

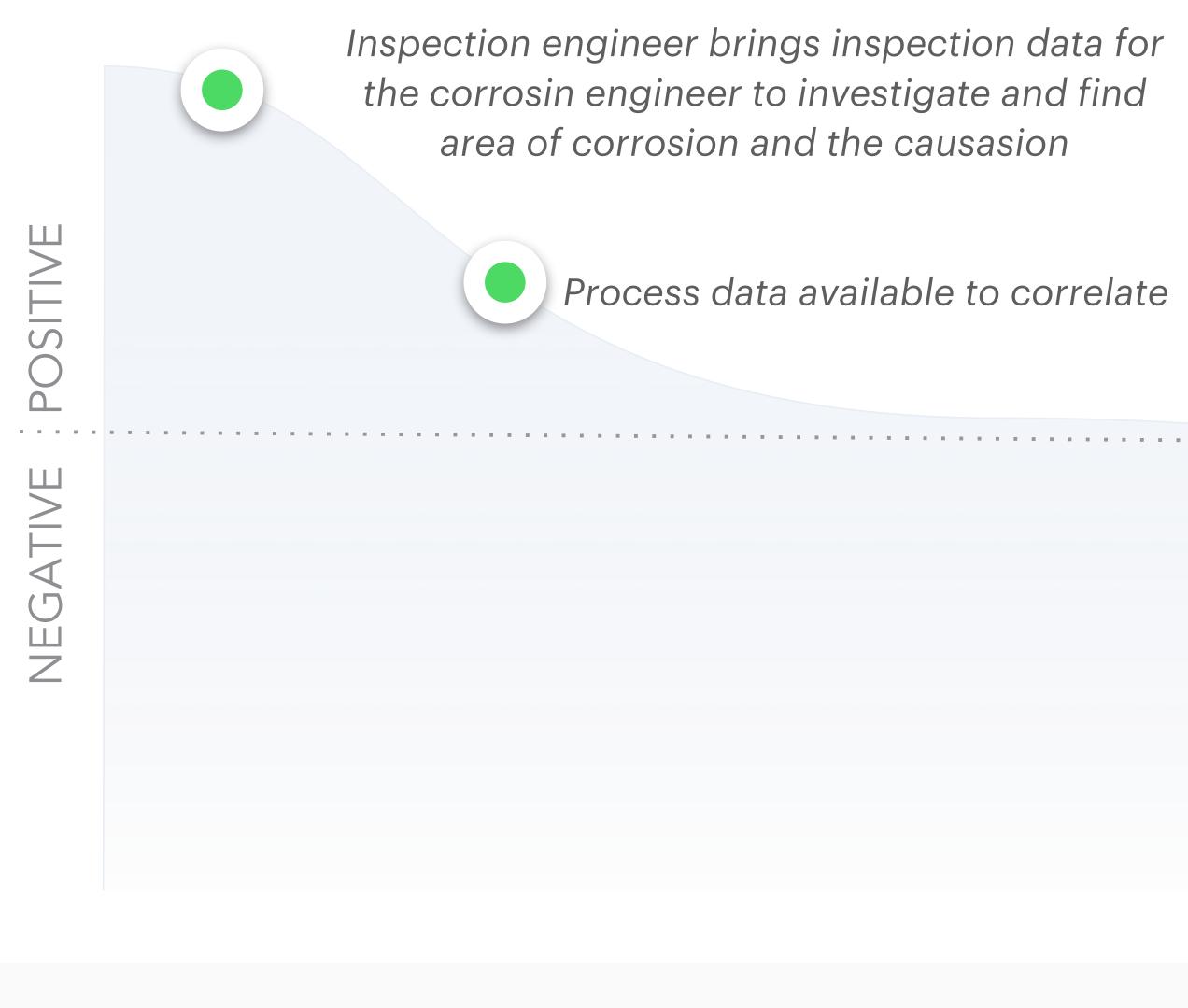
# Alta Baldwin

**Age:** 22 Work: Refinery Corrosion Engineer Family: Single Location: Manhattan, NYC

### **Gather Inspection** Insights

Stage 1

In this first stage, Alta needs to gather data based on the poping and vessel information in areas of the refinery with potential corrosion. She has to to gather this data from multiple sources to ensure her reading of causion will be as accurate as possible.



Opportunity

Merging the data source is in one location would help the engineers waste time searching through different data sets applications.

#### Bio

Alta Baldwin is a Refinery Corrosion engineer working in Cherrypoint. She is responsible for collecting data via reports, inspections, and measurements to determine the speed and spread of corrosion on metal parts and structures. She works with this collected data to find ways to eliminate or mitigate the effects of corrosion.

# Analyze **Corrosion Causes**

Stage 2

Within stage two, Alta has now gathered as much data as she could. She is now analyzing through all the data to understand what are some of the reasons why corrosion is happening. She ultimately wants to be able to find changes in corrosion rate. To do this she is searching for correlation between the different datasets for the poping circuits to help identify the specific reason of causation. Monitoring sensors in place to collect corrosion data No way to detect correlation of the perma sense data with Data has different any of the other Pi tags time scales automatically

Data in disparate systems , which leads to wasted of time on searching through data

Being able to cycle through different time scales quickly would help analyze the data and identify changes in the corrosion rate to help extract more accurate insights.

Having a way to plot the process data and the permanence data would help identify potential corrosion causation faster.

### **Goals & Expectation**

My goal is to reduce the time it takes to find accurate data and to search through multiple data sources. Doing so helps me discover insights and solve complex corrosion problems by providing technical knowledge of damage mechanisms to troubleshoot current corrosion integrity issues & prevent future corrosion failures.

## Conclusion and Prescribing Solution

Stage 3

Finally in stage three, Alta can conclude what has been causing the corrosion and provide the proper insight to her team. Once this has been done, the necessary action steps will follow whether its to replace, repair, or to continue monitoring.

> The area of corrosion has been identified and an accurate description of the causation has been shared out



Inability for near real time notification of change of rate of metal loss

Inability to correlating metal loss with process condition

> A real-time indication/alert of change in the rate of mental loss would help identify the problem as it happens and more accurately.

