

# Bridge Owner's Forum – 26 January 2021

Keith Harwood

- *A vision for Bridge Management Software*

# Currently

- Around ten software providers:
  - Multi-Asset such as Confirm, Symology
  - Specialist Bridges – BridgeStation, AMX
- Out-of-date
  - No understanding of the data we use
  - Or the decision process in bridge management
  - Industry stagnated – why?
- Several national authorities developing bespoke software including TS and HE. Network Rail?
  - Do they all need something different?

# Data

- Was
  - Tabular inventory data
  - Element condition scores
  
- But more useful, and not integrated
  - GIS
  - Old scanned drawings
  - Sensor data
  - Lidar
  - Network video
  - BIM
  - Historic photographs

# Inspection changes

- Automatic defect recognition
  - Monitoring change over time
  - Data for machine learning
  - Sensor data
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- Does the data we collect help make decisions?

# Decisions

- Artificial intelligence, machine learning
  - Eg Vaisala RoadAI
- Decision support tools and modelling
  - Eg SAVI Tool

# The way forward

- Modern Interface
  - A 3D GIS model, Google Earth
  - BIM
- Vision and benefits through research
  - Market too small for the software companies to fund
  - Collaboration between national agencies, SMEs, and University
  - Benefits to be quantified
- A theme for a future BOF