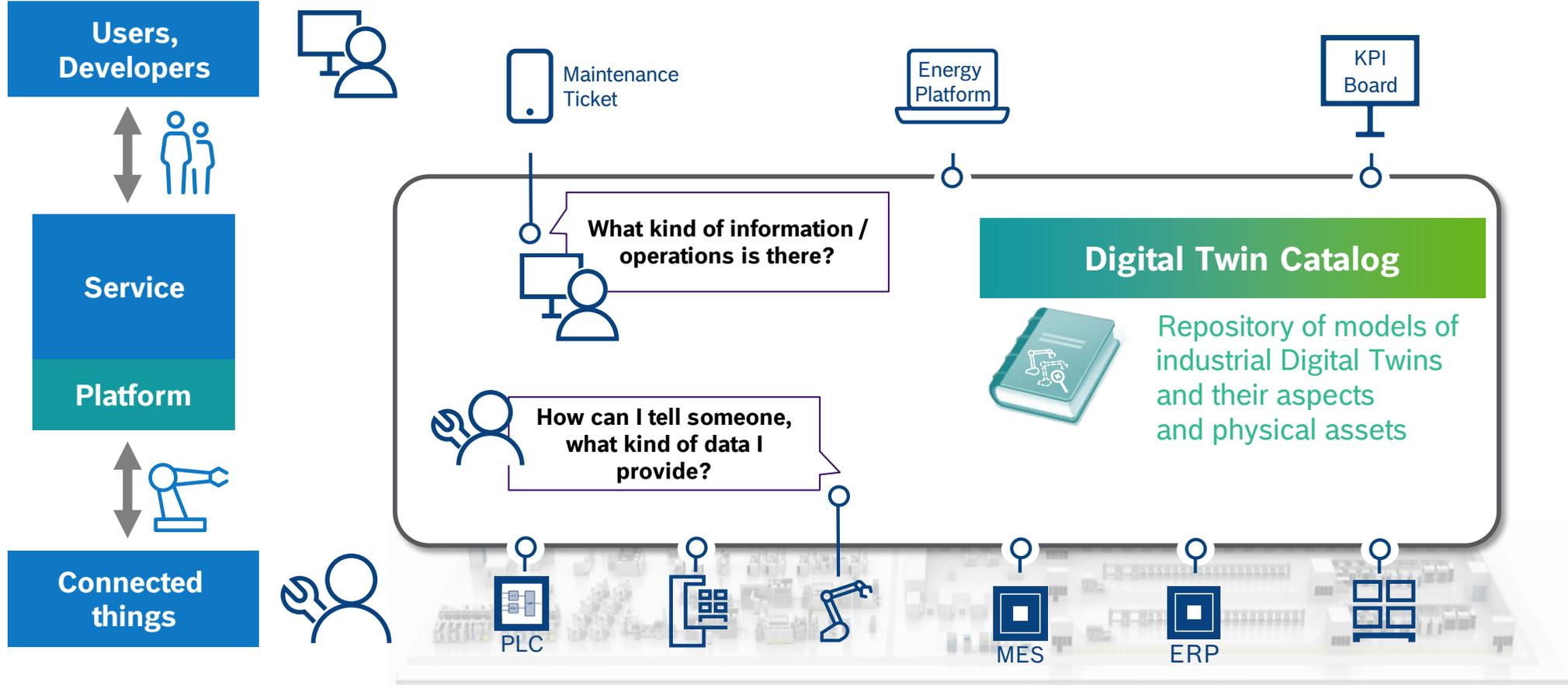
# Nexeed Open Integration - Digital Twin

## Describing what there is!



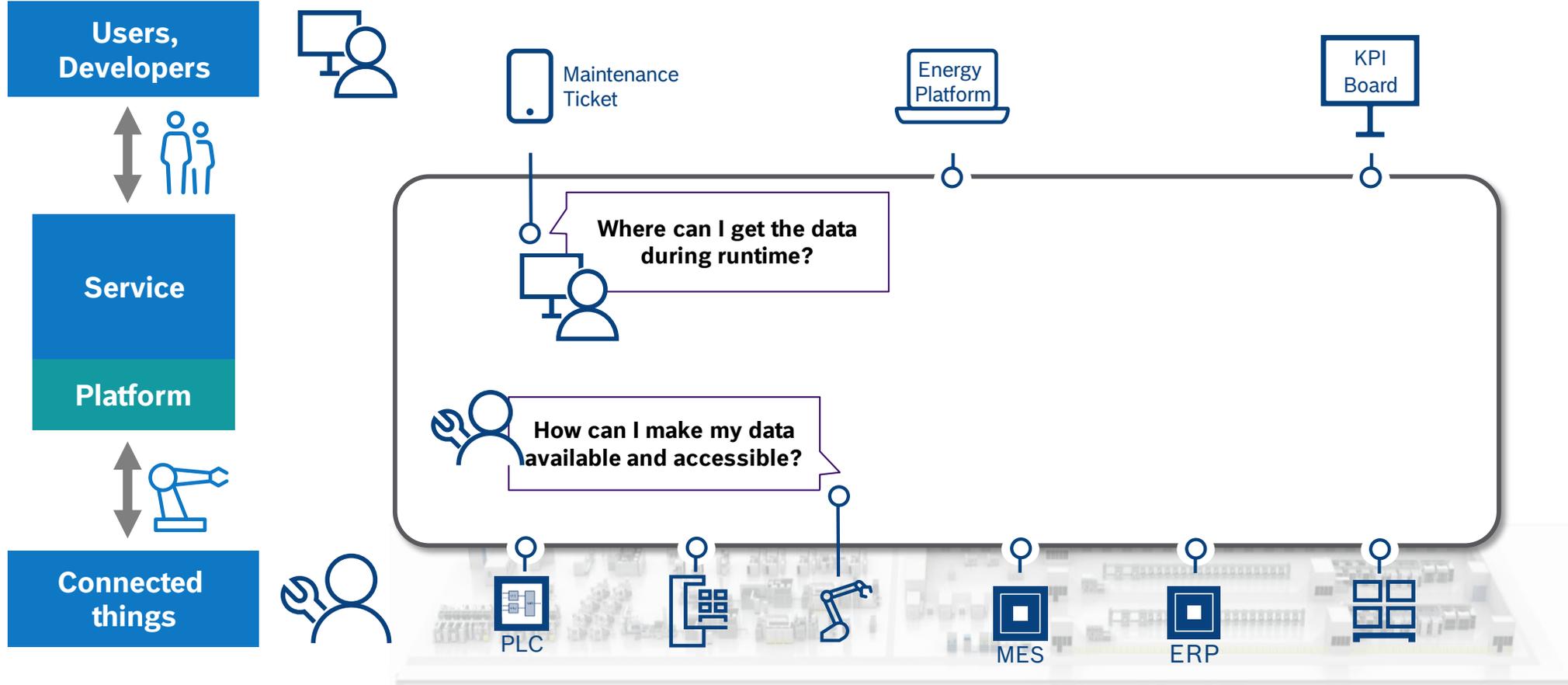
# Nexeed Open Integration - Digital Twin

## Describing what there is – Digital Twin Catalog



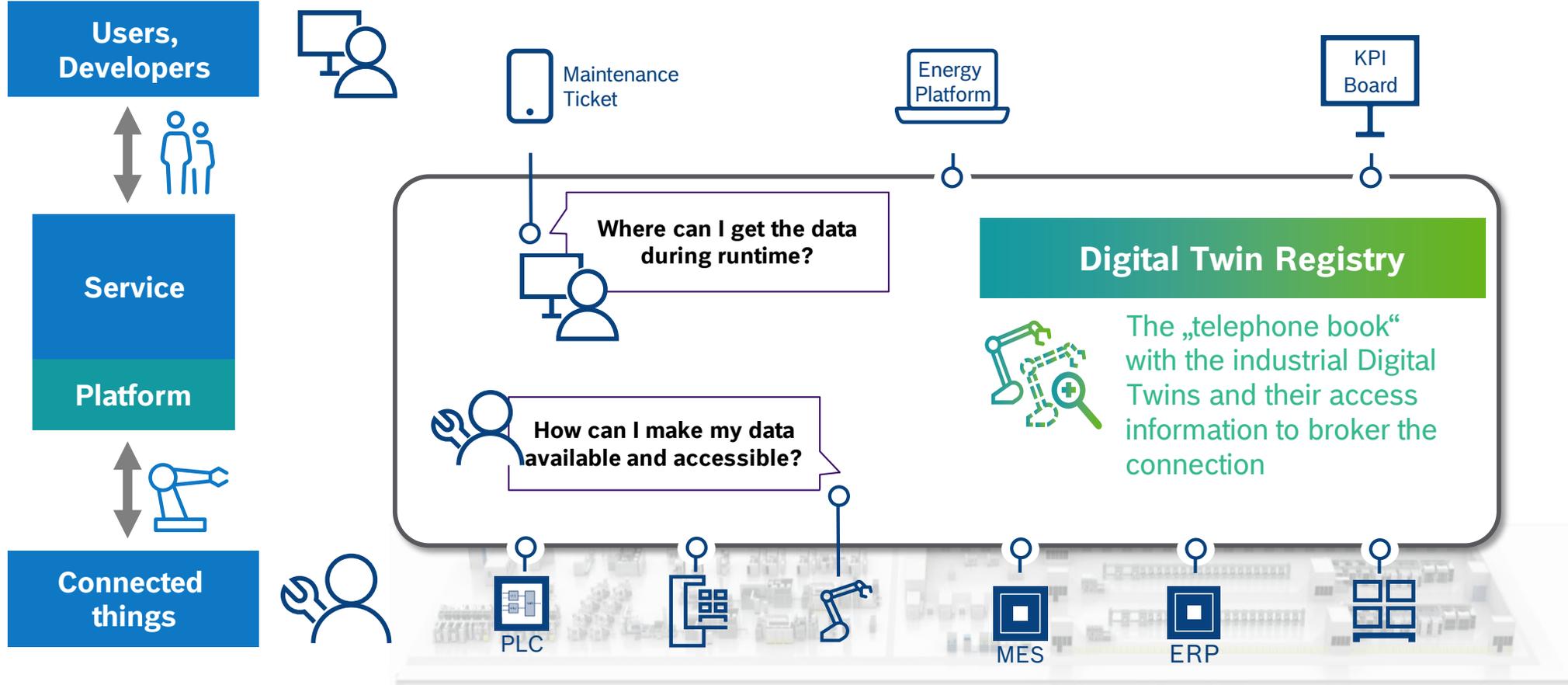
# Nexeed Open Integration - Digital Twin

## The Runtime – accessing information



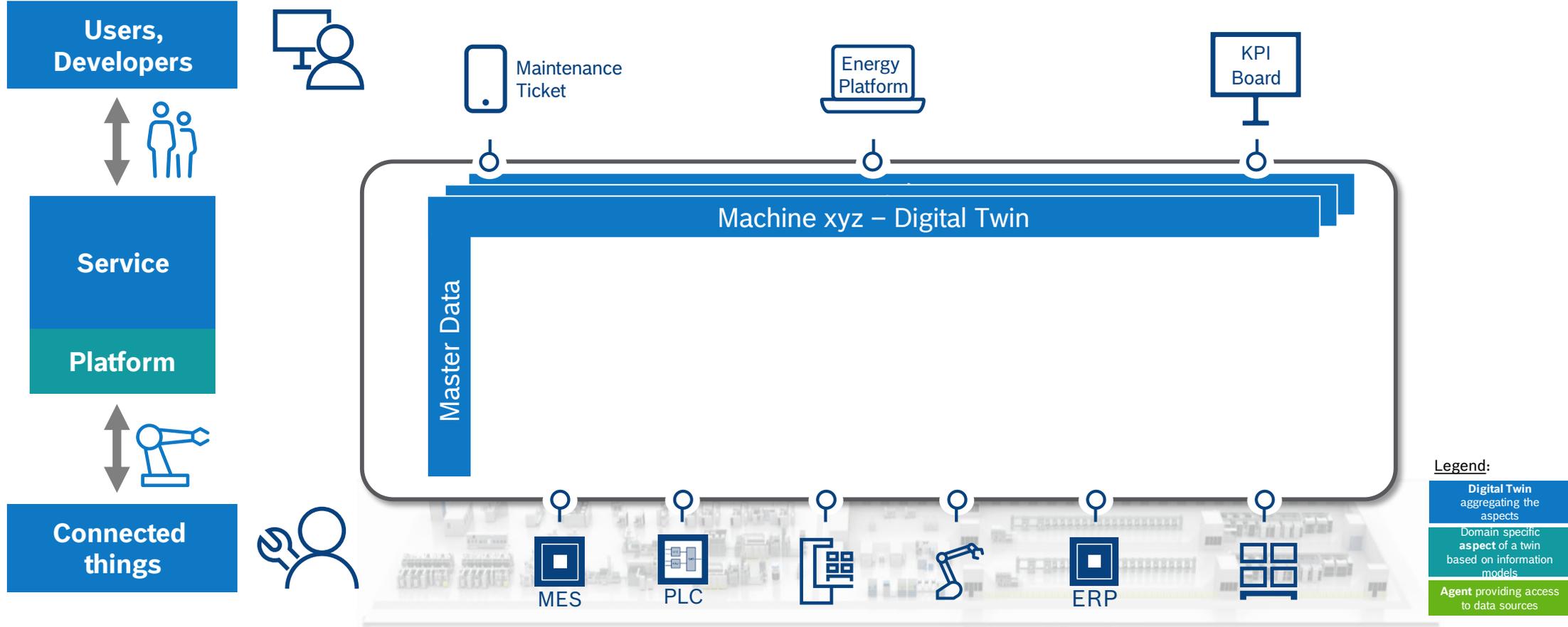
# Nexeed Open Integration - Digital Twin

## Digital Twin Registry – A telephone book



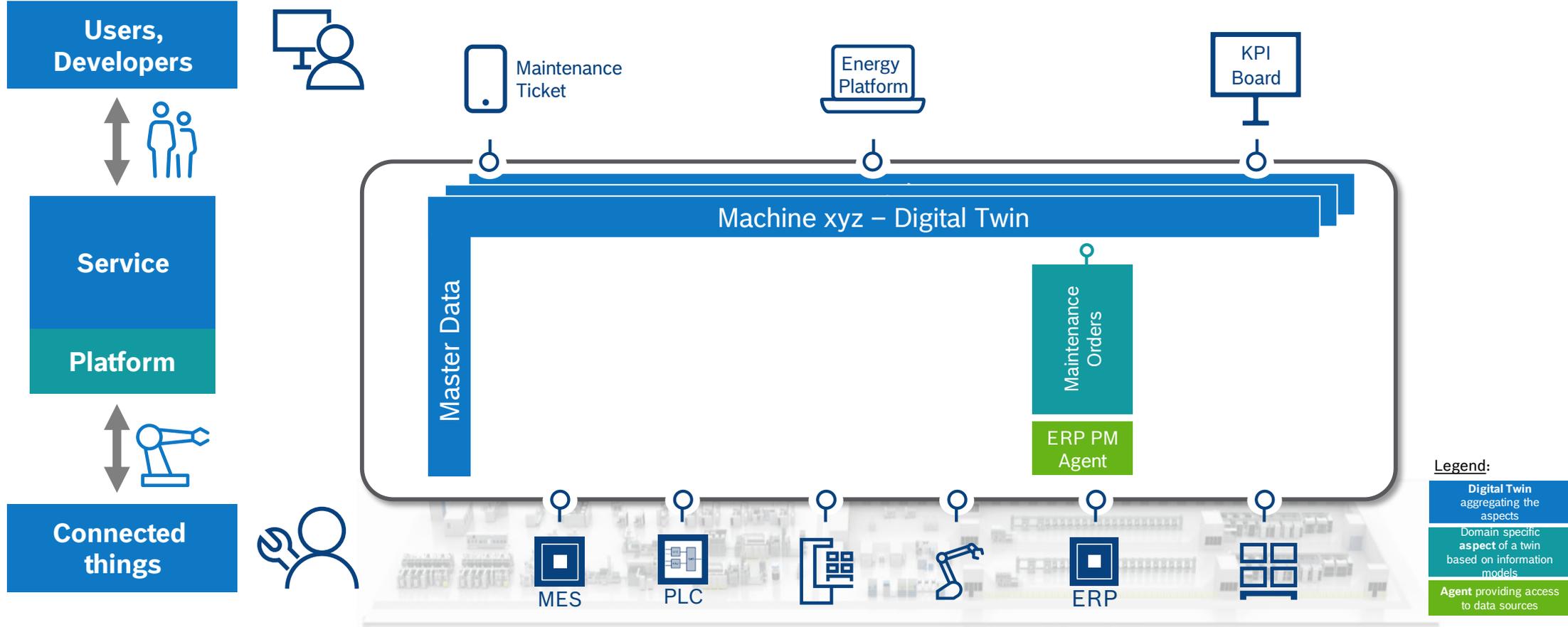
# Nexeed Open Integration - Digital Twin

## Digital Twin Aspects – Domain knowledge coded in IT



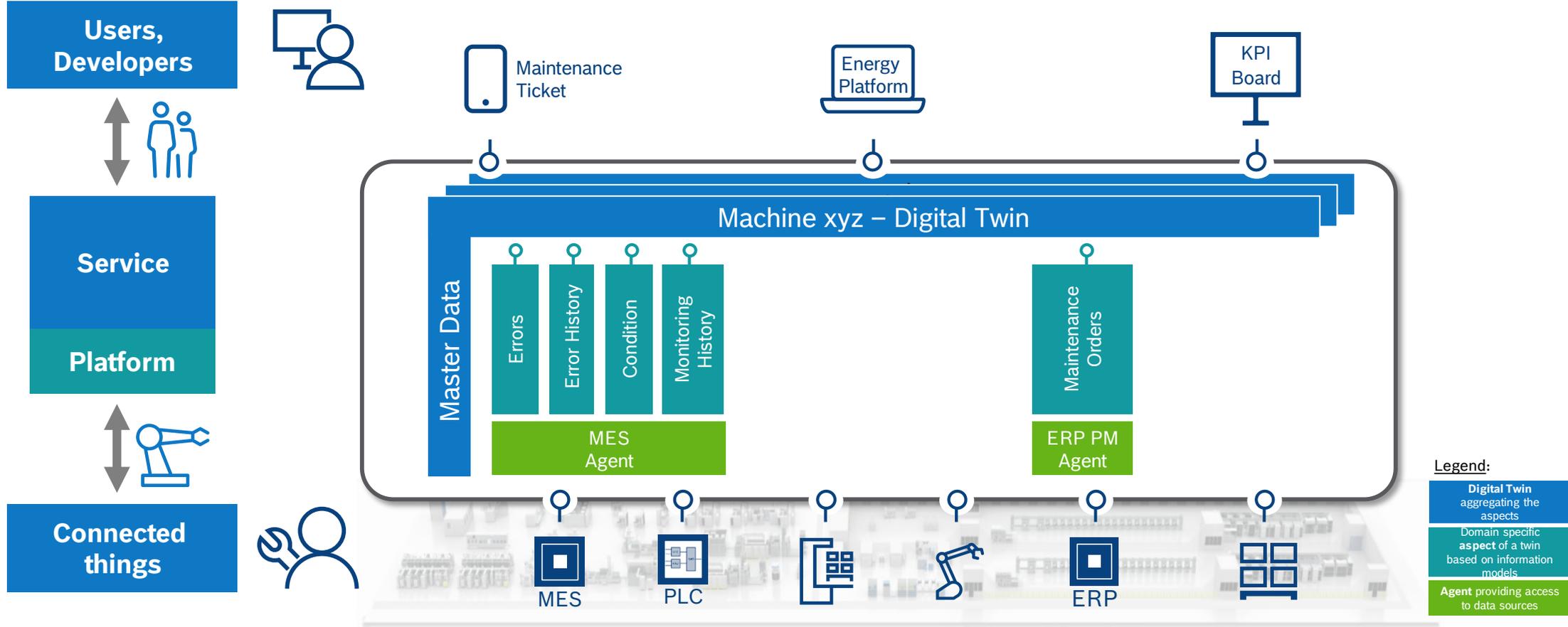
# Nexeed Open Integration - Digital Twin

## Digital Twin Aspects – Domain knowledge coded in IT



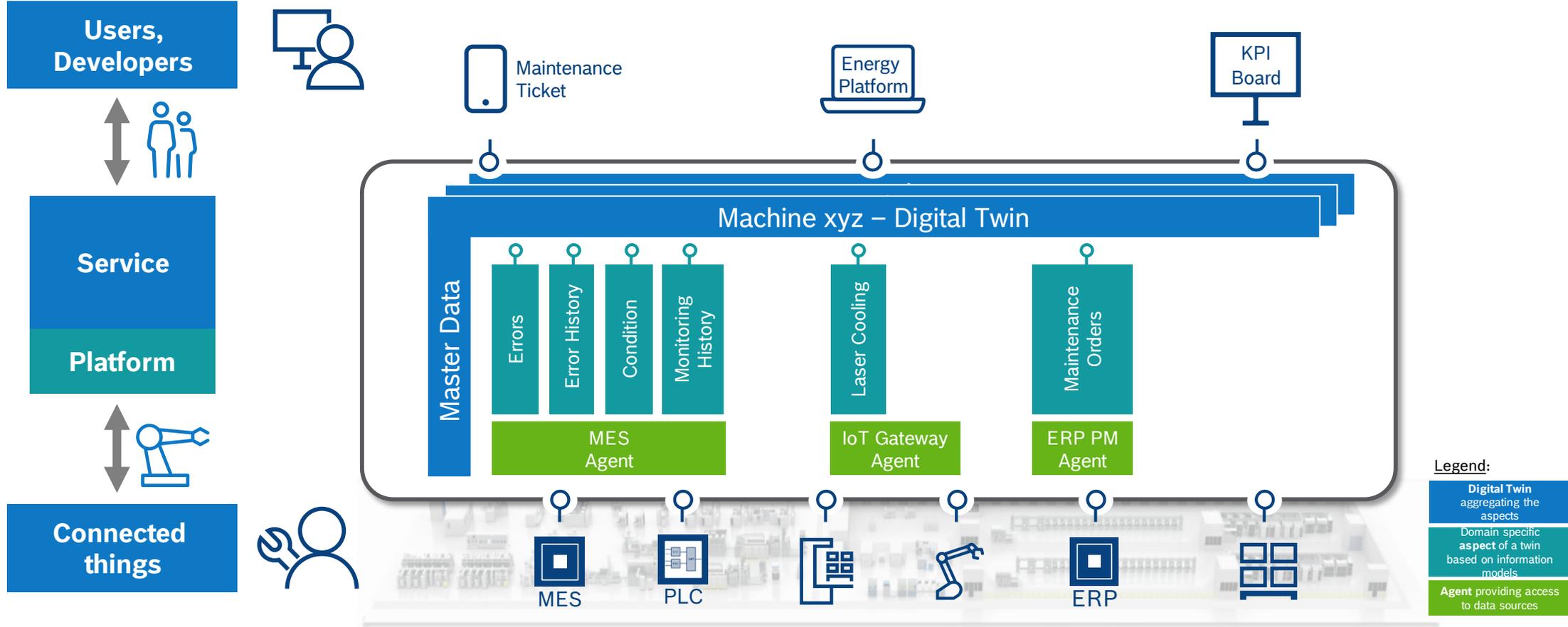
# Nexeed Open Integration - Digital Twin

## Digital Twin Aspects – Domain knowledge coded in IT



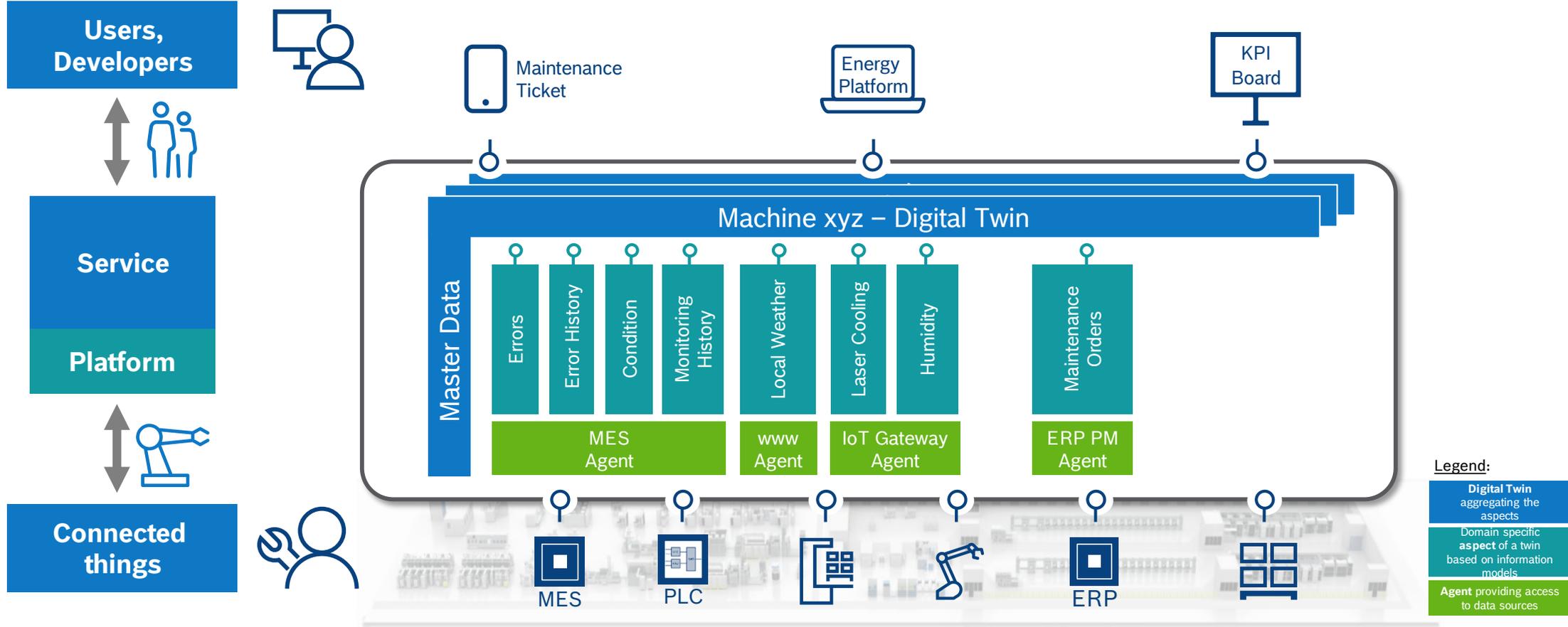
# Nexeed Open Integration - Digital Twin

## Digital Twin Aspects – Domain knowledge coded in IT



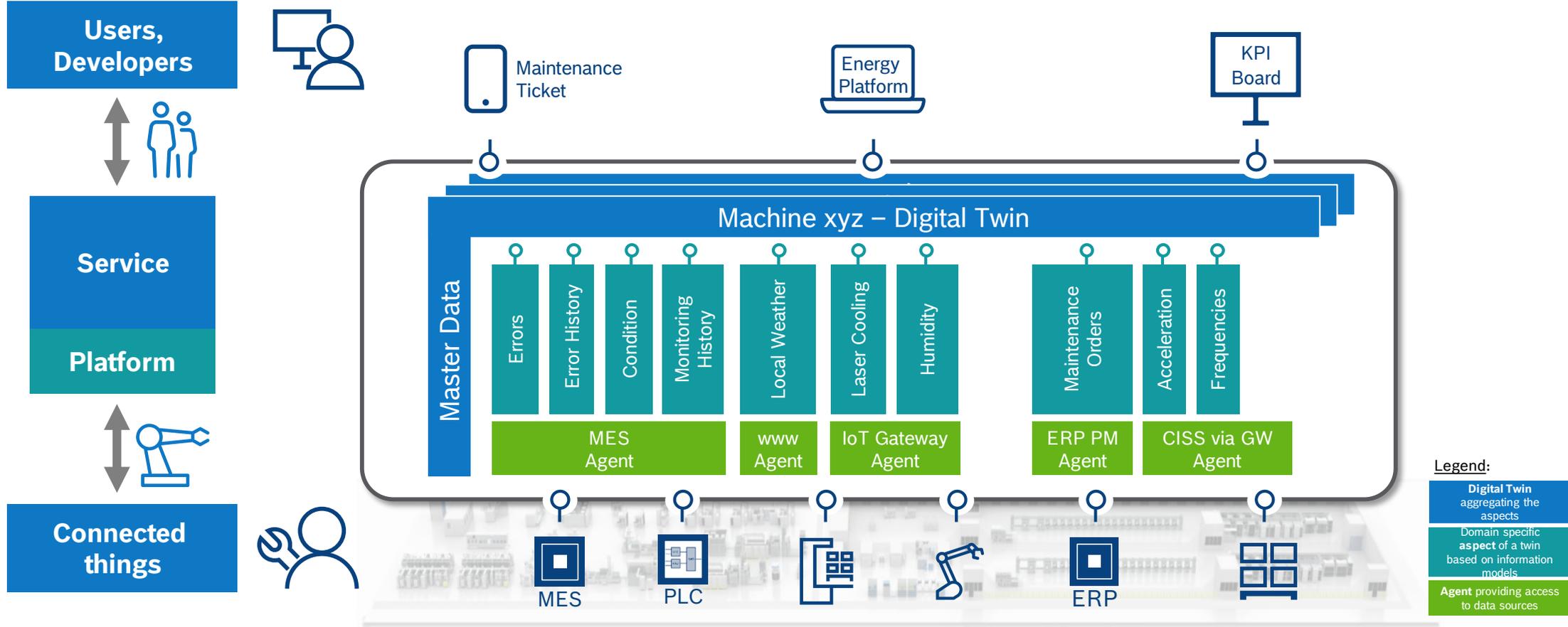
# Nexeed Open Integration - Digital Twin

## Digital Twin Aspects – Domain knowledge coded in IT



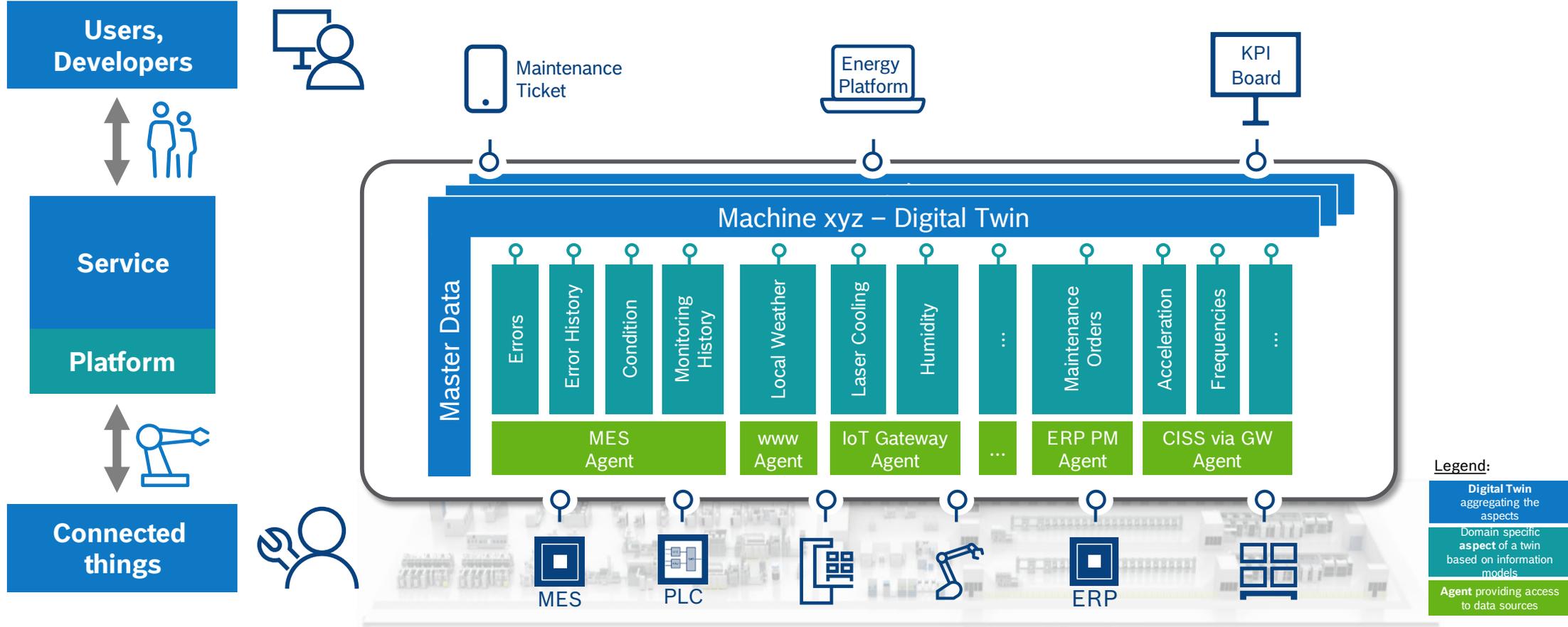
# Nexeed Open Integration - Digital Twin

## Digital Twin Aspects – Domain knowledge coded in IT



# Nexeed Open Integration - Digital Twin

## Digital Twin Aspects – Domain knowledge coded in IT



**Legend:**

- Digital Twin aggregating the aspects
- Domain specific aspect of a twin based on information models
- Agent providing access to data sources

# Nexeed Open Integration - Digital Twin

- ▶ Bosch Connected Industry Offering
  - ▶ Operations of Nexeed Open Integration - Digital Twin System with Registry and Catalog
  - ▶ Implementation of Digital Twins and Aspects
  - ▶ Consulting and Support to digitalize / “twinify” your shopfloor
  - ▶ Integration of Nexeed applications and other products / solutions