



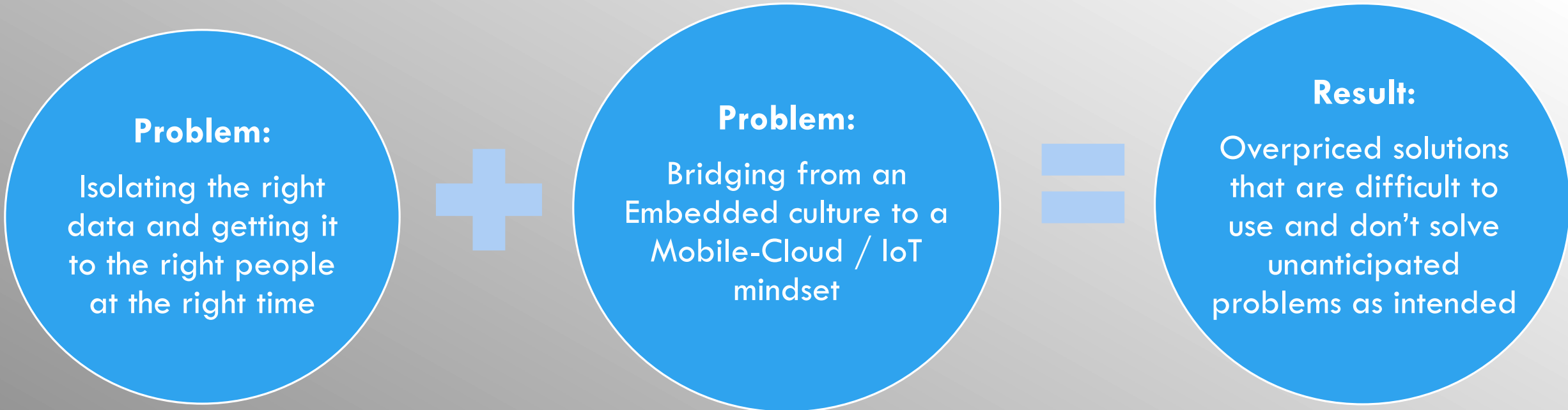
Right Data to the

Right People at the

Right Time


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THE INDUSTRY 4.0 CHALLENGE





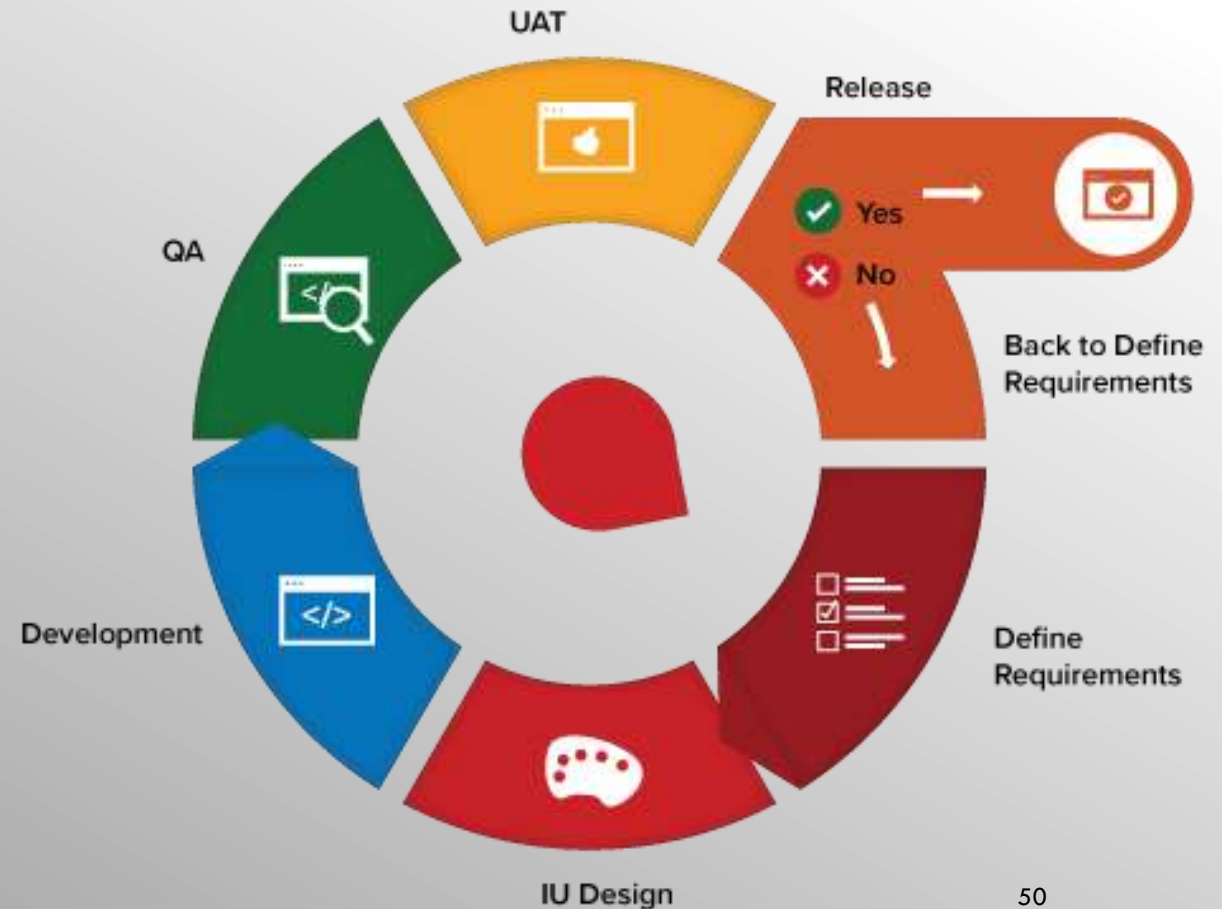
THE INDUSTRY 4.0 LANDSCAPE

- Big names in the industry are caught in this conundrum 
- Cultural Divide is real – Manufactures! are expected to build out their own applications, but lack true mobile-cloud experience
- Manufacturers must meet in the middle - they can't be expected to develop a software division over night. What's needed are step-based solutions that deliver ROI immediately & generate acceptance at all levels of the organization.
- Zero Training - Solutions can't require training. Industry 4.0 is too young and too risky for busy plants to dedicate resources to it. It has to simply work.
- Insights Today – data must be high quality and make sense AND lead to actions with clear ROI.

MAVEN & CONAIR PARTNERSHIP



- **Reason:** Best of breed skill-sets to solve problems using a real-time platform
- **Formula:** Agile development is the method to create what customers want
- **Iterate:** Rapid design cycles enable new features to roll-out quickly
- **Results:** Capture detailed data on a massive new level, but deliver insights simply & tied to key metrics





Making Factory 4.0 Work



Making IoT Work for People

Industry 4.0 is not just a product, it's a process

- Your plant is not going to change over night. You have to continuously improve your own plant

Identify pain points in your process, measure and solve them.

- No one knows your process as well as you do. So you are the best person to improve it!



Making IoT Work for People

- **Flexible** – Customizable triggers enables us to get out alerts in real time. Customers know their own production better than anyone else. They must be empowered.
- **Top Down Control** – Managers define & control the information flow
- **Escalating Alarms** – as situations persist more people are brought into the situation
- **Real-time Ticketing** – Automatically generate new tickets where people can collaborate and discuss problems as they come up.



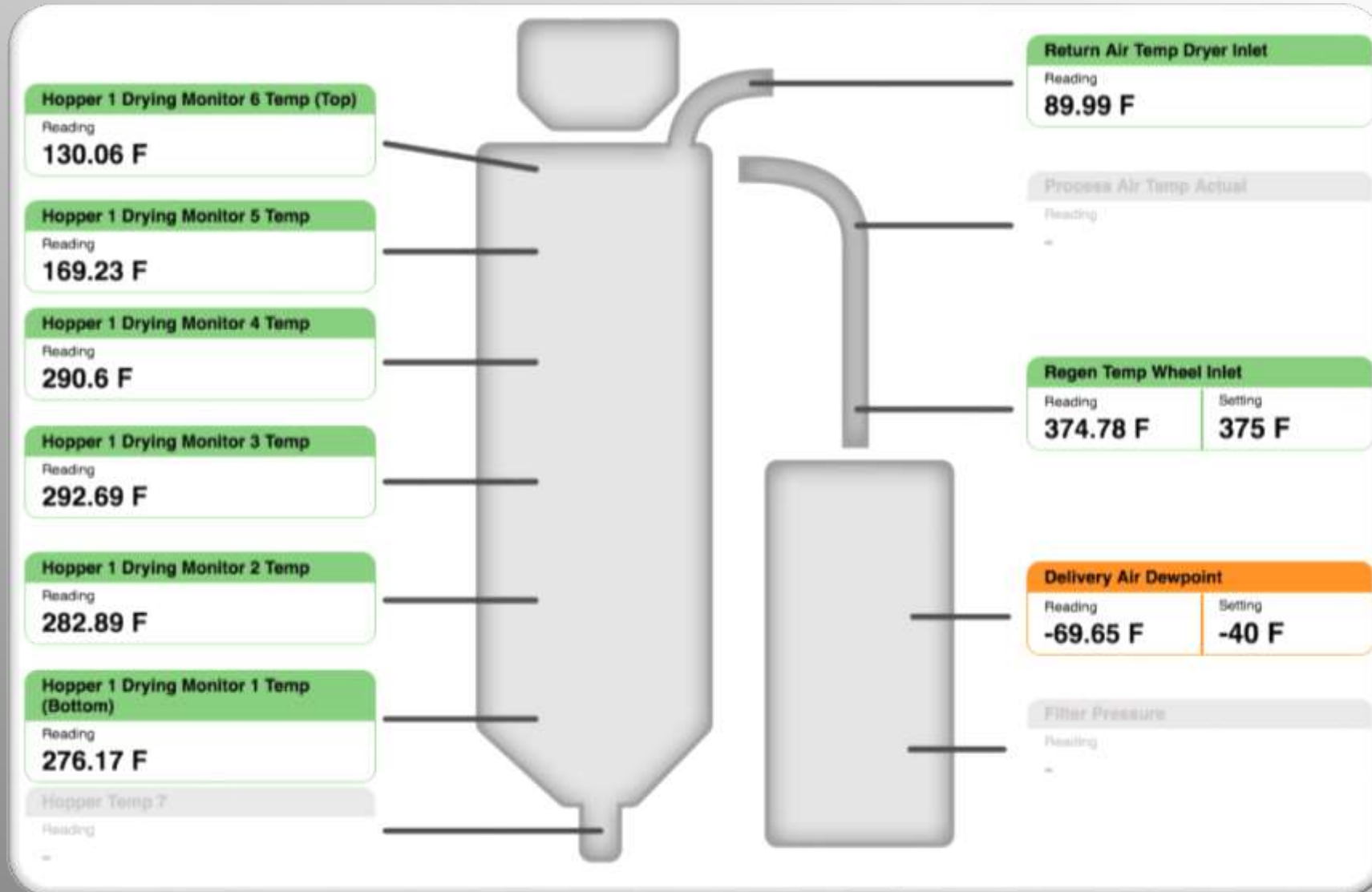
Making IoT Work in Industrial Settings

Industrial Grade
Reliability





Making Machines Visible





Real Life Benefits

“Before, we had to check every machine every day”

- Daily Check took 60 minutes per day per shift

“Now, I know what I’m walking into”

- Checks their Smart Machine Dashboard before drive to work & hits the ground running

“Useful for everyone on my team”

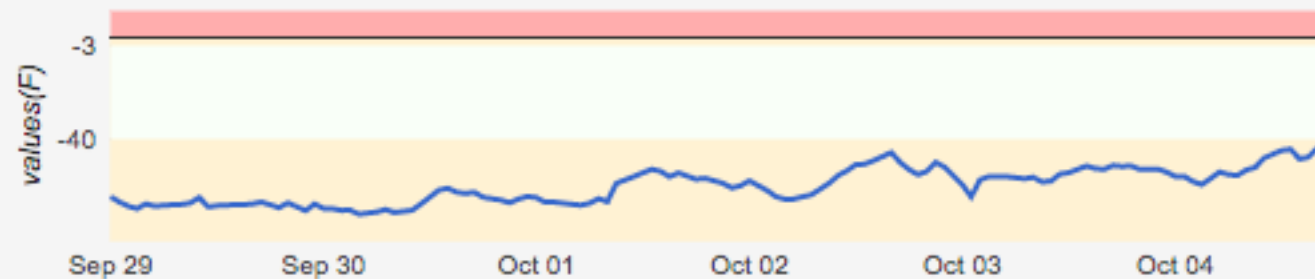
- When everyone has all the information, things run smoother



Real Life Case

Prevented waste: Customer saw dewpoint was too low

Delivery Air Dewpoint



Through Maven alerts the process engineer was alerted and managed to tweak parameters to save a hopper full of pellets from over drying and causing waste.



Real Life Case

Automated
daily reports
and real-time
alarms

How Your Shifts Performed

	Shift 1 7am - 3pm	Shift 2 3pm - 11pm	Shift 3 11pm - 7am
% Machine Uptime	62.5%	53.7%	42.1%
# High Priority Alarms	0	0	2
# Low Priority Alarms	40	16	26

Machine Alarms

2 High Priority, 82 Low Priority

TNB101	System: Active Alarms: The x20...	06:37am - 06:38am CDT
TNB101	System: Active Alarms: The x20...	06:40am - 07:34am CDT

[View All Alarms For Plant](#)

Blender 2

TB - 4

Component 1: Active Alarms:
Hopper out of material
Fri, Sep 21, 2018, 4:31 AM EDT



DATA DRIVEN RESULTS

Toledo Mold and Die Plant Report

How your 9 machines performed throughout the day.

% Machine Uptime	52.9%
# High Priority Alarms	2
# Low Priority Alarms	82



ACTIVE FACTORY 4.0 TODAY

- 100 PLASTICS MANUFACTURERS SIGNED UP IN FIRST 90 DAYS
- NEW INSTALLATIONS HAPPENING WEEKLY
- ONBOARDING DONE IN 1-2 DAYS WITH TEAMS OF 1-2 PEOPLE
- MONITORING A DOZEN TYPES OF EQUIPMENT ACROSS THE ENTIRE PLANT FLOOR
- ROLL-UP STYLE REPORTING PROVIDES ROI TO MANAGERS & EXECUTIVES BY
DELIVERING A CLEARER UNDERSTANDING OF PROCESS, UTILIZATION, AND EQUIPMENT
HEALTH



LOOKING FORWARD

- **CUSTOMIZED SENSORS** – MEASURE ANYTHING IN YOUR PLANT THAT YOU WANT TO WITH REMOTE SENSORS FROM BUTTON PRESSES TO HUMIDITY
- **PREDICTIVE ANALYTICS** – PRE-EMPTING PROBLEMS AND HAVING ADDITIONAL VALUE ADD THROUGH CONAIR
- **MACHINE RECIPES** - SAVE TIME AND ERRORS ON LINE CHANGES BY STORING AND APPLYING MACHINE RECIPE

digitalbridge²⁰¹⁸

PITTSBURGH'S INDUSTRY 4.0 CONFERENCE

Bank of America
Merrill Lynch

COMCAST
BUSINESS

