

# Industrial Internet of Things (IIoT)



## Gateway to building smart factories

### 1. IIoT vs IoT

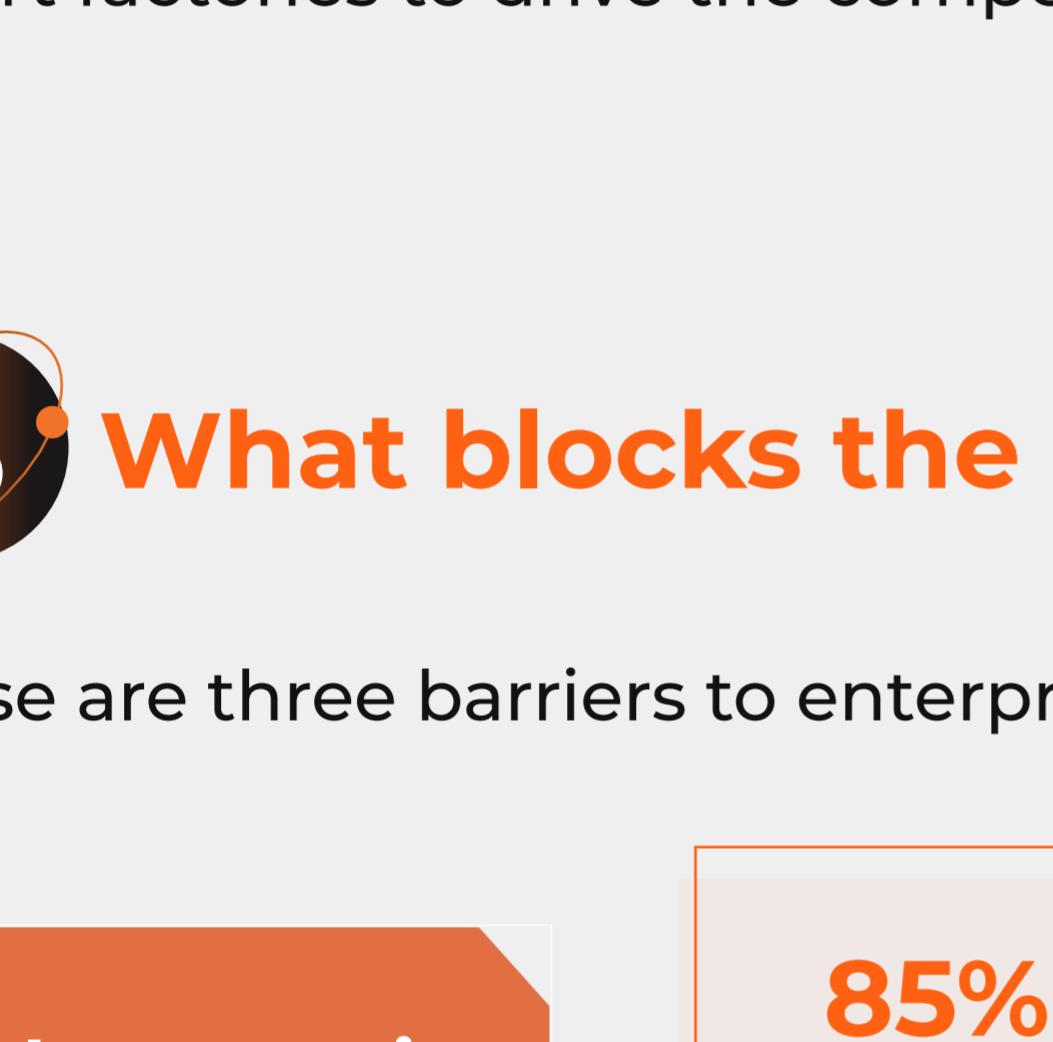
**IoT:** A network of connected physical objects (the “things”) that are capable of generating, communicating and analyzing data with minimal human intervention.



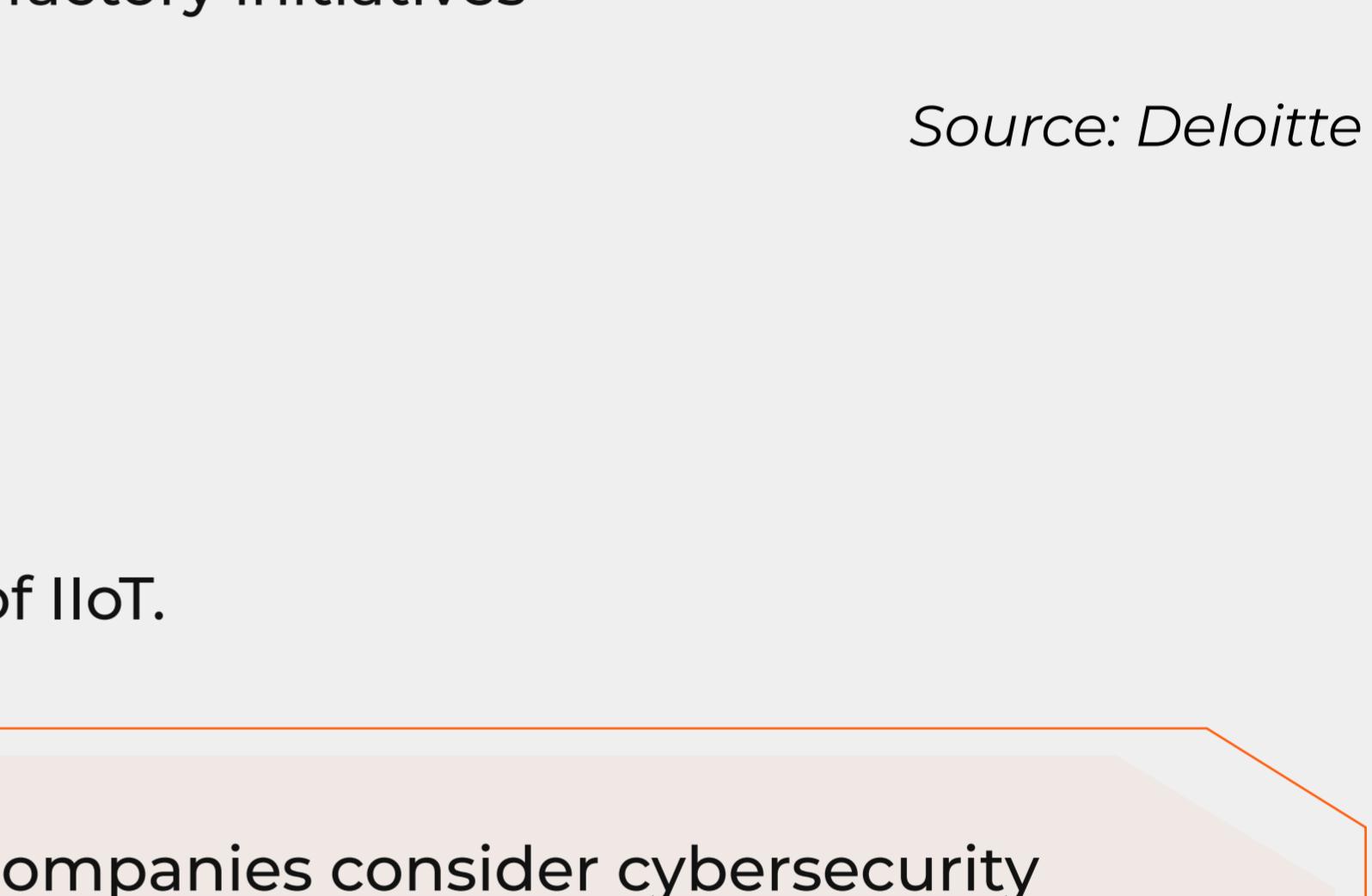
**IIoT:** The use of IoT in industrial settings to generate desirable business values, including boosting productivity, enabling preventive maintenance and lowering energy consumption.

### 2. Adoption of IIoT – strong interest but slow progress

#### In the United States



86% of surveyed organizations believe smart factories to drive the competition.



But 65% report NO progress on their smart factory initiatives

Source: Deloitte

### 3. What blocks the road?

These are three barriers to enterprise adoption of IIoT.

#### Cybersecurity

85% of surveyed companies consider cybersecurity as critical in their digital transformation journey. They expect solid security from every system they connect to, including that of suppliers and cloud platforms.

#### IT – OT integration

Traditional IT and OT operations differ significantly. Both have their protocols to ensure connectivity within internal systems, but none are built to effectively communicate with one another.

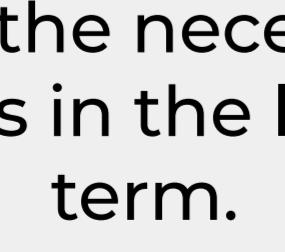
#### Limited Budget and Unclear ROI

33% of surveyed companies cite cost as the number one reason for IIoT adoption failure. A further 29% call out unclear ROI and limited understanding of how IIoT might add values as contributors.

Source: PwC, GSMA, Microsoft

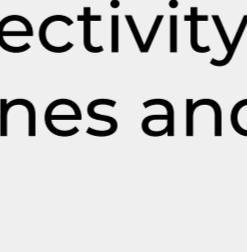
### 4. Learn from the pioneers

Only 5% of surveyed US companies have fully converted at least one of their factories into smart factories. Here are how they did it.



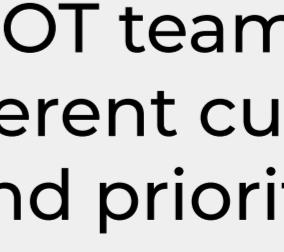
#### Human-centered design

Understand how individuals work on the shop floor and what information they need.



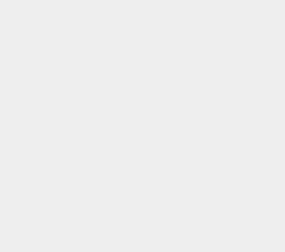
#### 360-degree support

Bring the whole team on board and engage them in the adoption process.



#### Diversity

Ensure a diverse team with varying skills and cross-functional skill transfer.



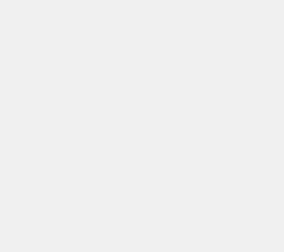
#### Continuous learning

Ensure employees have the necessary skills in the long term.



#### Connectivity

Ensure stable connectivity among machines and human.



#### IT-OT integration

Bring together IT and OT teams with different cultures and priorities.



#### Diversity management

Acknowledge diverse devices with different models, formats and purposes. Develop an approach for effective management of devices.

Source: Deloitte