MICHIGAN STATE UNIVERSITY

Alpha Presentation

Predix Enabled Toy Train

The Capstone Experience

Team GE

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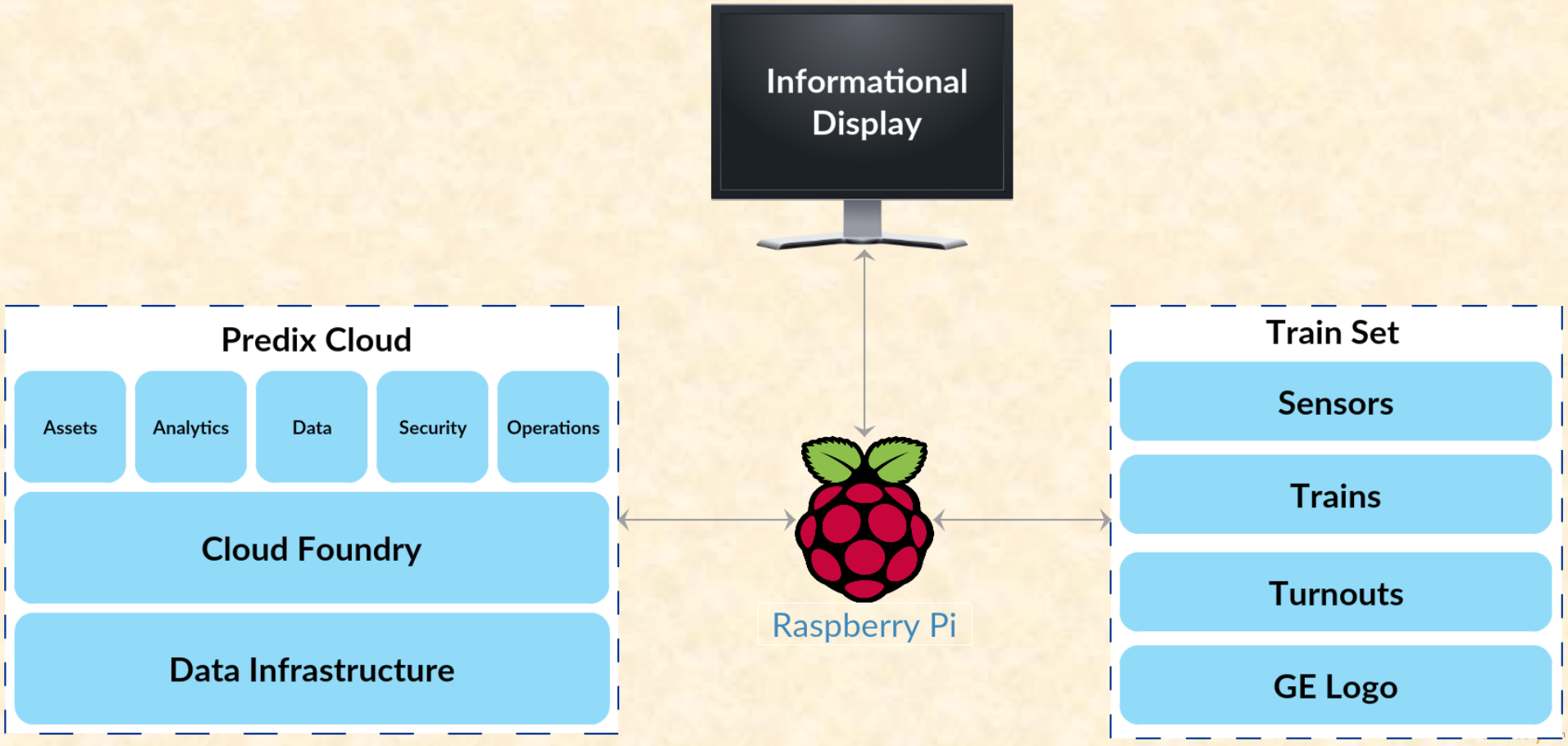
From Students…
…to Professionals

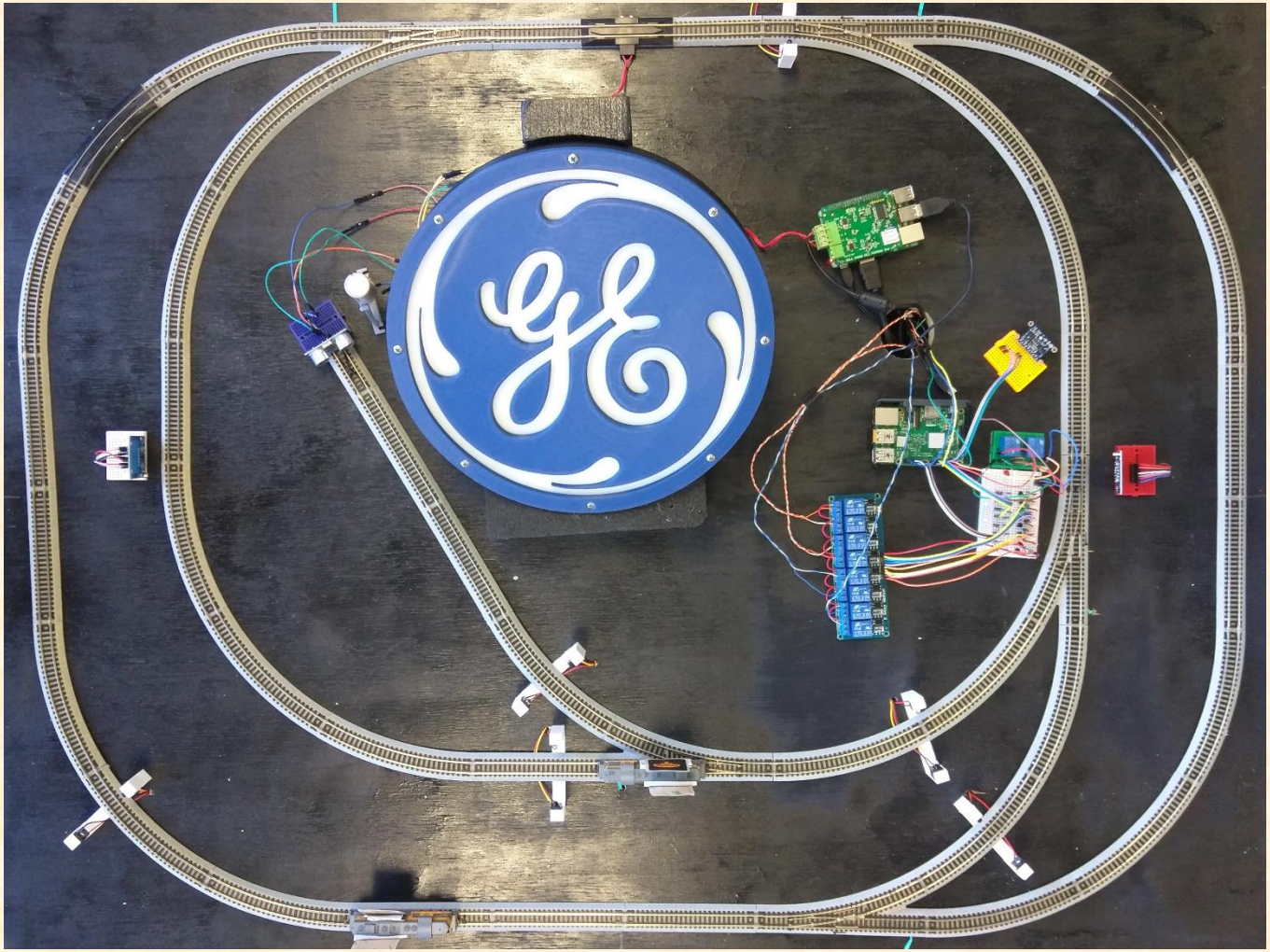
Project Overview

- Demonstrate the capabilities of Predix and its services with the Toy Train
  - Receive, analyze, and monitor data collected from the train and sensors along the track
  - Send analyzed data back to make decisions about the train's movement

System Architecture

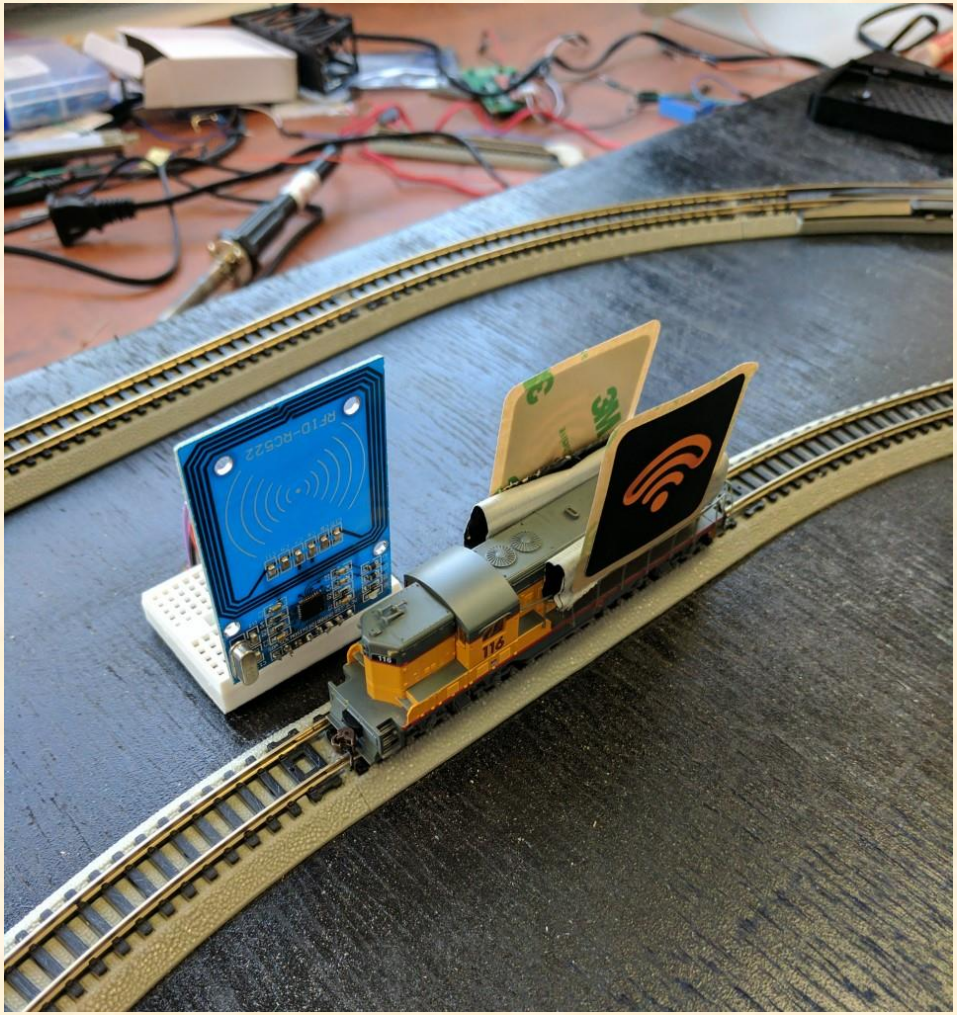


PICTURE OF THE TRAIN

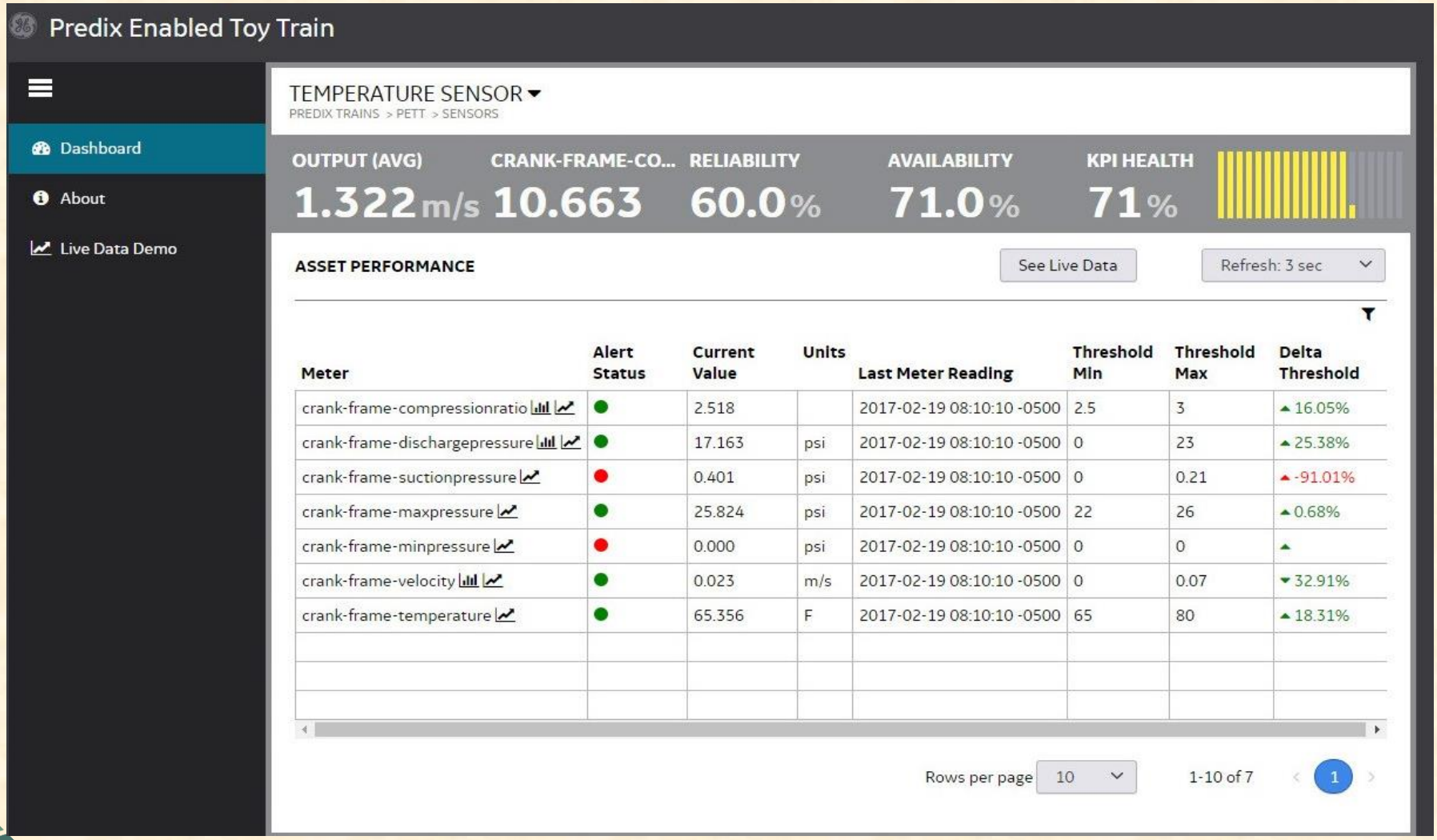


Sensors – Beam Breakers

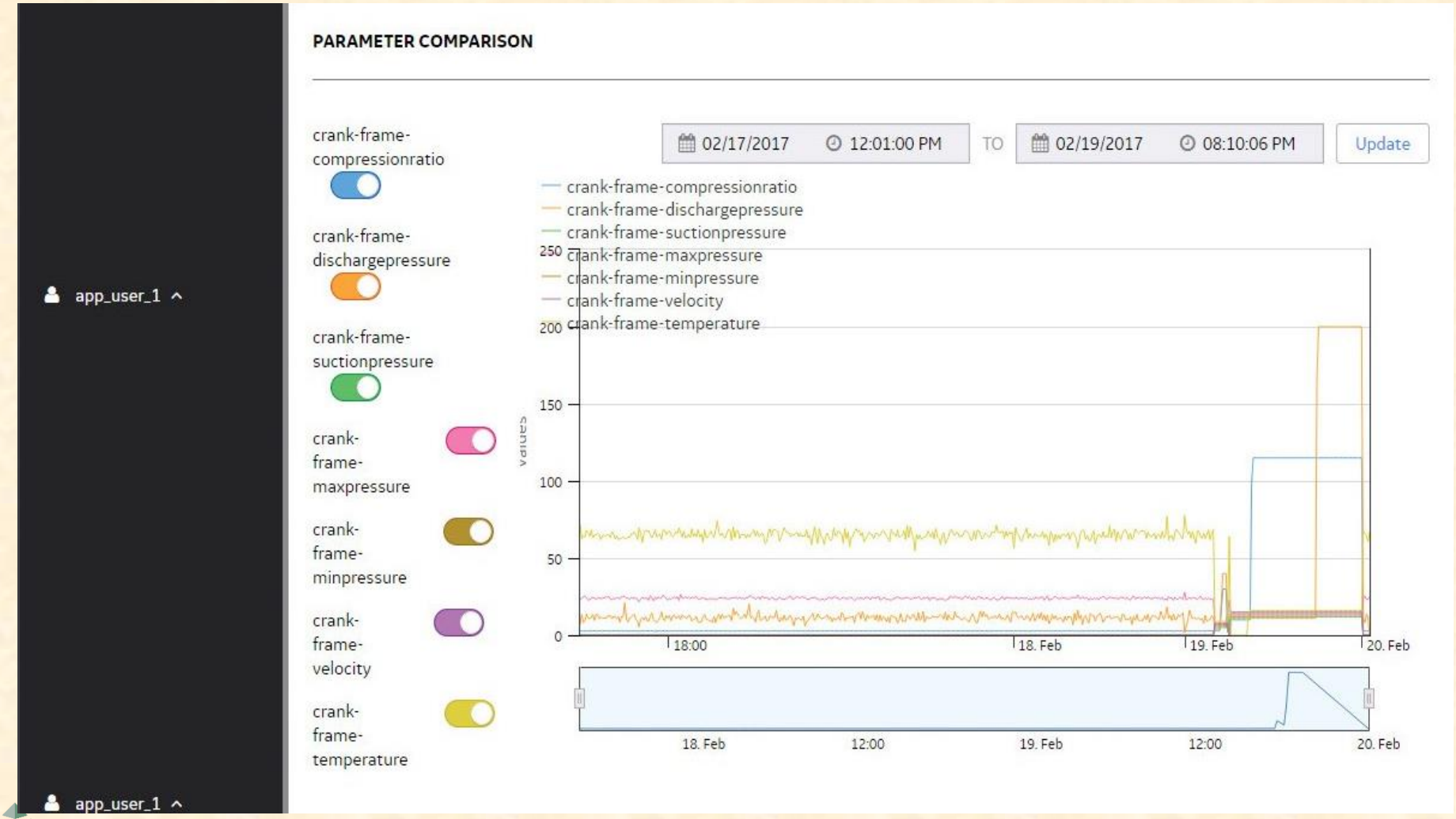
Sensors – RFID Module and Tags



Predix Dashboard



Predix Dashboard



What's left to do?

- Predix Analytics
  - Getting the sensors to talk to Predix
  - Run anomaly detection to monitor sensors
  - Use machine learning analytics on data to prevent collisions
- Scripting for the Train
  - Run Jython scripts without the use of PanelPro
  - Use Data from Predix to Make Decisions

Questions?

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