

# Asset Management/Asset Care



Asset Base

**€4B** 150 Buildings  
2,300 acres

**+34,000**  
Assets

Primary Net Energy

**230 GW/hrs**  
gross annually

Team of

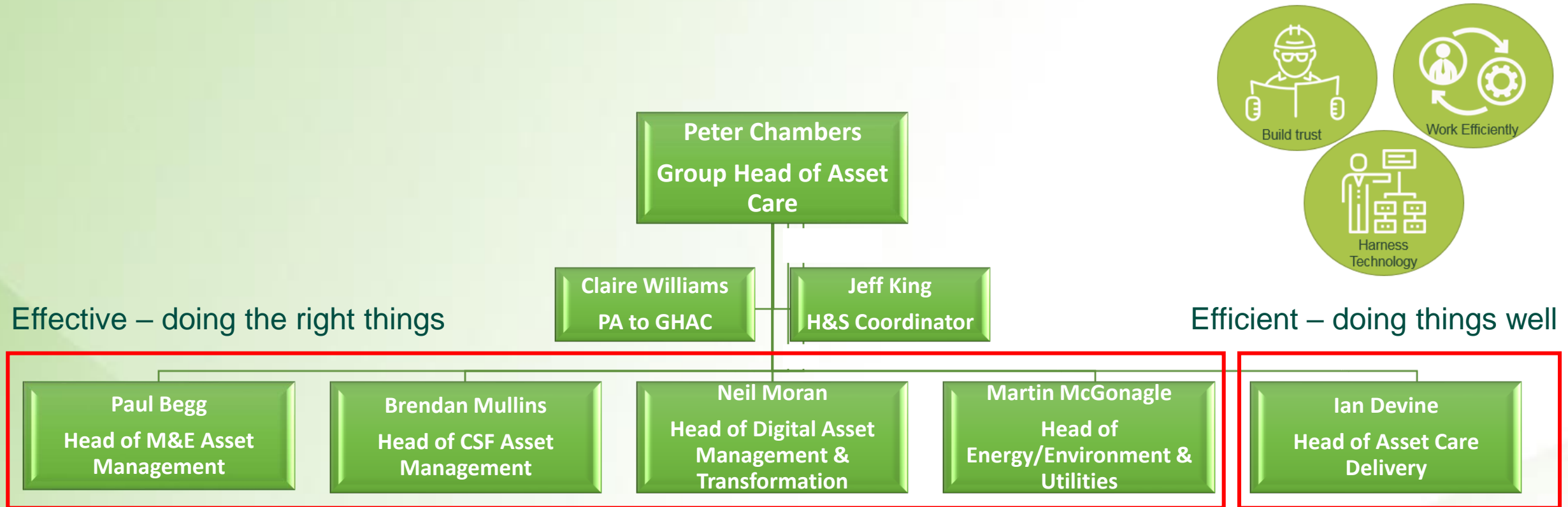
**+250**

Technical & Managerial

Compliance Frameworks

ISO 55001 Asset Mgmt.  
ISO 50001 Energy Mgmt.  
ISO 45001 H&S Mgmt.  
ISO 14001 Environmental Mgmt.

# Asset Management/ Asset Care Team

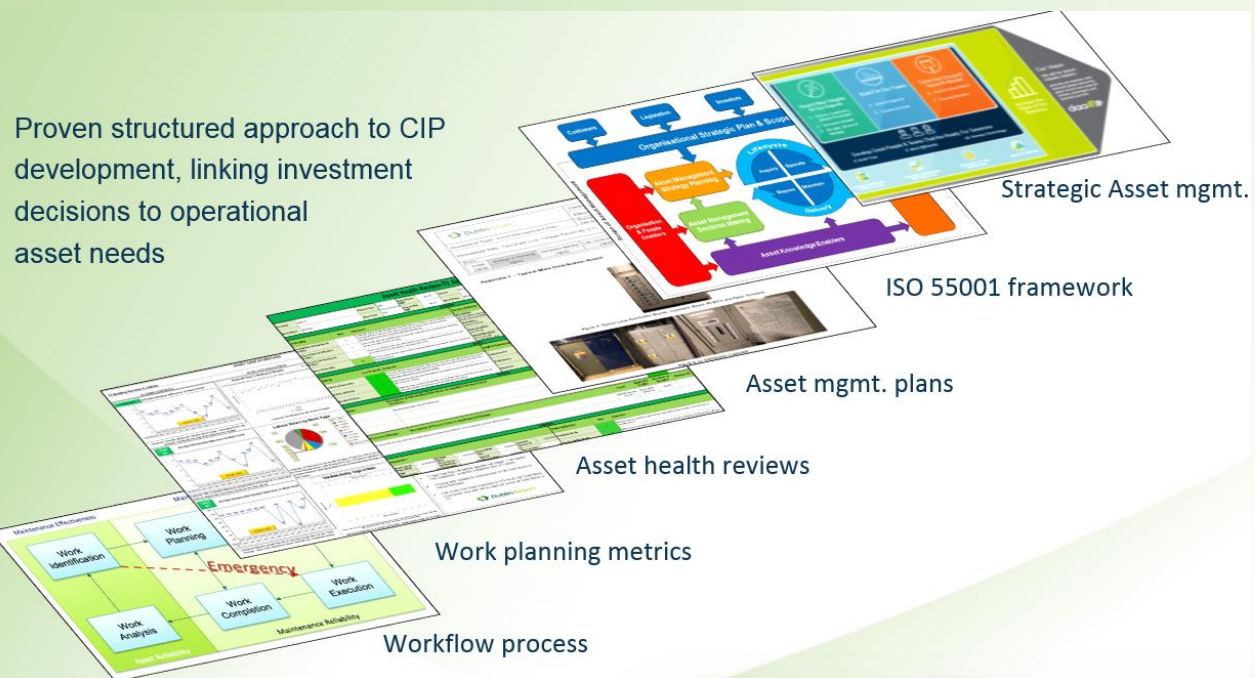


**Our Vision**  
We keep You moving through Engineering Excellence



# Asset Management Process

Proven structured approach to CIP development, linking investment decisions to operational asset needs

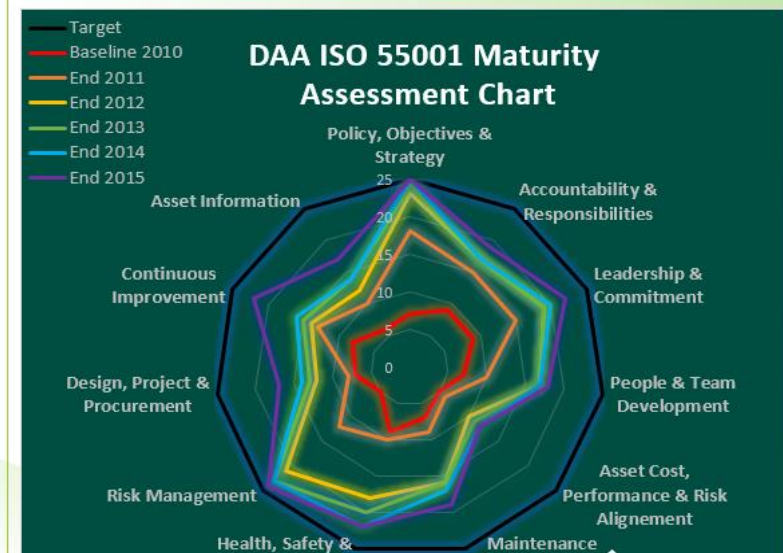


## ASSET MANAGEMENT FRAMEWORK

### Summary Headings:

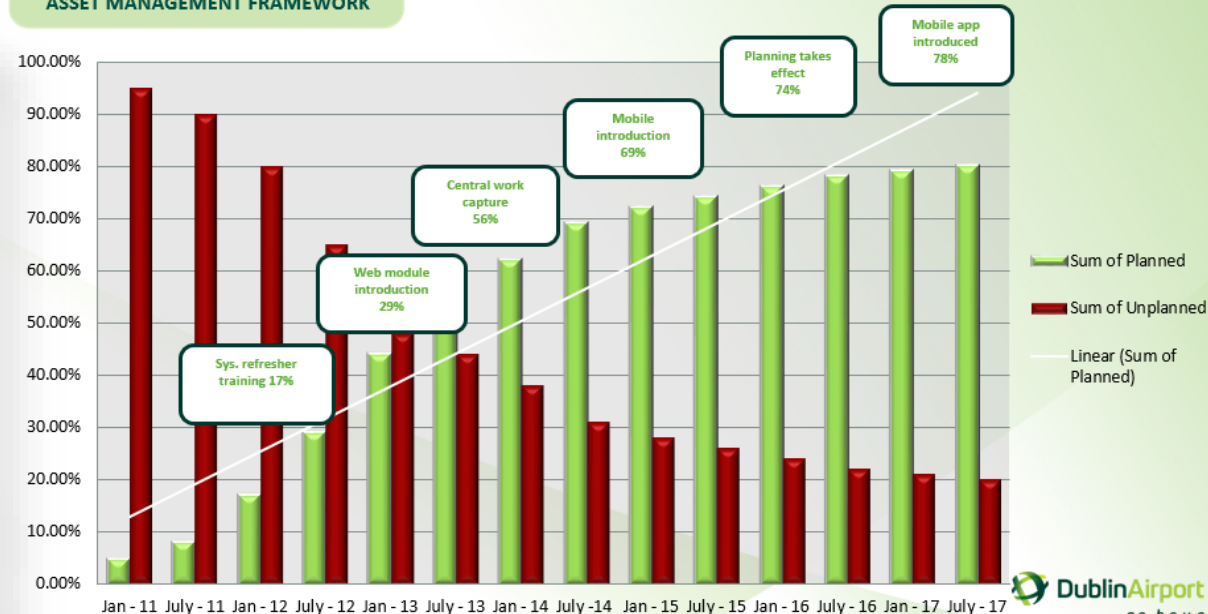
1. Policy, Strategy & Objectives
2. Accountabilities & Responsibilities
3. Leadership & Commitment
4. People & Team Development
5. Asset Lifecycle Planning
6. Design, Project & Procurement
7. Operate & Maintain
8. Asset Information Management
9. Health, Safety & Environment
10. Risk Management
11. Continuous Improvement

## DAA ISO 55001 Maturity Assessment Chart



## Planned Vs Reactive By Time

### ASSET MANAGEMENT FRAMEWORK

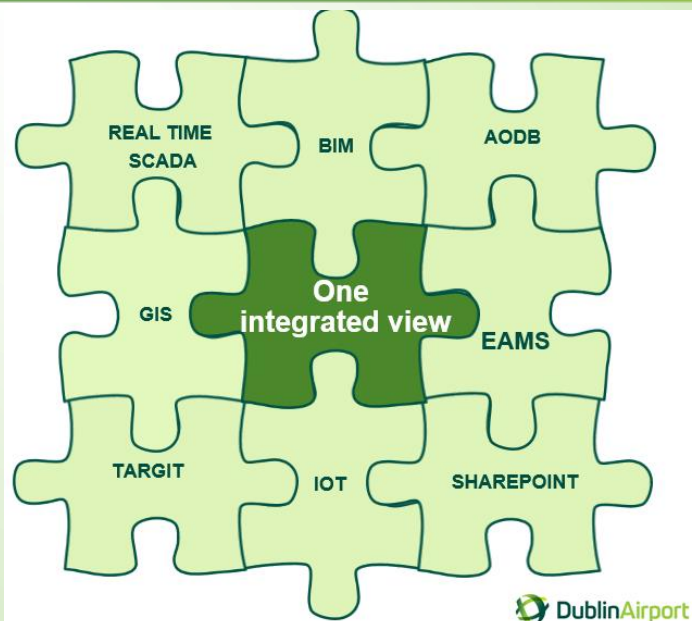


## Asset Lifecycle



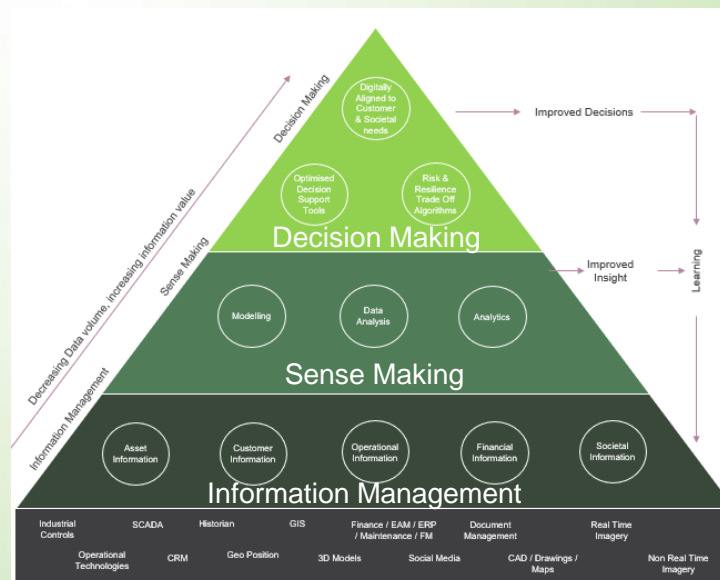
# Technology & Data Analytics

## SINGLE INTEGRATED VIEW (Opportunity)



Asset information integrated to provide one consistent view across the asset life cycle providing insight into cost, risk & performance

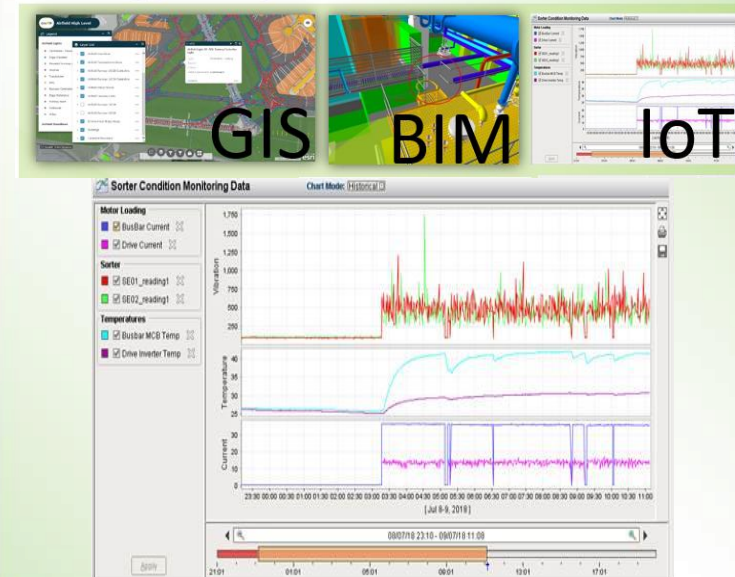
## CREATING VALUE FROM DIGITAL



### Data Collection

Decreasing data volume, increasing information value, providing insight to support improved decision making

## DIGITAL ENABLERS (Developing GIS, BIM, IoT capability)



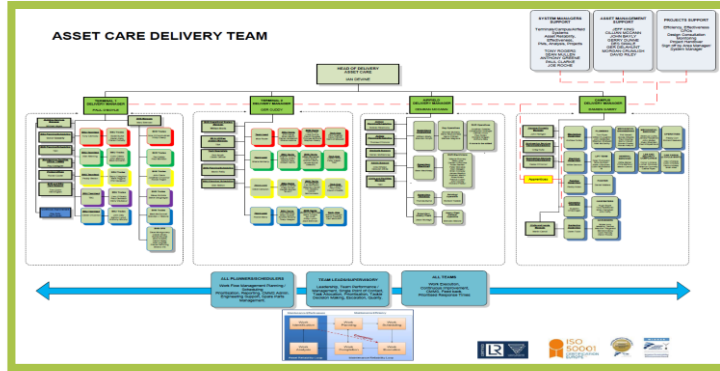
Connect, monitor and diagnose the performance and health of key assets with IoT sensors and a real-time asset health capability

Joining up the asset location (GIS) with asset history (Maximo) and live asset condition (SCADA)

Opportunity to create common digital platform to display operational activities and performance of the airport



# Passenger at the Centre

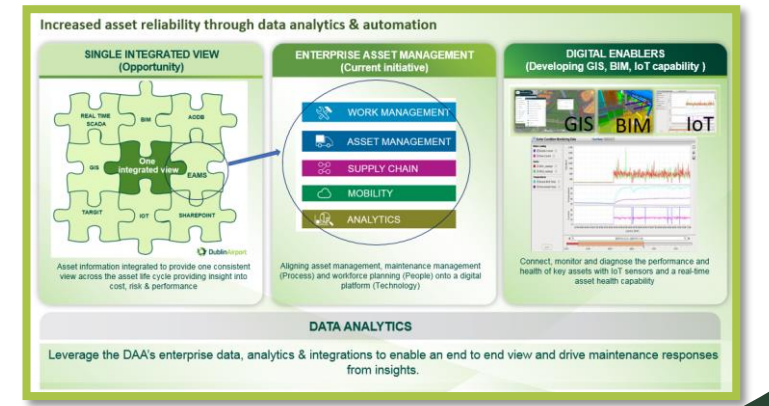
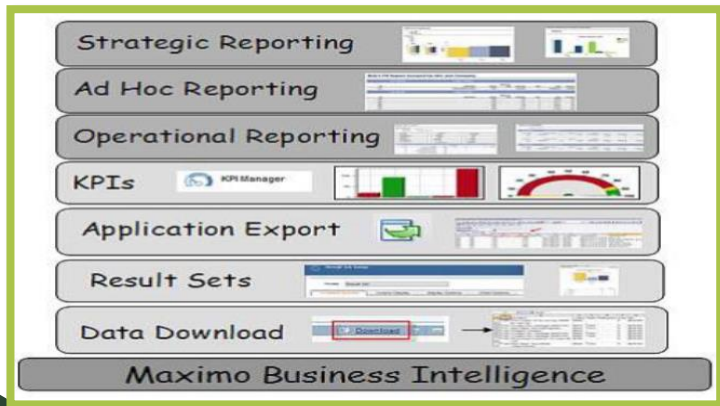


Passenger Experience

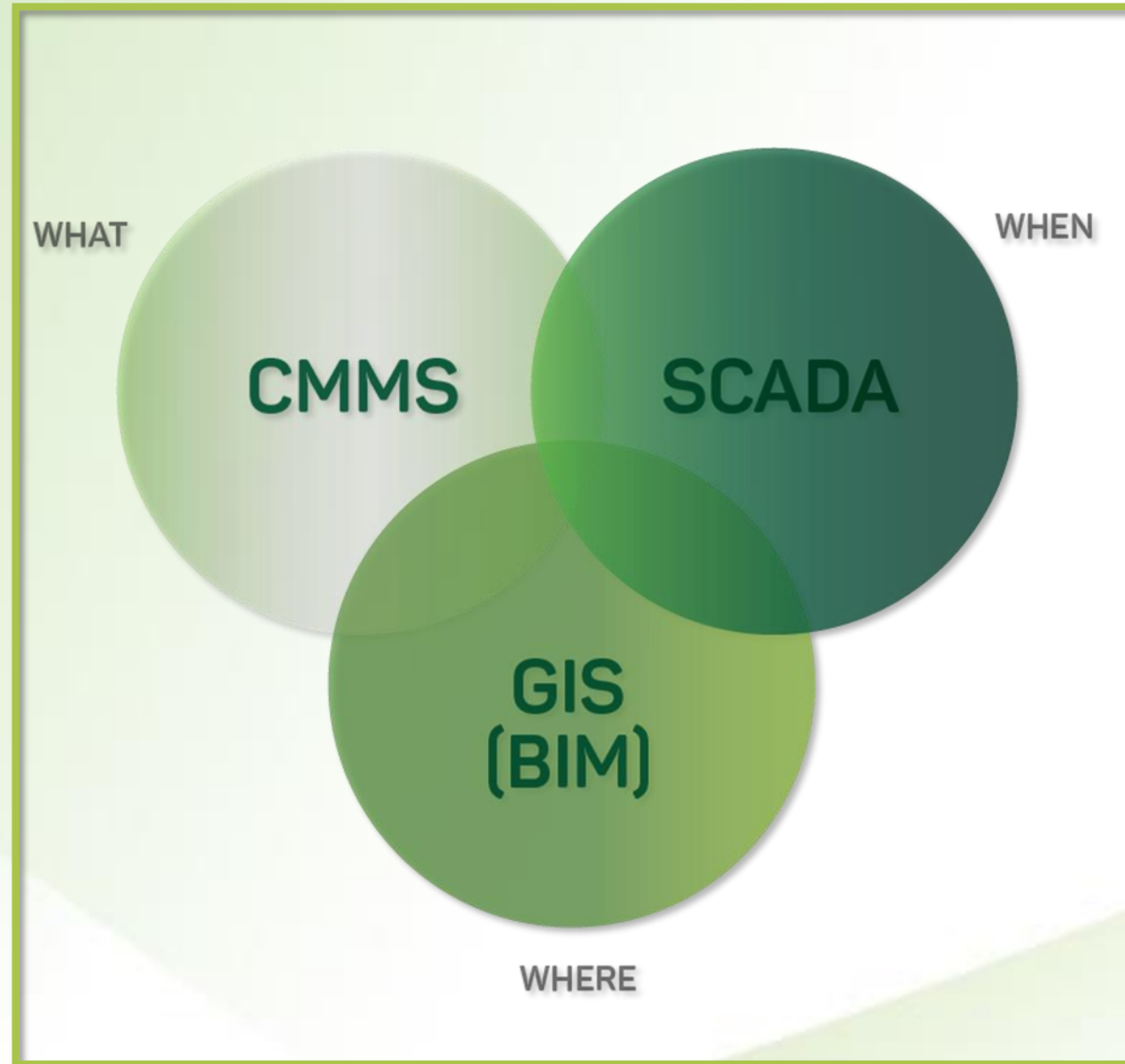


Process

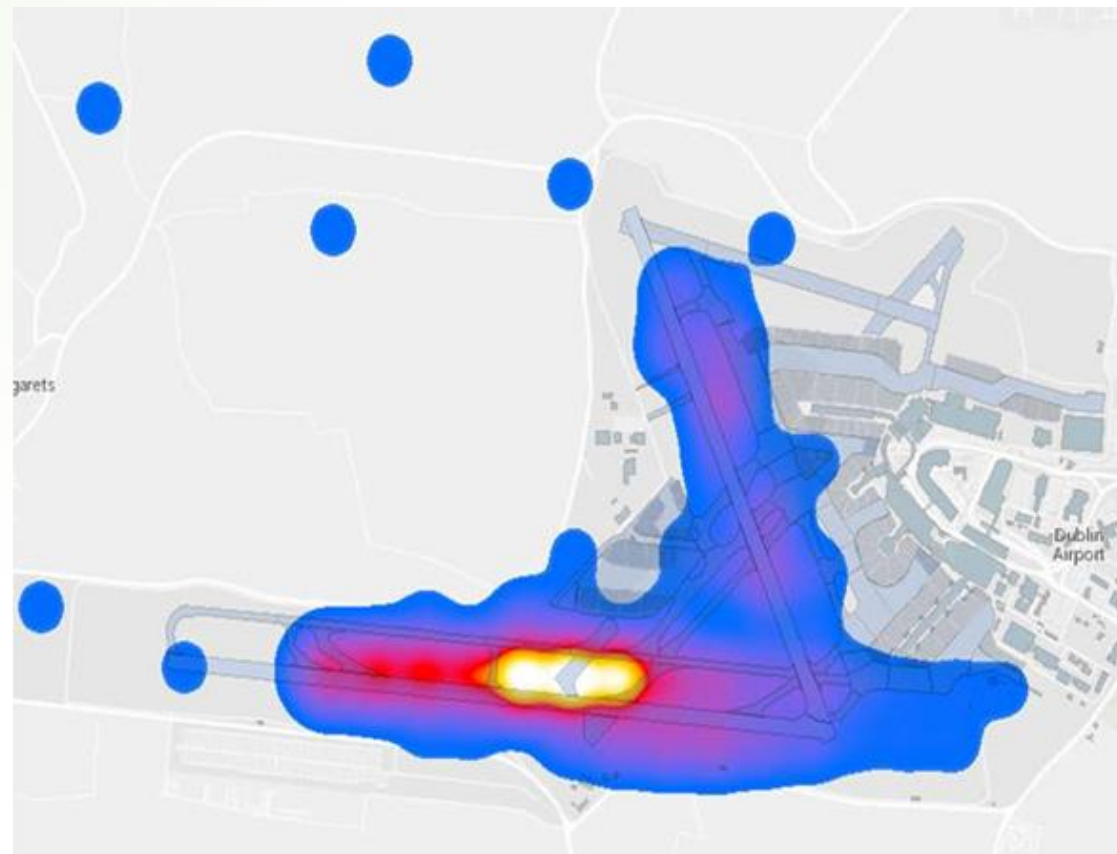
Technology



# Enterprise Technology Integrations

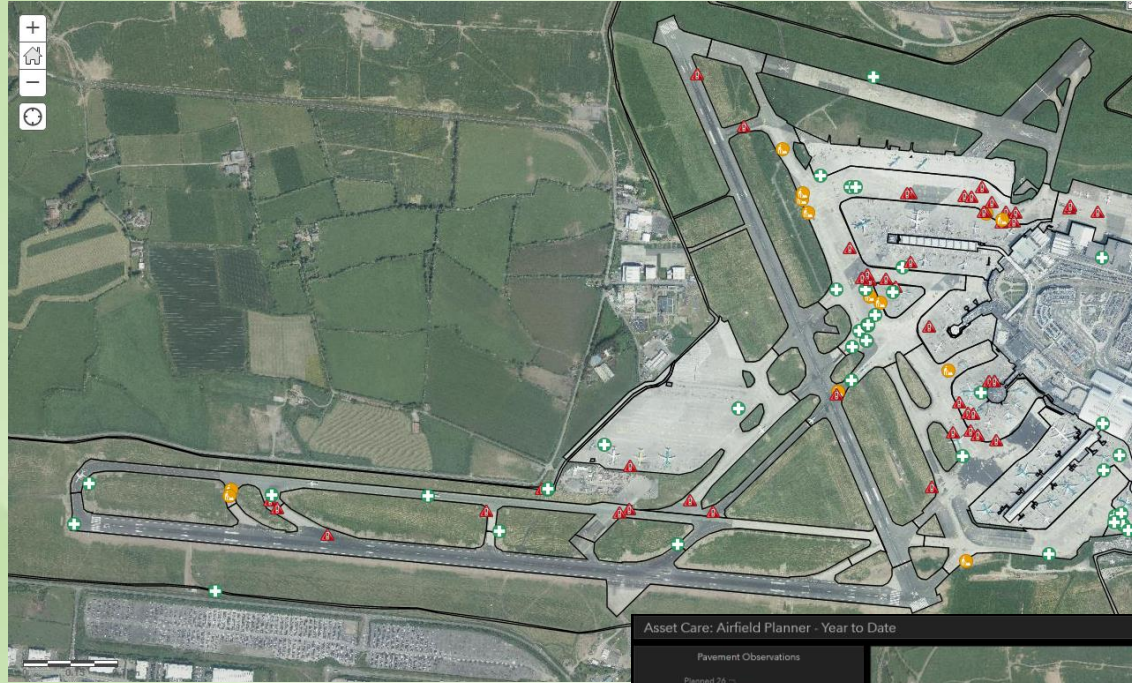


# Data to Information





# Pavement observations tracker





# Data Aggregation

DublinAirport Pavement Overloads 30 Sep 2019 to 30 Sep 2019

Overload Details

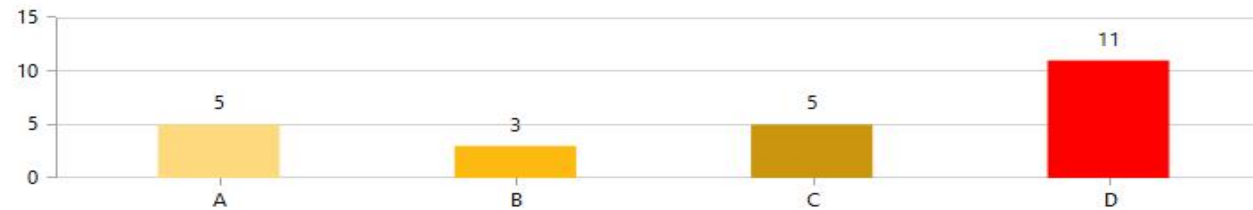
PCN view

Operator View

## Pavement Overloads

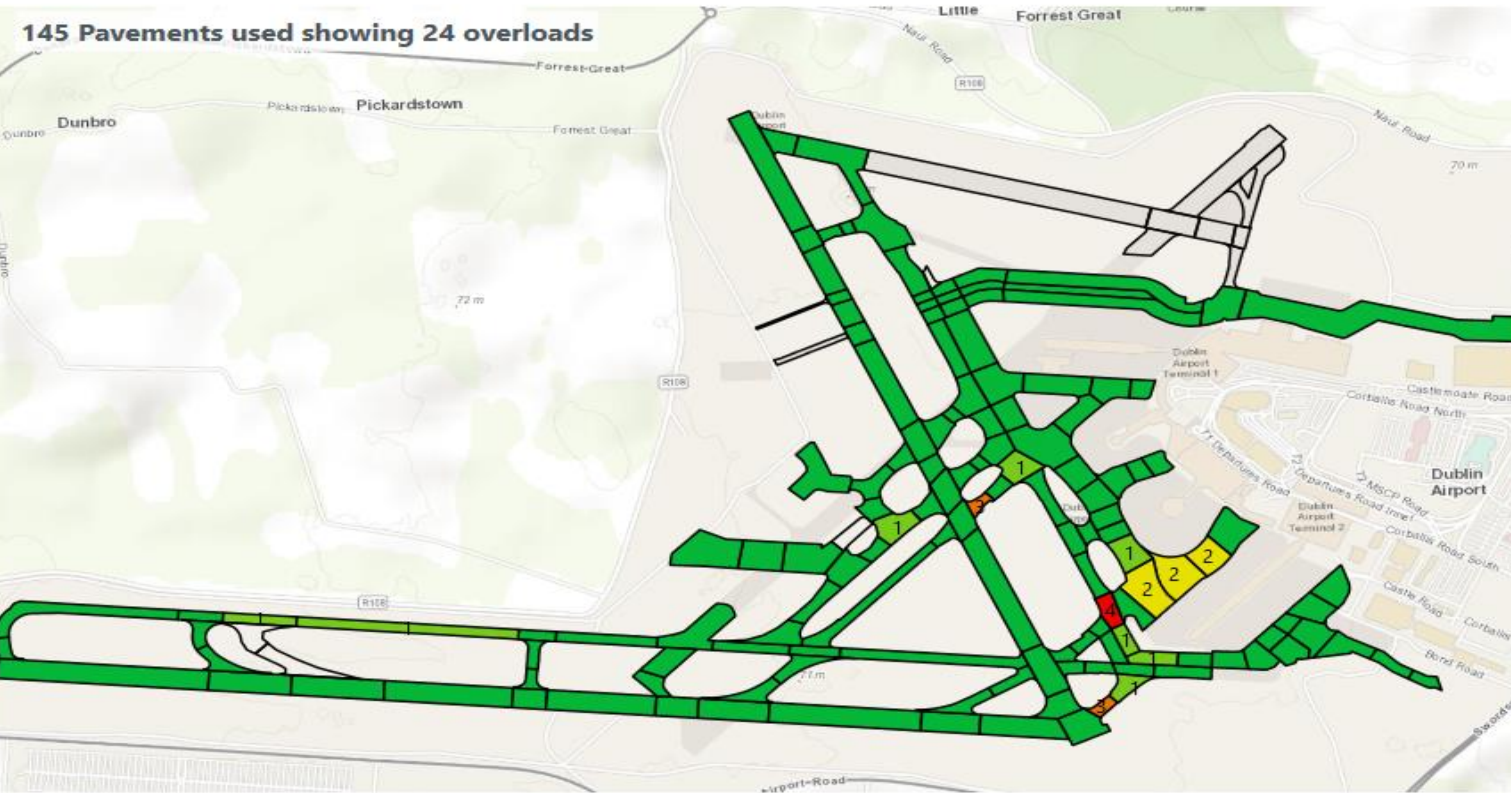
6 Flights  
14 Pavements  
24 Instances

24 Overloads by Category

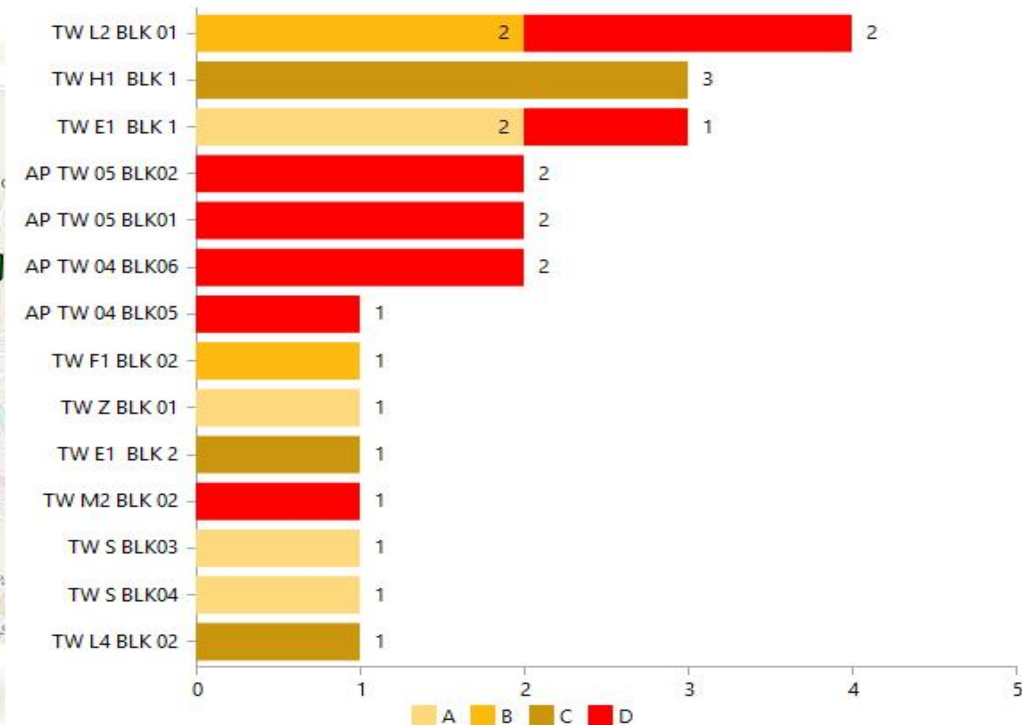


## Overload Flights

6 Flights  
1% of Total



Overloads by Location and Category



# Dashboards



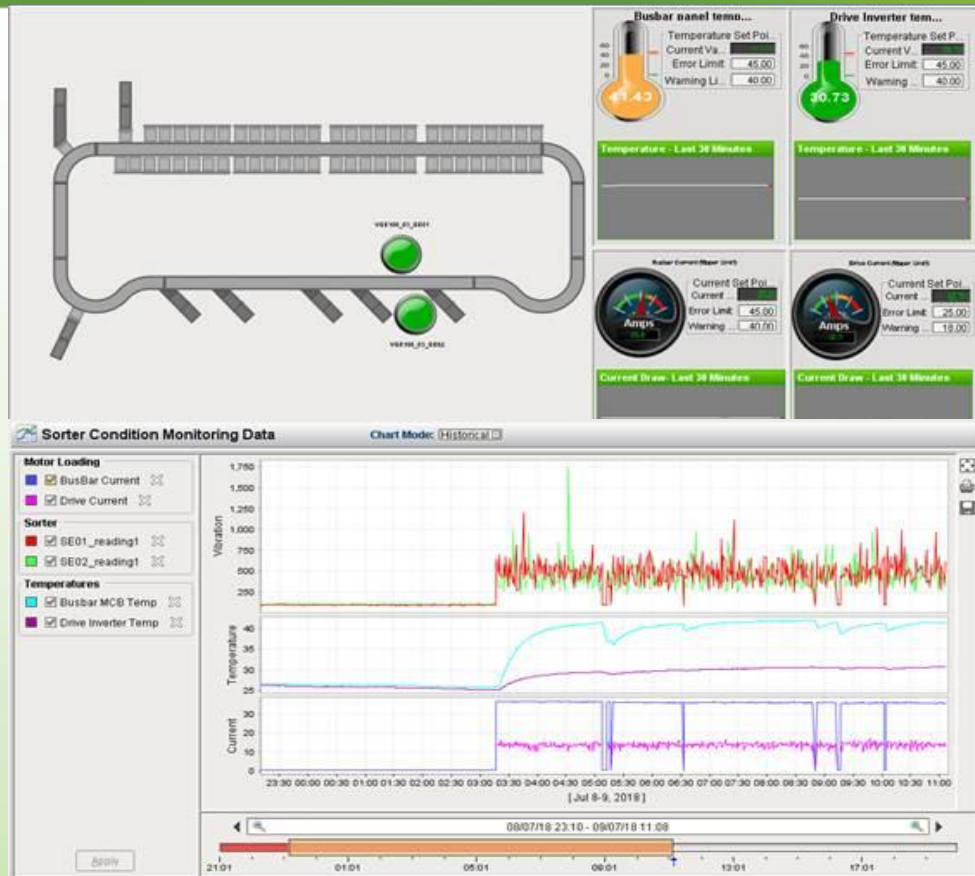


# Terminals Baggage - Field Applications of Conditioning Monitoring (Asset Care)

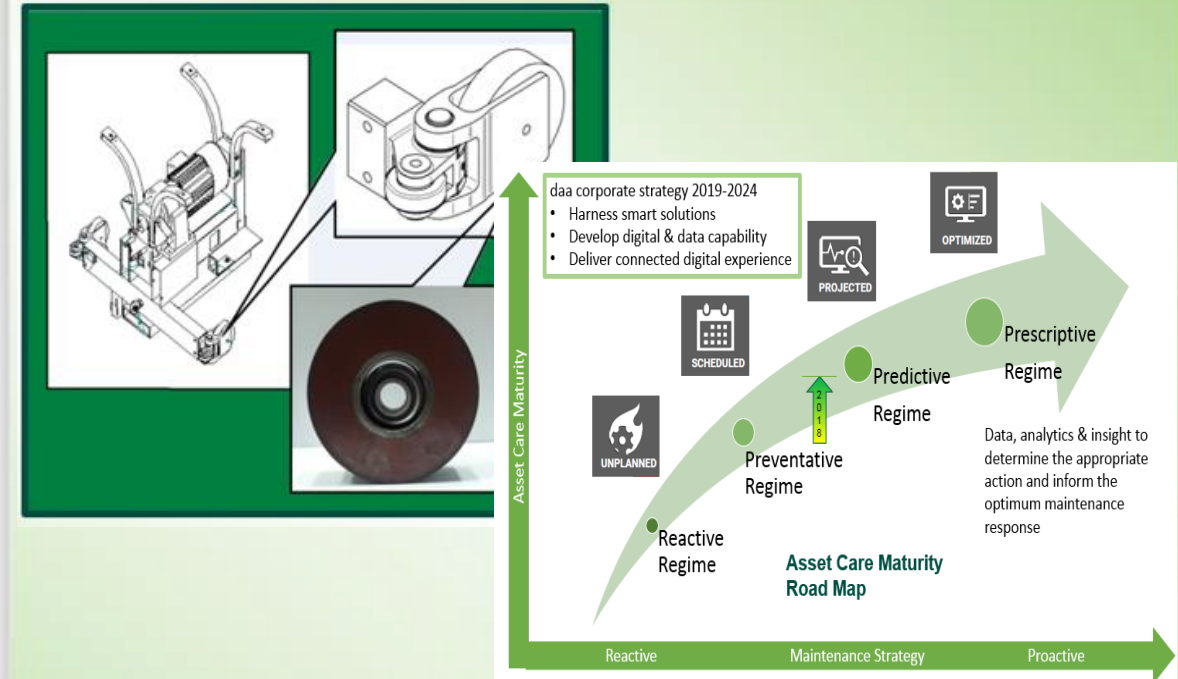
Proof of concept trials completed on T1/T2 Baggage Handling Systems



## CONDITION MONITORING (IoT)



## APPLICATION/JOURNEY



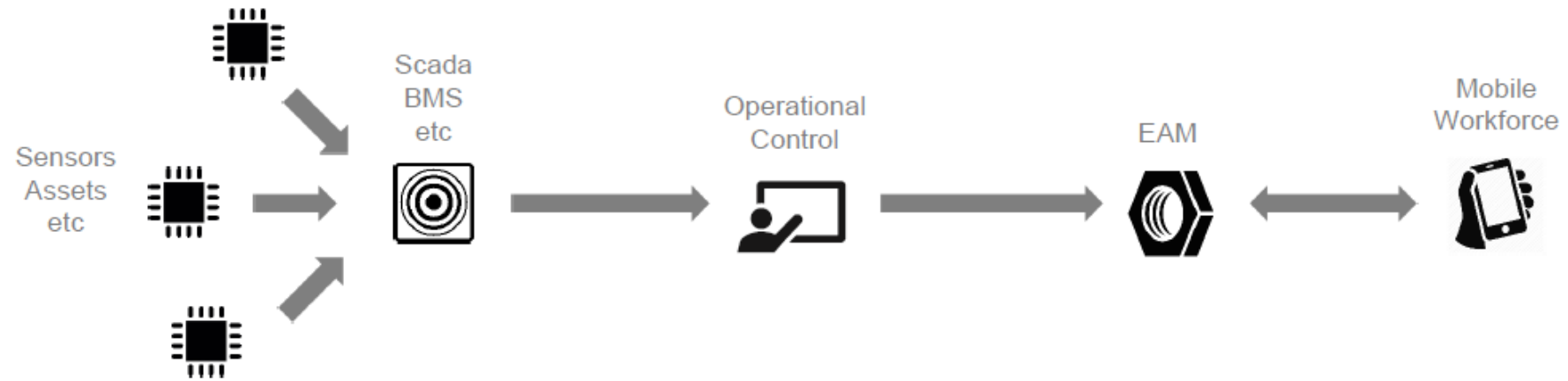
NoReply@daa.ie | Thomas Quinn - Asset Care; Marc Brennan; Ronan Fagan

**EARLY WARNING - Busbar MCB High temperature - Priority 4 Work order to be raised**

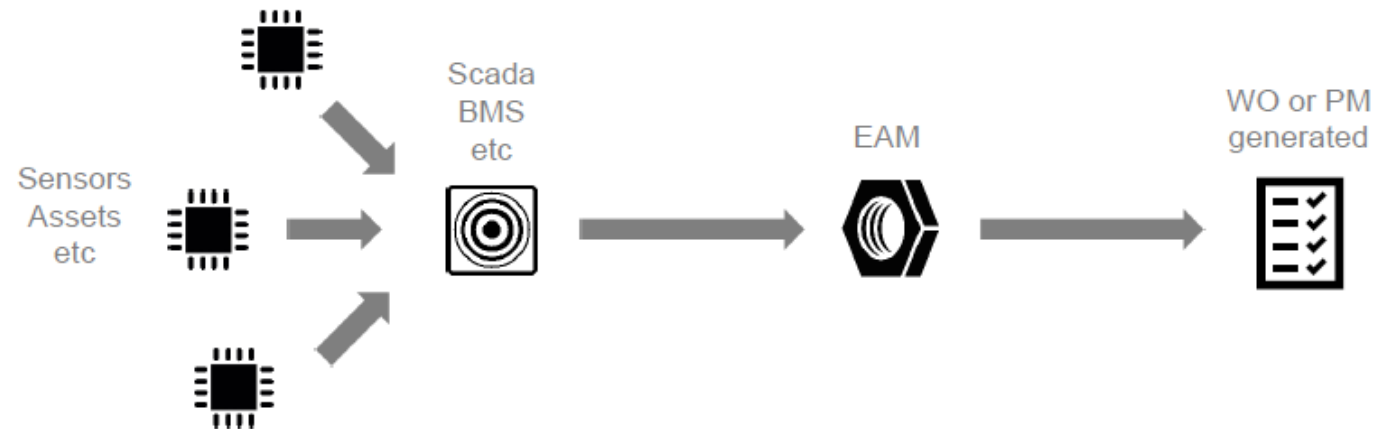
Sorter\_01 - EARLY WARNING - Busbar MCB temperature - Priority 4 Work order to be raised

# Maximo/SCADA Integration

## ● Fault Creation from SCADA

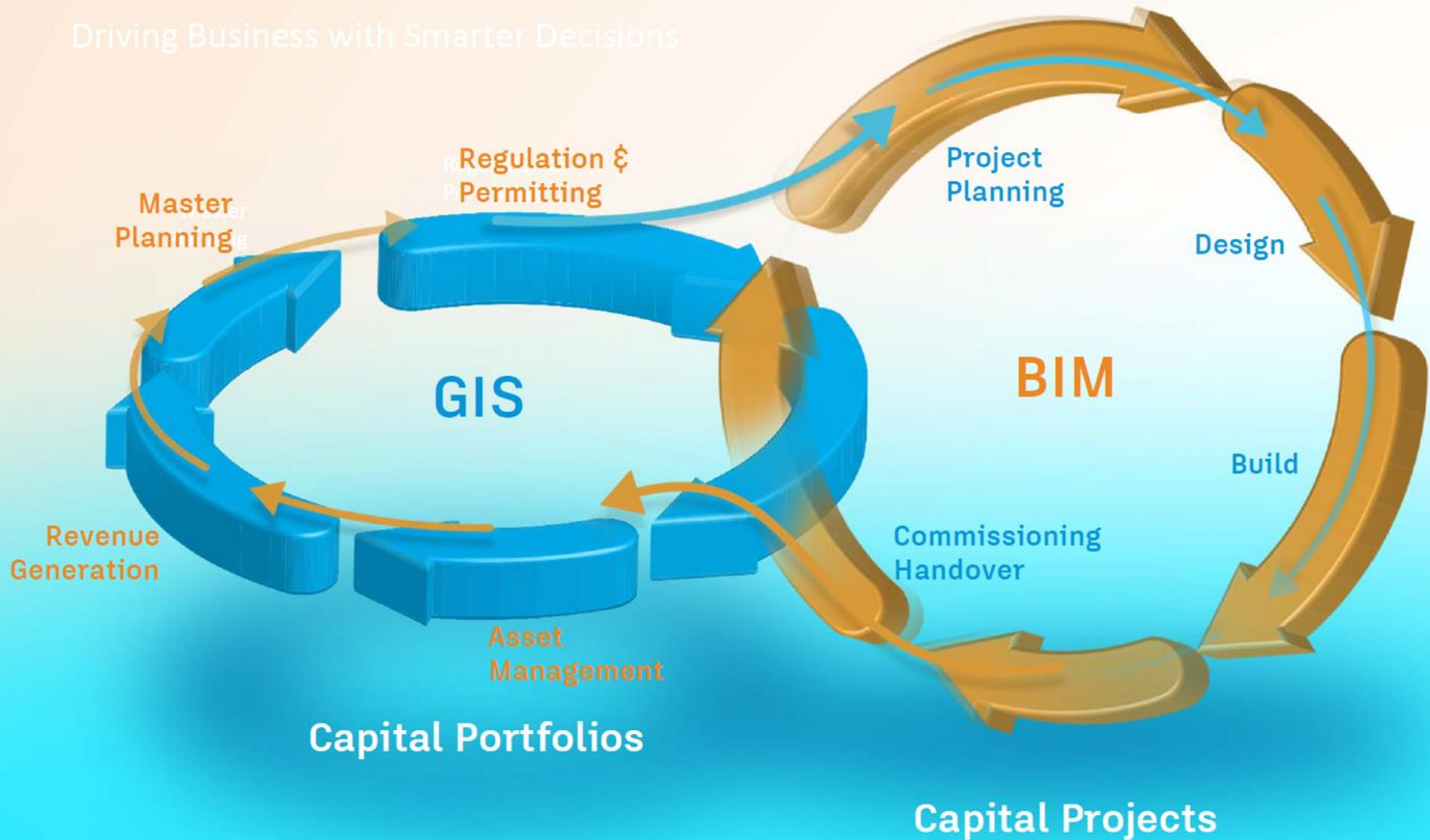


## ● Meter and CMP data from SCADA

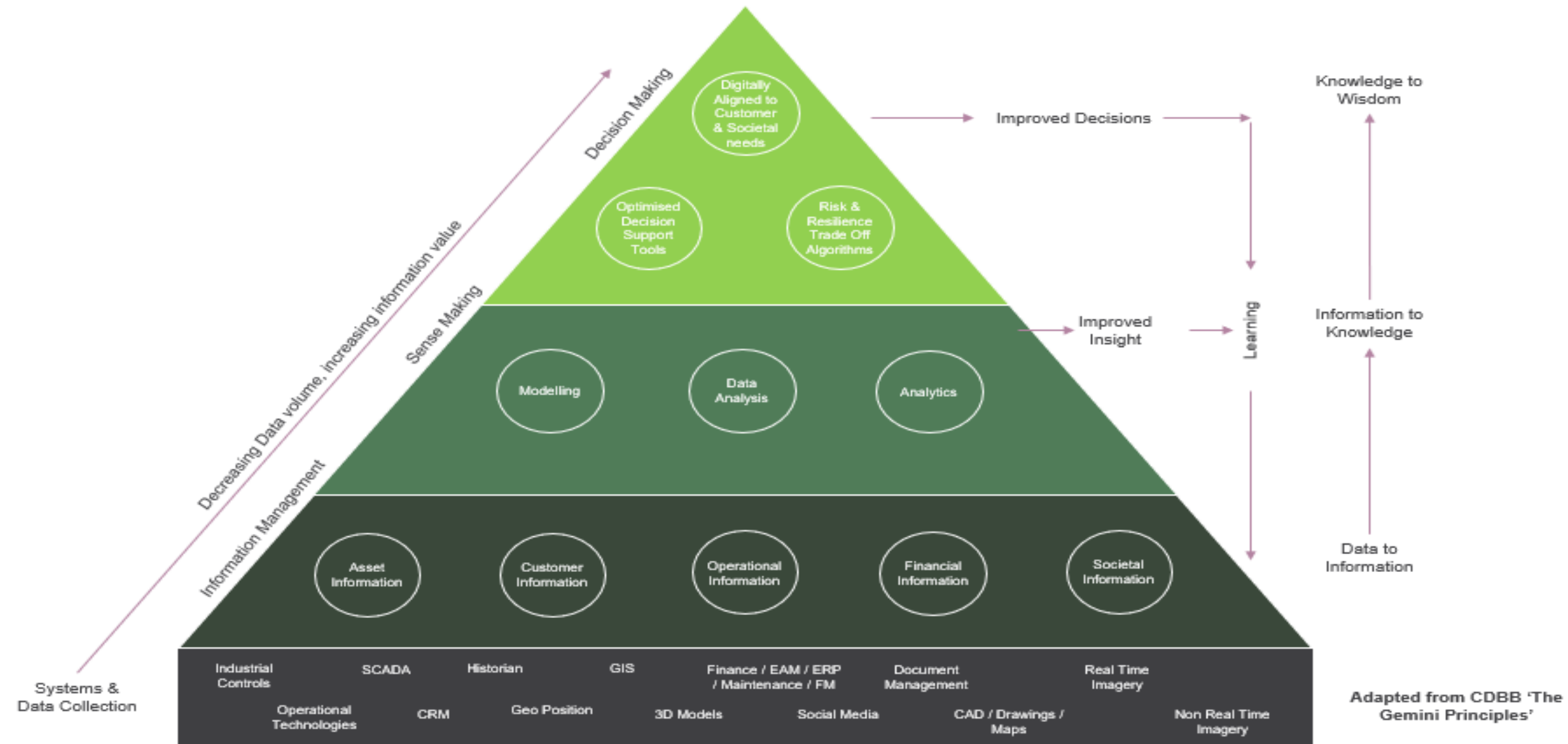




# GIS – BIM Relationship

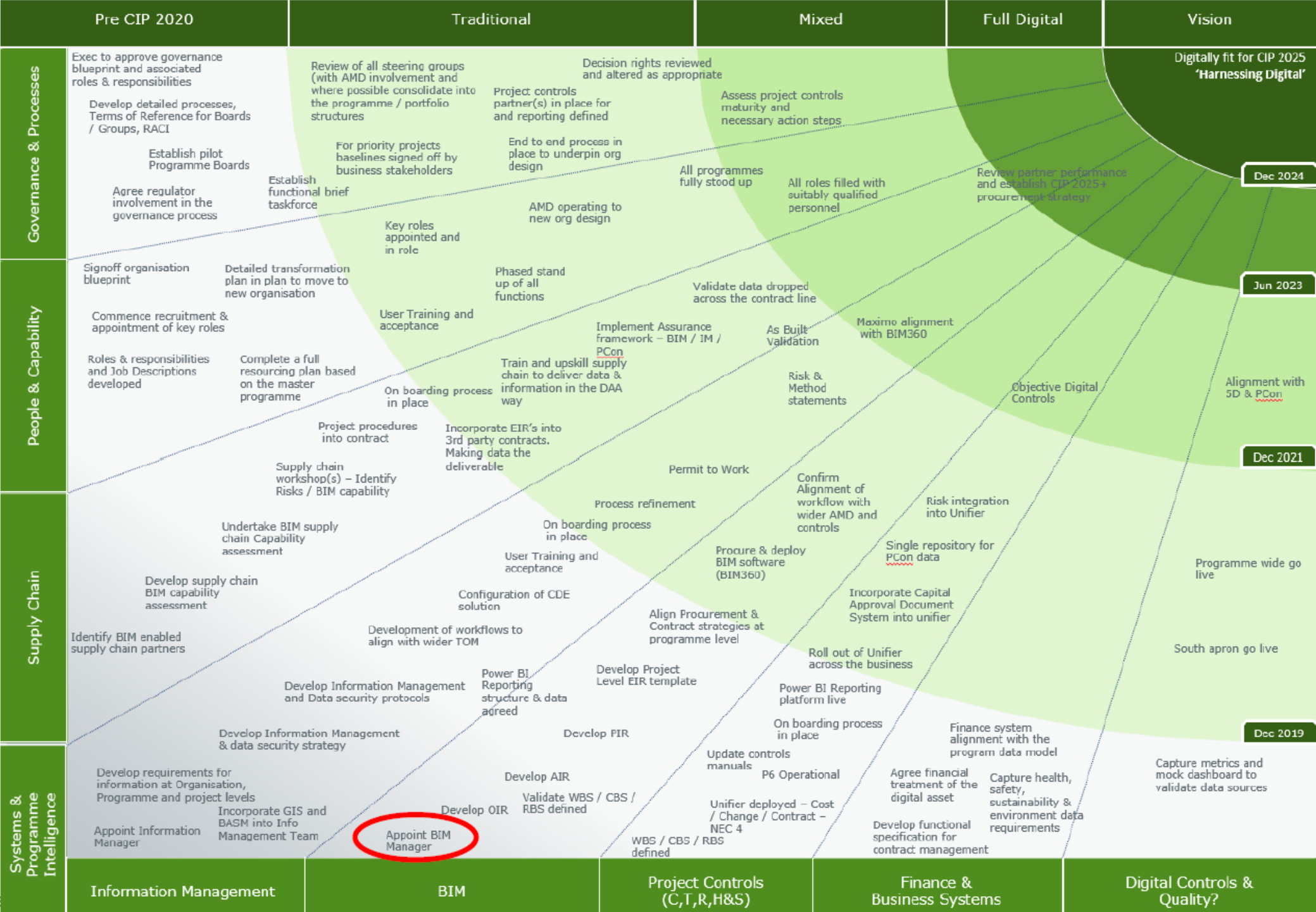


# Creating Value from Digital





# DIGITAL Road Map



# Thank You!

## Dublin Airport Asset Management