PROJECT AIR™

Intelligent insights from device to boardroom

EdgeX Forum

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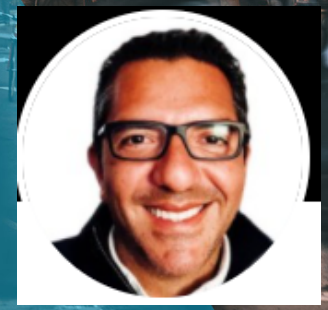
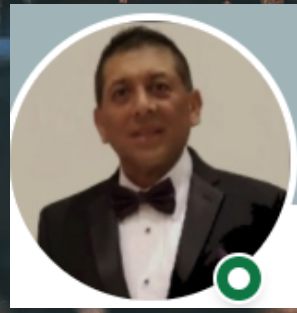
Prepared TIBCO LABS™





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TIBCO CONNECTED INTELLIGENCE

TIBCO makes it possible to unlock the potential of real-time data for making faster, smarter decisions.

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TIBCO LABS™:
Continuous Innovation

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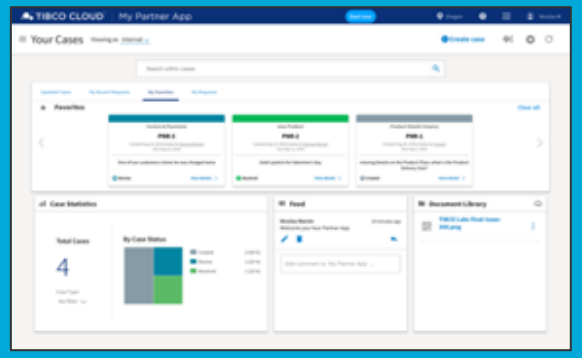
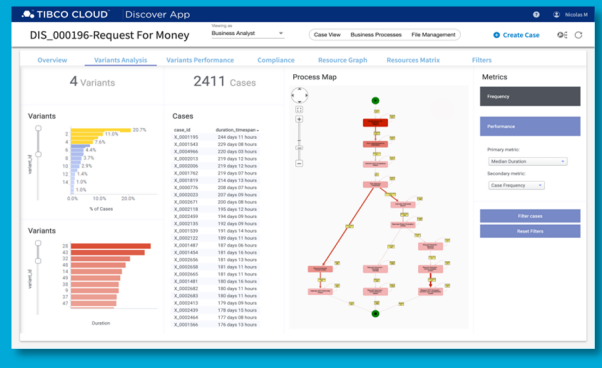
Cloud Starters

Quickly build native cloud applications



Discover

Discover business processes from operational data

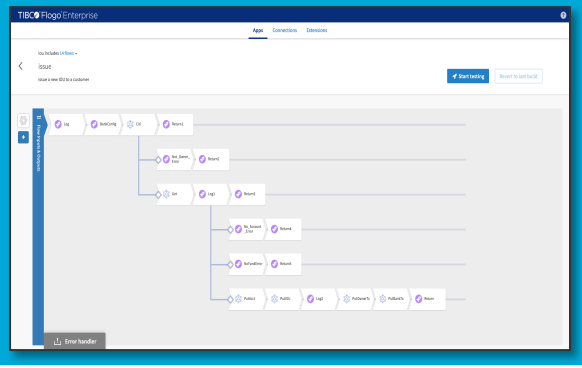


Cloud Conversations

Have a conversation with your enterprise data

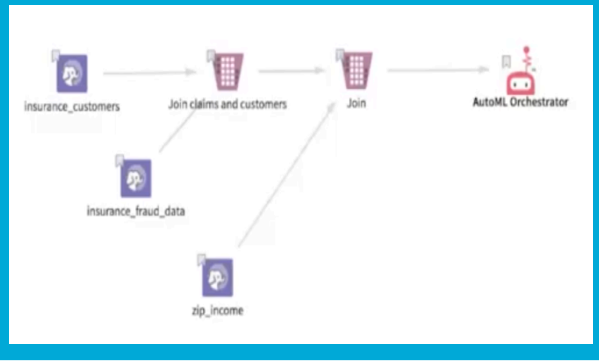
Dovetail

Make blockchain smart contracts smarter



Auto ML for Data Science

Auto ML workflows for the generation of applications

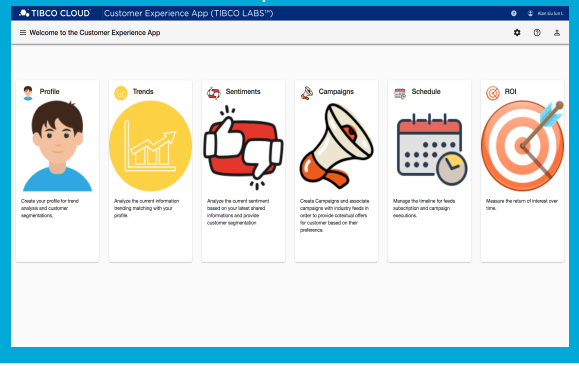


AIR

Streamline IoT from the edge to the cloud

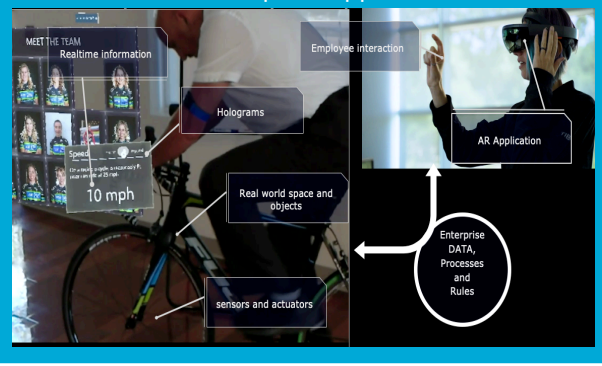
Journey

Engage with customers in new ways and exceed all expectations



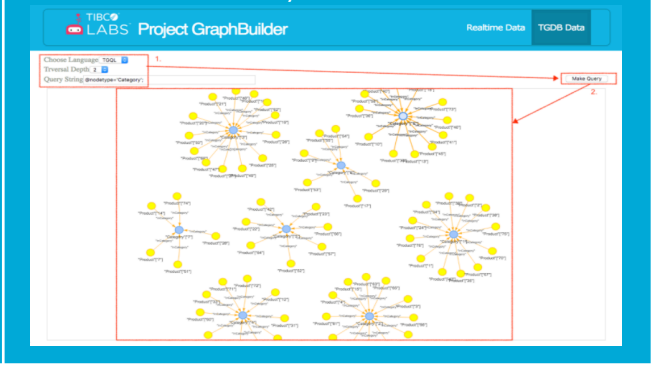
ART

Augmented Reality (AR) with real time data for enterprise apps



GraphBuilder

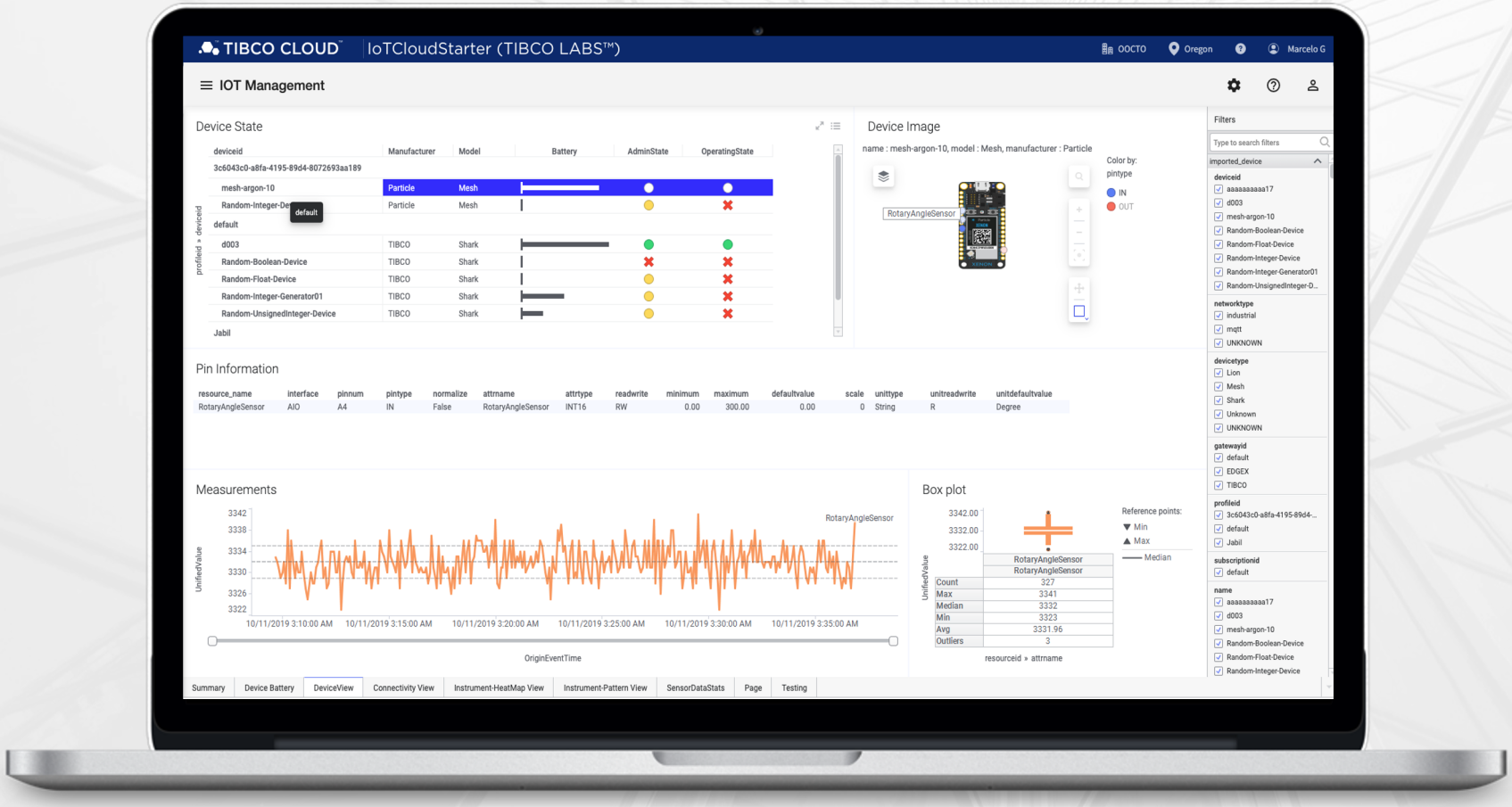
Construct graph entities to leverage relationships in your data



What comes to your mind when you think **IoT?**

TIBCO LABS™ Project AIR™

Intelligent insight from device to boardroom



Template that customers can take and extend

- **Register and interact** with IoT devices (gateways, edge devices, sensors, etc.).
- **Process IoT derived data** anywhere it is needed (at the edge, gateway, data center/cloud, etc.).
- **Agnostic approach** to select any cloud provider and edge device while leveraging open source technologies.
- **Own, analyze and store** IoT data as needed.
- **Extensibility in every layer** for easy integration with other platforms.

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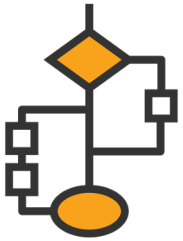
Project AIR™ Capabilities

Connect and extract IoT data for processing



Create triggers to respond to IoT events

Data management

Feed into long term / Big Data repositories for historical analysis

Visualize and explore IoT data

Monitor, measure and react to IoT events via a customizable UX

Combine IoT data with AI/ML models

Ability to map various end points within the organization

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Enterprise Use Cases Across Industries

CONNECTED VEHICLES

Automation of normal driving tasks to improve safety and reduce number of vehicles.

TELEMETRY

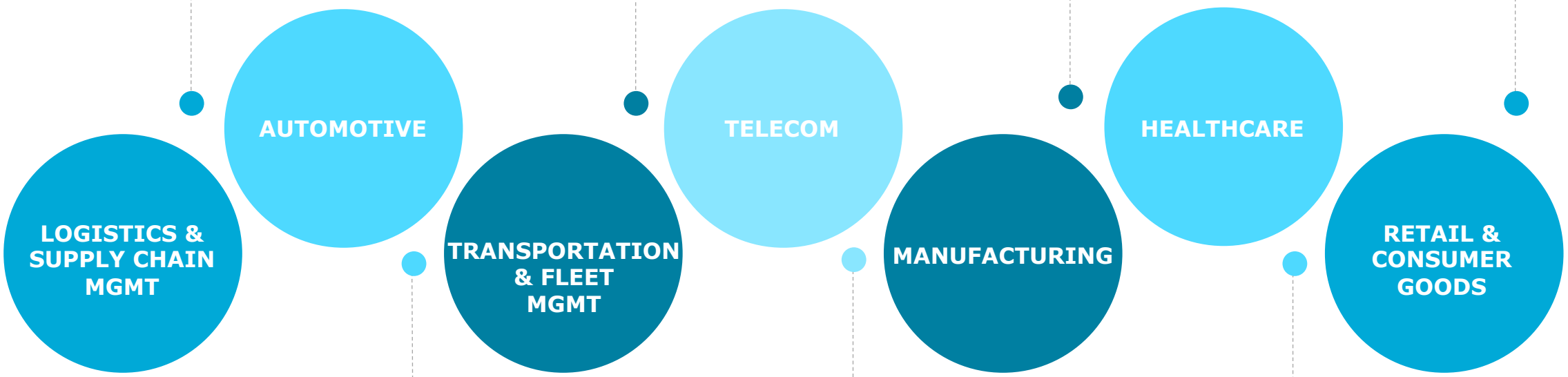
Deploy active fleet management systems to minimize risks associated with vehicle investment, improving efficiency and productivity while reducing costs.

COMPLIANCE

Use IoT data to gain analytical insights on your customers, internal operations and business processes so you can adjust as needed and comply with industry specific regulations.

AUTOMATION

Leverage sensors and cameras in combination with event/rule based engines to automate a sequence of steps in various business processes.



MACHINE LEARNING AT THE EDGE

Incorporating ML algorithms at the edge for real time decision making process and integrate/process all kinds of data feeds including feeds like Computer Vision for anomaly detection and preventive maintenance

PREDICTIVE MAINTENANCE

By leveraging sensors, cameras and analytics, smart factories can reduce failures by automatically creating maintenance timelines, improve strategic planning capabilities and capitalize on cost savings.

SMART METERING

Understand when and how many resources are consumed to achieve goal levels of energy efficiency and savings while reducing operational expenses by automating manual tasks.

ASSET TRACKING

Easily locate and monitor key assets to optimize logistics, maintain inventory levels, prevent quality issues and improve theft detection.

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Available Resources

TIBCO LABS™ page

https://www.tibco.com/tibco-labs

GitHub

https://github.com/TIBCOSoftware/labs-air/

TIBCO Community

https://community.tibco.com

Contact Us

tibcolabs@tibco.com

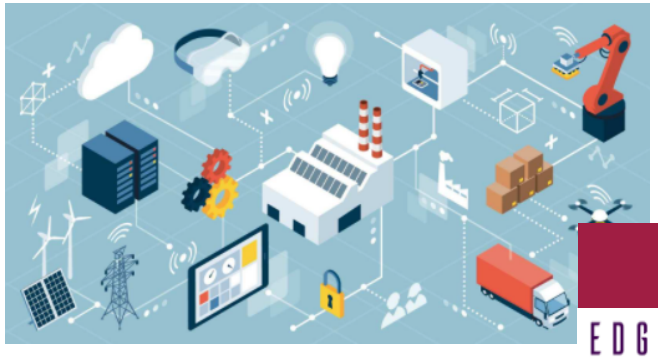
Project AIR™ Functional Components (Demo)

Project AIR™

Home Devices

EDGE X FOUNDRY™

TIBCO Flogo™ Runtime (App / Device Services*)

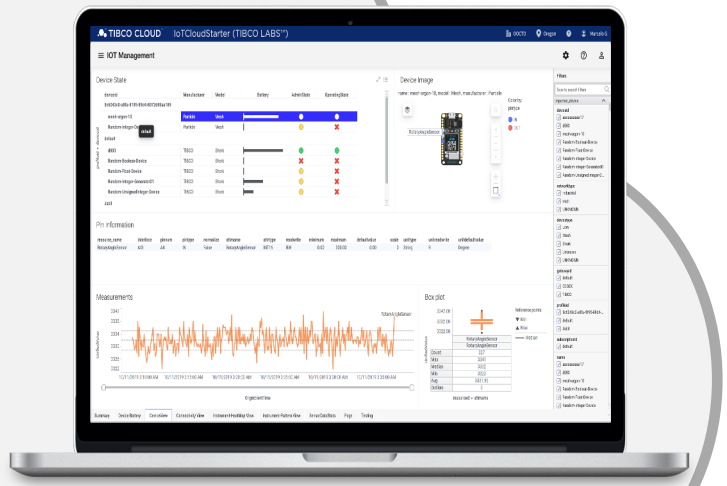


Remote Devices

EDGE X FOUNDRY™

TIBCO Flogo™ Runtime (App / Device Services*)

- IoT data extraction
- Multi-end point connectivity
- Data streaming, consolidation and storage
- Trigger based event response
- Data analytics
- Data enrichment with AI/ML models



Project AIR™ UI

aws

Microsoft Azure

Google Cloud

IoT Distributed Architecture

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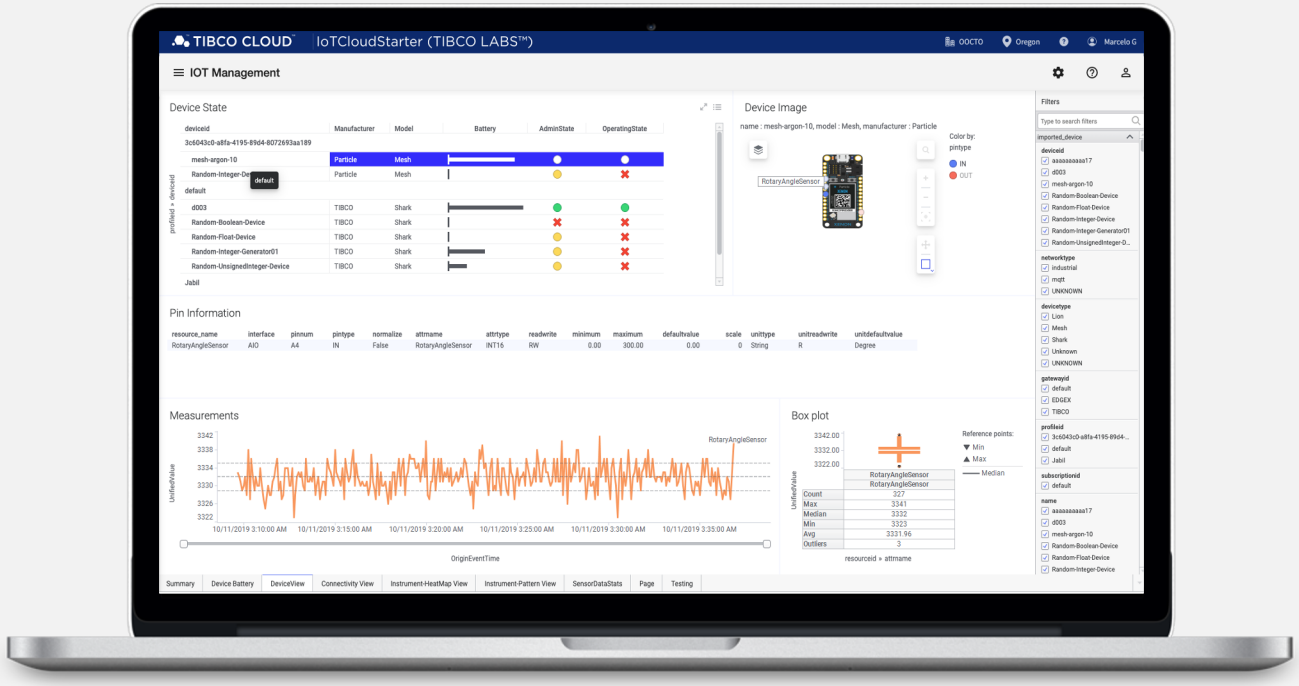
Project AIR™ Summary



Template that customers can take and extend

Register and interact with IoT devices (gateways, edge devices, sensors, etc.) and **process IoT derived data** anywhere you need.

Business Value:

- **Automation and cost savings**
- **Risk reduction and visibility**
- **Active customer engagement**
- **Improved workflow and automated commerce**

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