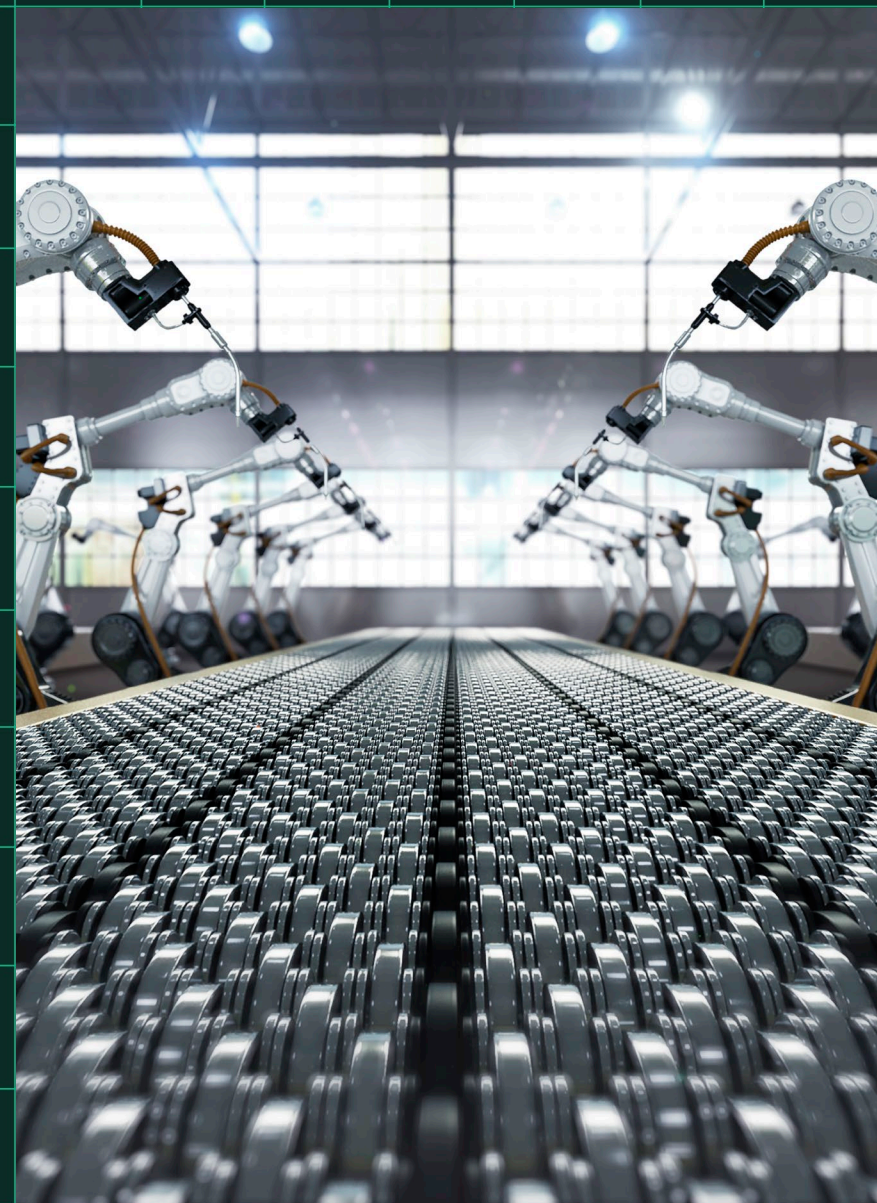


# Validation and “Time to Insight”

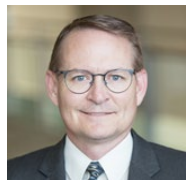
Allen Howard, NI Consultant

Mike Wang, NI Consultant

Improve how you leverage data  
to validate quickly and get to  
market faster – A Case Study



# Who we are...



## C. Allen Howard, Consultant

As a Consultant for Global Services at NI, Allen Howard is focused on partnering with organizations to achieve their business and operational outcomes. He has been with NI for over 22 years in various roles in Services, Account Mgmt, Training & Development, Sales, and Engineering. During this tenure at NI, he has worked across many industries, with extra depth in aerospace/defense. Prior to joining NI he was a Consultant with Price Waterhouse. He holds a Ph D from Penn State University.



## Michael Wang, Consultant

Mike has over 30 years of experience in product and technology development. Mike has led a team in delivering several level 3 maintenance solutions for both the DoD and International tactical communications systems. Mike have also spent several years in the global services with transportation including the FDOT / SEPTA open payment systems as well as other retail customers, such as creating the self-serve printing solution at Staples.

## Pressure from Product Businesses

### Case Study:

What NI Professional Services did with a customer to reduce time to insight

### Takeaways

### Q&A

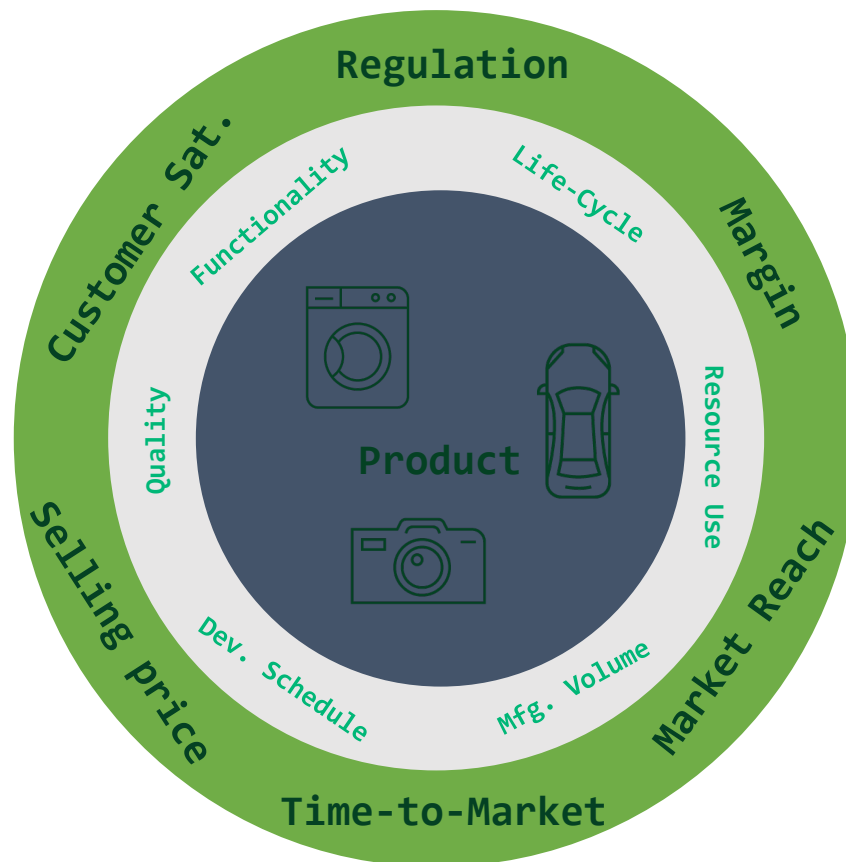
# Pressure from Product Businesses

## External: Market Forces

**Increasing Product Complexity**

**Shorter Market Windows**

**More Competition**



## Internal: Company Objectives

**Digital Transformation:**  
*Data-Driven Decisions*

**Time-to-Market:**  
*Improved Efficiency*

**Product Quality:**  
*Cross-Functional Collaboration*

# Time to Insight

- The right data, presented in a useful way = Insight
- Insight drives product decisions
- A focus on “Time to Insight” drives efficiency & effectiveness

# NI Professional Services Case Study

How NI Professions Services Partners with Organizations to Accelerate Achieving their Business Objectives

## Focus & Scope

- Desired Outcomes – What business metrics are driving the need?
- Identify Current & Future State

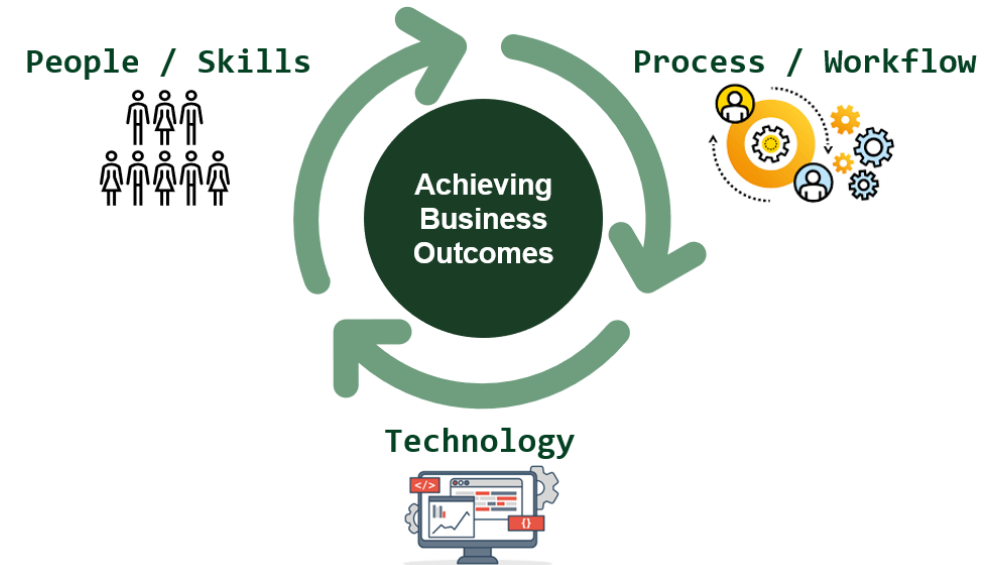
## Information Gathering

- 360 Degree Interviews
- Relevant Data
- Examination / Observation

## Report

- Findings
- Recommendations
- Proposed Plan to reach Business Objectives

## Wholistic Perspective





# Validation Labs

## Current State vs. Future State

### Current State

1. **Testing/Automation**
  - 75% is manual, “R&D” style
    - Time consuming, inconsistent
  - Inflexible systems
2. **Data**
  - Analysis takes too long
  - No data use across life cycle

### Action

1. Test: Automate Common Measurements
2. Data: Identify data & analysis needs

### Future State

1. **Testing/Automation**
  - 80% common, automated measurements
  - Modular, adaptable systems
2. **Data**
  - Common analysis
  - Digital data thread

### Key Business Impact:

1. Test:
  - Time savings = faster time to market
  - Quality improvements
2. Data
  - Improved Quality



Best-in-class production test teams don't just build test stations—they execute against a test strategy that actively supports their company's performance. At NI, we're equally committed to both your engineering and business goals, empowering you with industry-leading solutions, software and services.

**Kyle Voosen**

Director  
Production Test Strategy







# Collaborative Work

## Learn and prepare

- ✓ Scoping and outcome Definition
- ✓ Kick-off + Preparation meetings with Core Team



## 360-degree discussions



13

Site Interviews with 41 people across

10<sup>+</sup>

Job roles



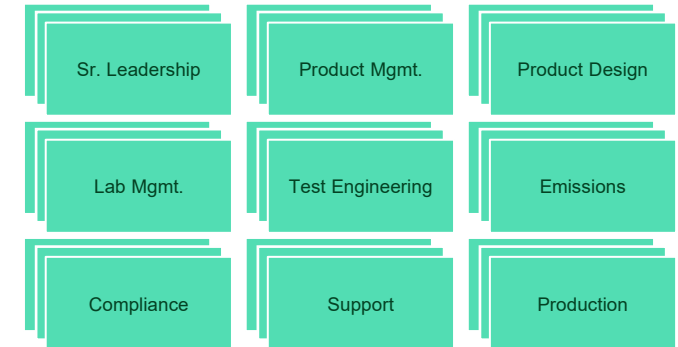
4

Weeks



6

Functional organizational teams (Sr. Leadership, Product design, Lab Mgmt., Test Engr., Compliance, Production)



# Validation Lab Testing Process

Current State: Time to Insight 24 Days



Future State: Time to Insight 7 Days

## Current State:

Mostly manual testing

Long data analysis

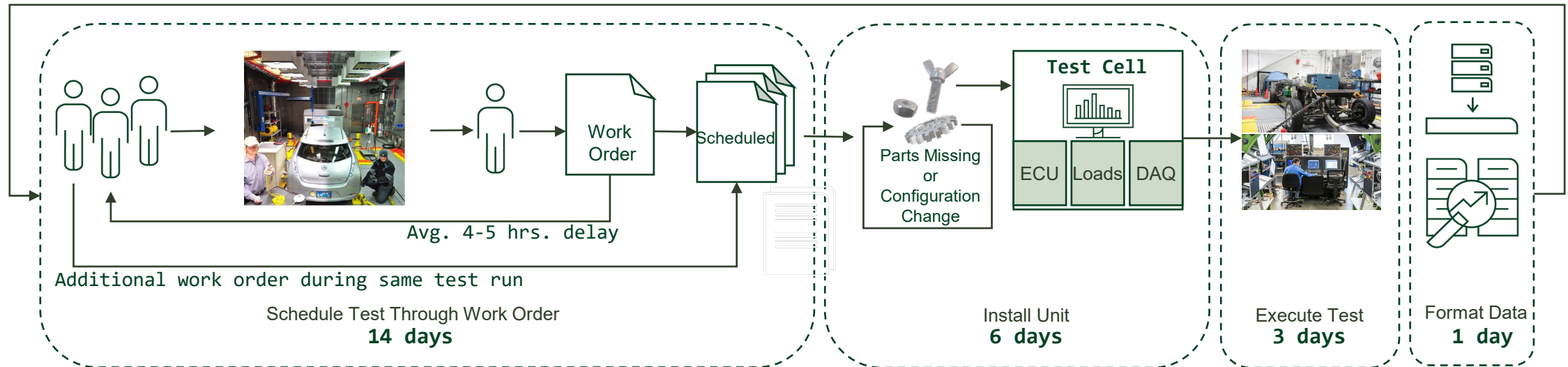
No data life cycle management

## Future State:

80% common, automated testing

Test reduced from 24 to 7 days

Modern data life cycle management





# Collaborative Work

## Learn and prepare

- ✓ Scoping and outcome Definition
- ✓ Kick-off + Preparation meetings with Core Team



## 360-degree discussions



13

Site Interviews with 41 people across

10<sup>+</sup>

Job roles



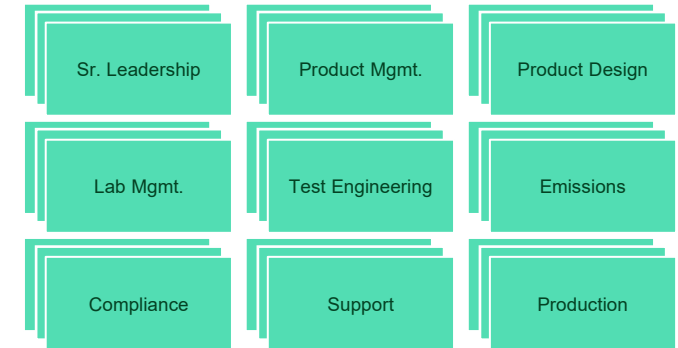
4

Weeks



6

Functional organizational teams (Sr. Leadership, Product design, Lab Mgmt., Test Engr., Compliance, Production)



## Deliver and align

Observations,  
Ramifications



Recommendations & Benefits:  
People, Process & Technology



High Level Plan





# Hybrid Development Partnership

- ✓ What are the invaluable tasks that can be Offloaded?
- ✓ Is your priority – budget, time or quality? Or all three?
- ✓ Do you have the right expertise?

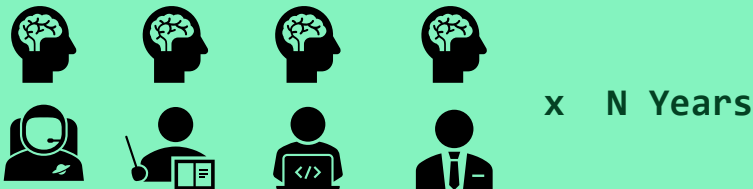
Minimal Budget Impact  
Customer only



- Lower upfront cost with operation risks
- Longer wait till savings
- Expertise Required

Vs.

Minimize Timespan  
With NI



- Higher upfront cost
- Scalable sustainment resources  
(Hybrid Development Model)

△ in Years or Revenue, Budgetary:\$\$\$

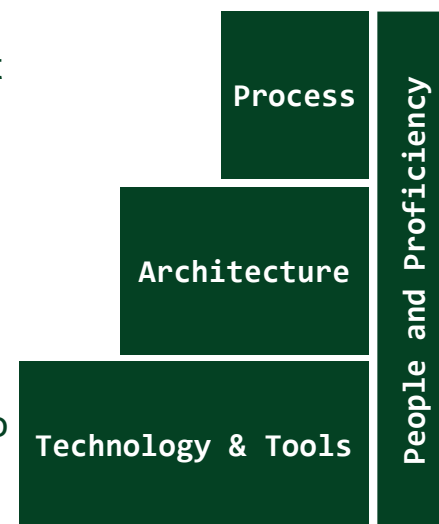
# What you should takeaway from this?

- Interest in time to insight?
- Things you can do...
  - Identify your current state and future state
  - What are your processes today?
  - Do you have metrics?
- You don't have to do it alone, but partner with NI



Fusing HW & SW into solutions that best serves your needs!

1. **Process** – how the architecture and tools are executed
2. **Architecture** – a framework for the tools to be used
3. **Technology** – the tools in use
4. **People & Proficiency** – ability to use tools, architecture, and process



Q/A



National Instruments  
is now NI.