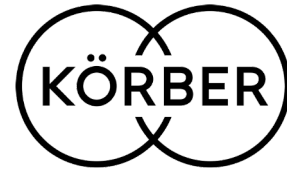




AI MONDAY®

#AIMondaySessions



Bending the curve with AI

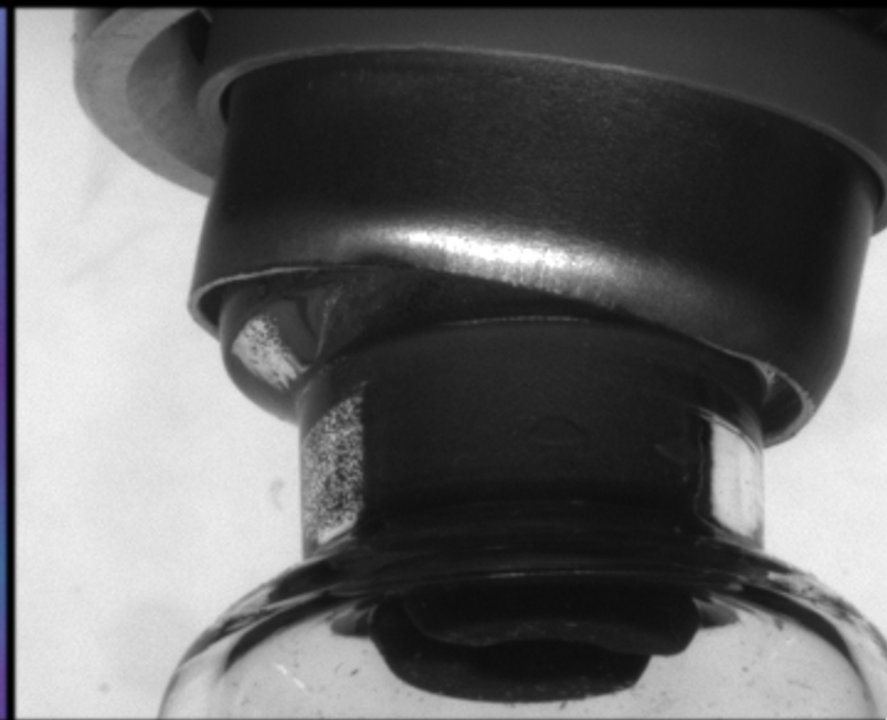
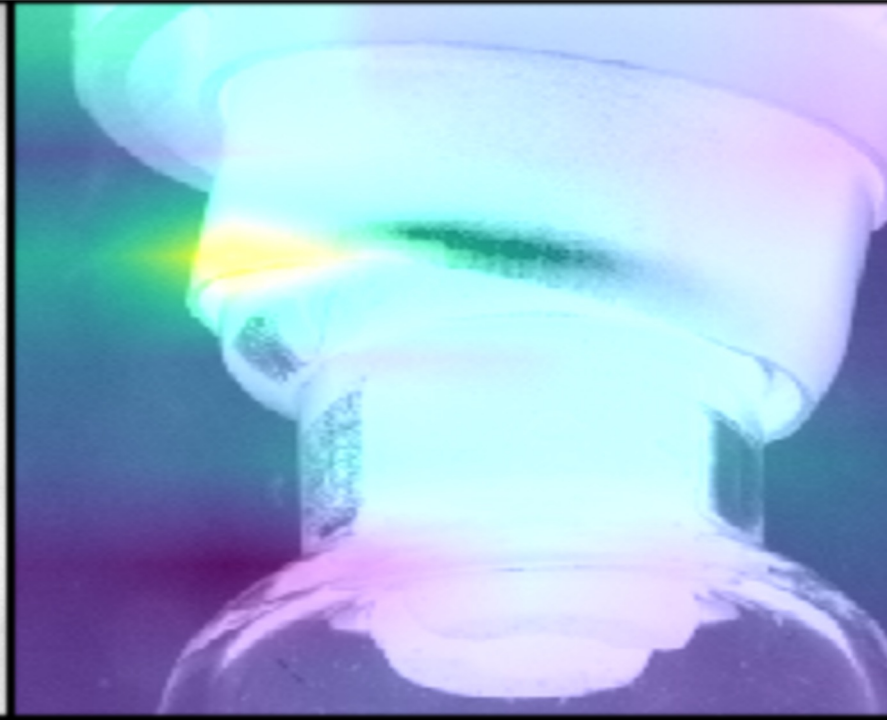
Andreas Leder
VP Operations | InspectifAI



Powered by



Revolutionizing
visual inspection
with **Artificial Intelligence**



INSPECTIFAI

WE ARE INSPECTIFAI

FOUNDED
IN
2021

~30
PEOPLE

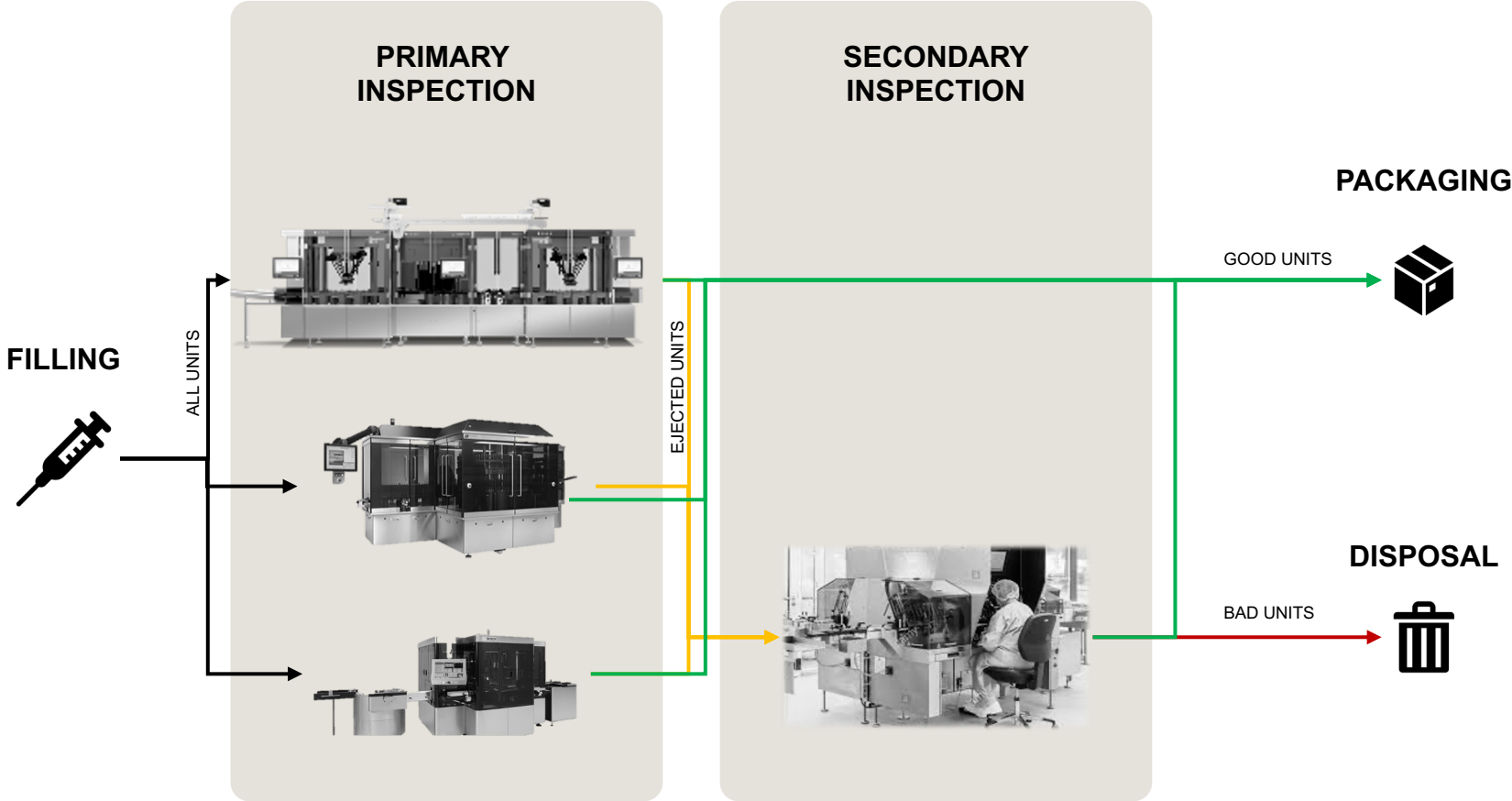
4
CONTINENTS

9
COUNTRIES

... UNITED BY
1 VISION.



Pharmaceutical visual inspection



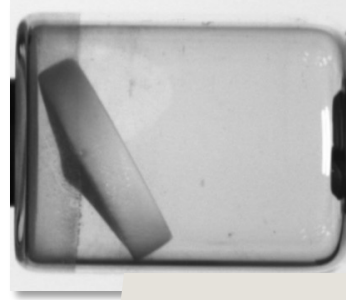
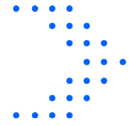
Part of the Problem: **False-Reject-Rates**

Rejects: Example I



Deformed Cake

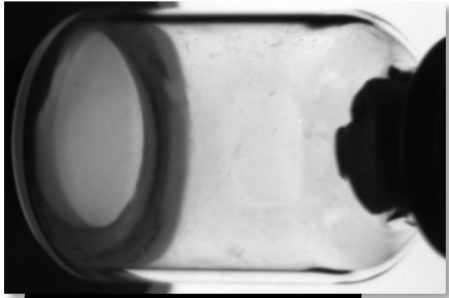
Defect



Flying Cake

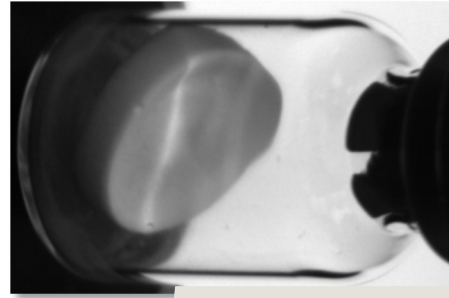
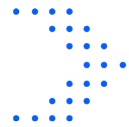
Acceptable

Rejects: Example II



Retracted Cake

Defect

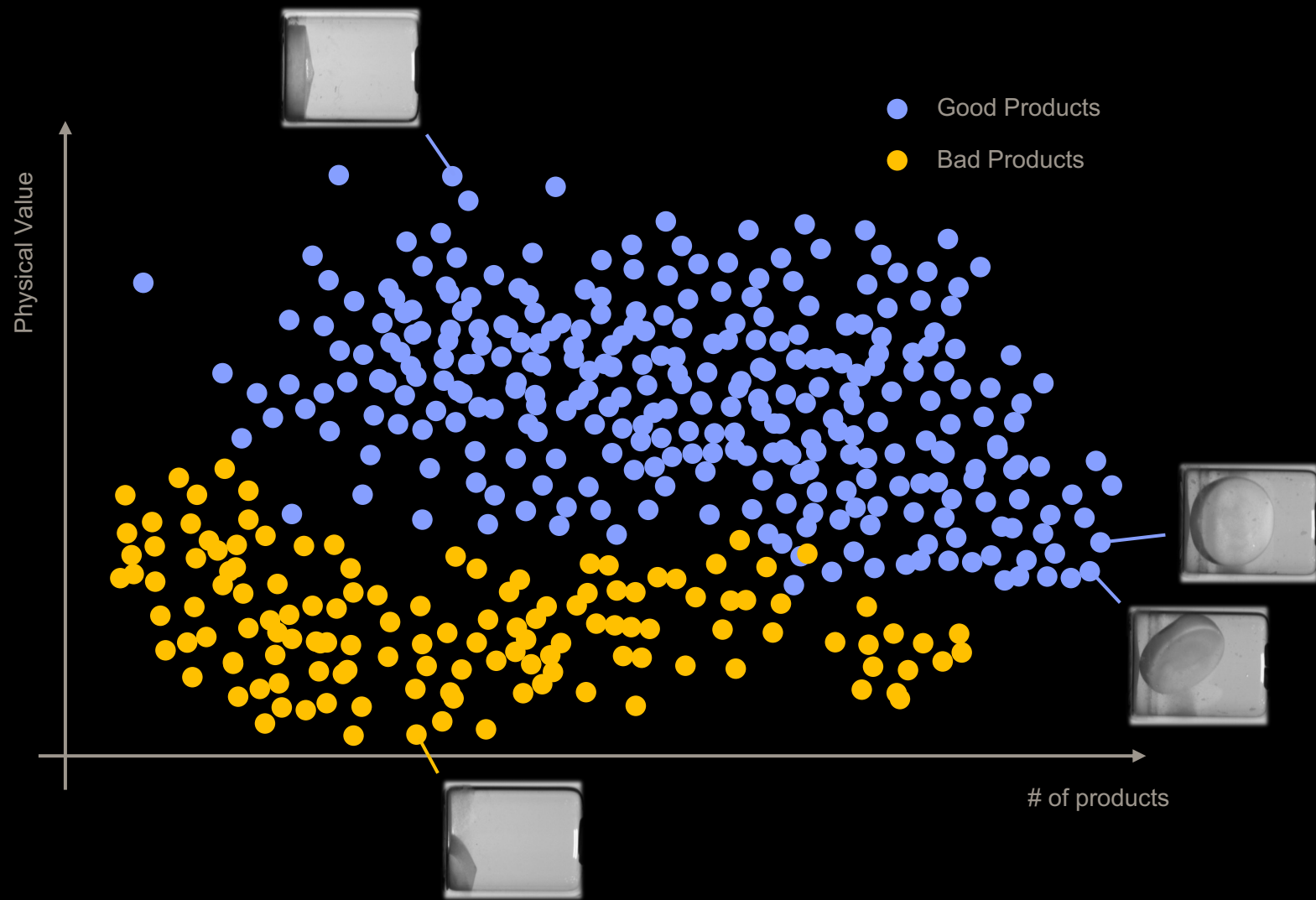


Flying Cake

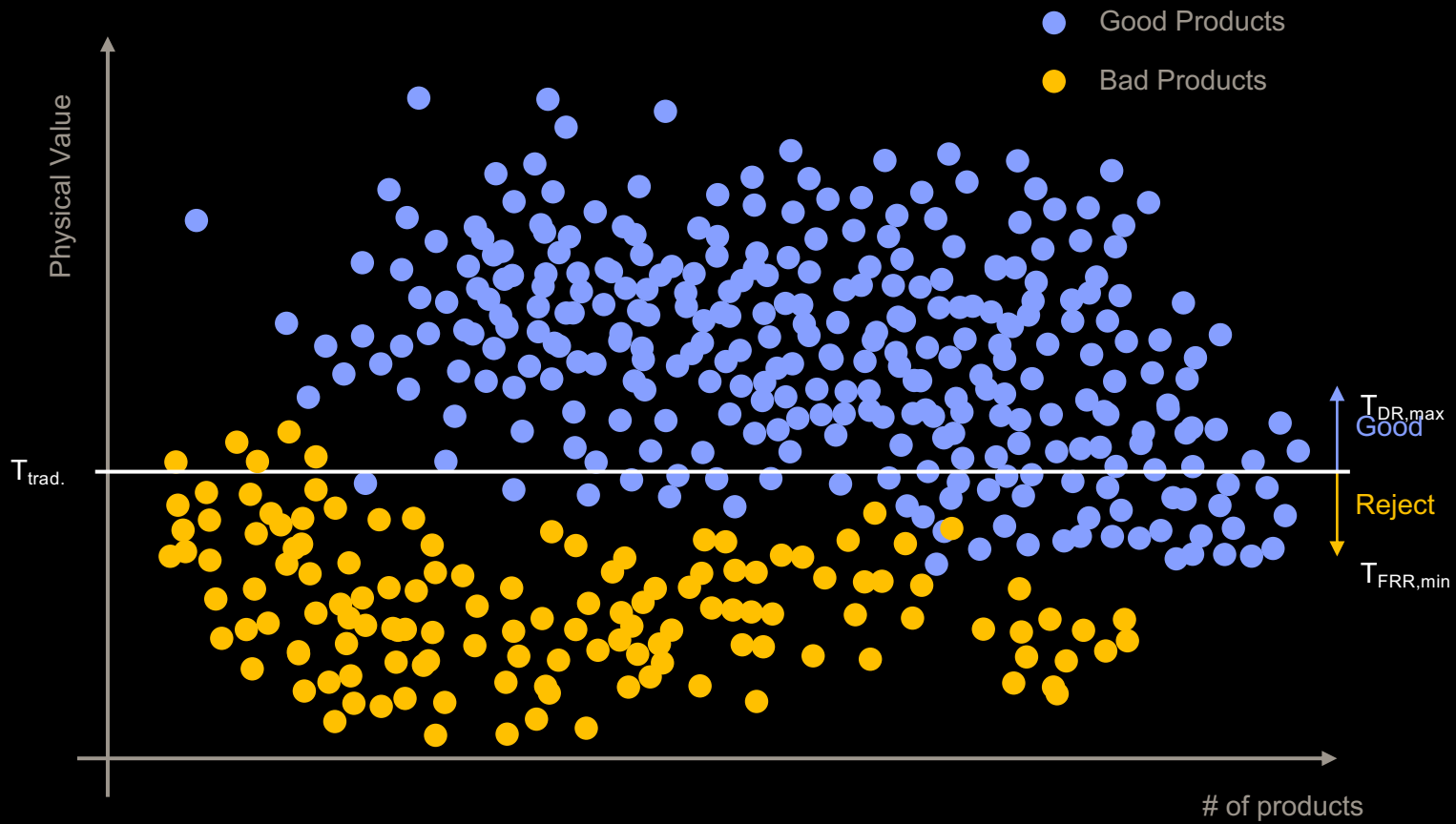
Acceptable



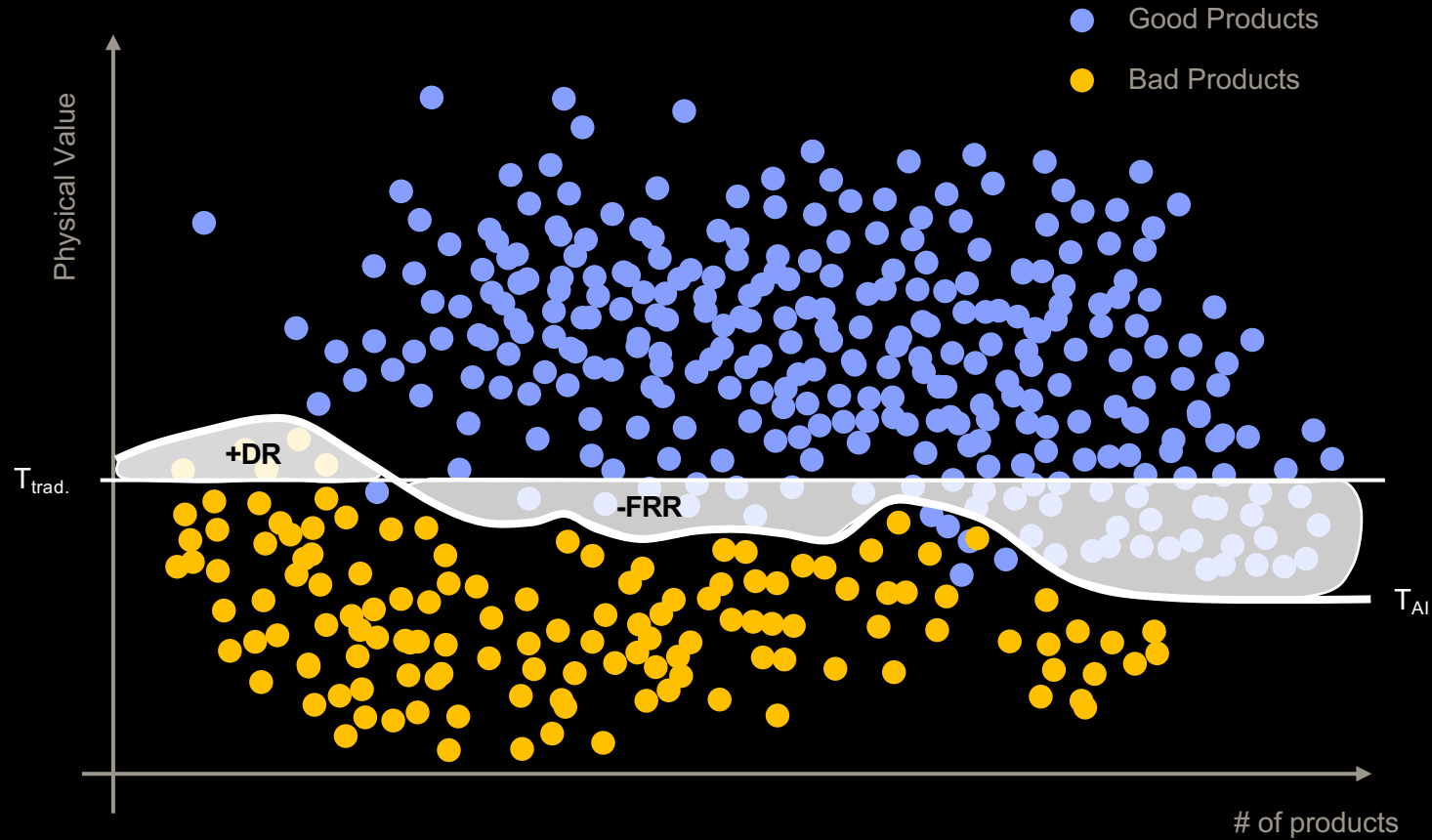
Where traditional rule-based methods meet their limit.



Where traditional rule-based methods **meet their limit.**

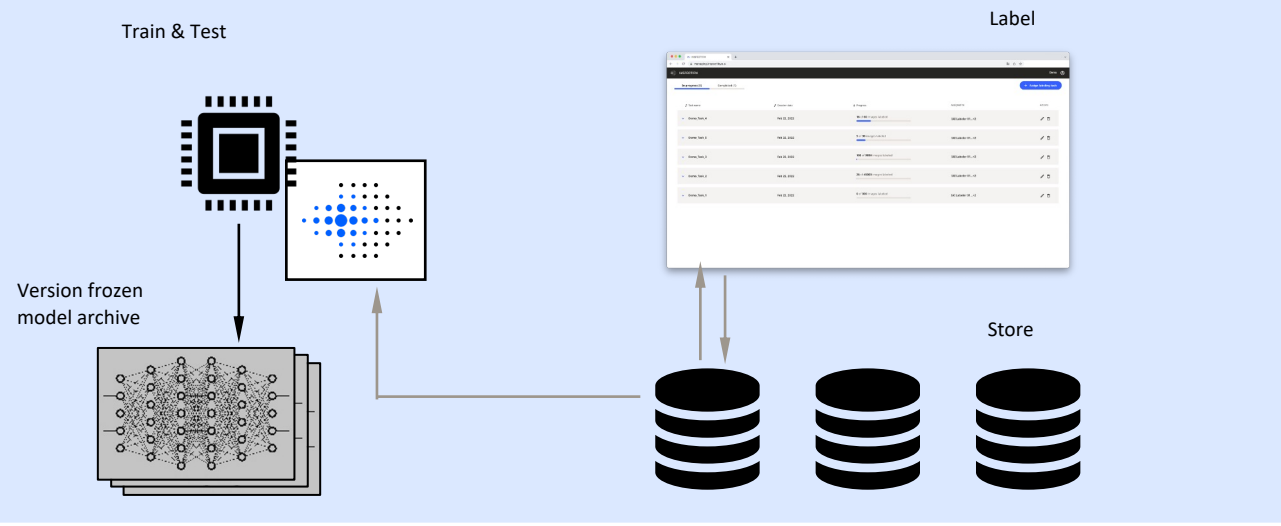


Bend the curve - with Artificial Intelligence

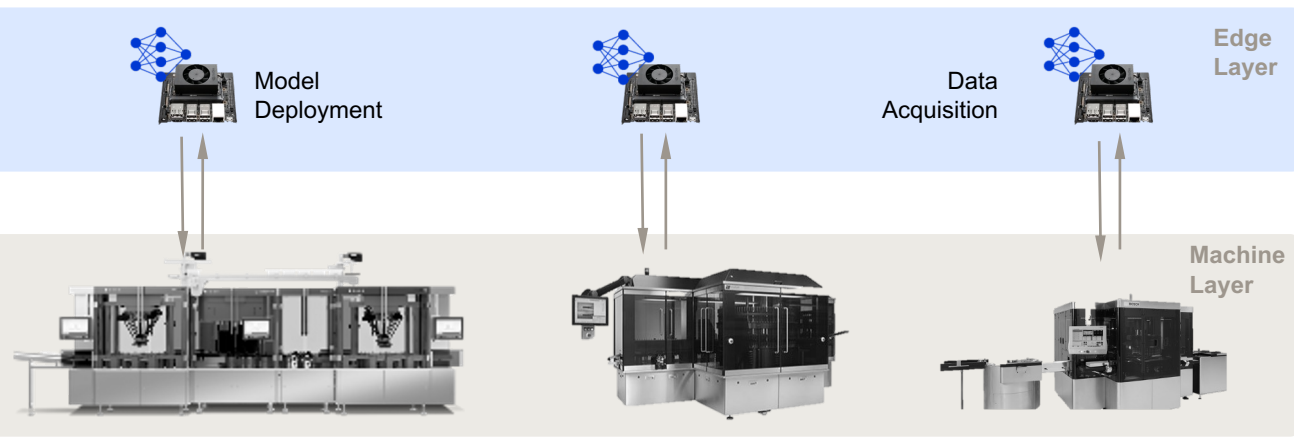




InspectifAI



Customer



InspectifAI

Solution



ARTIFICIAL INTELLIGENCE EXCELLENCE

The Power of Data

AI-POWERED
CLASSIFICATION

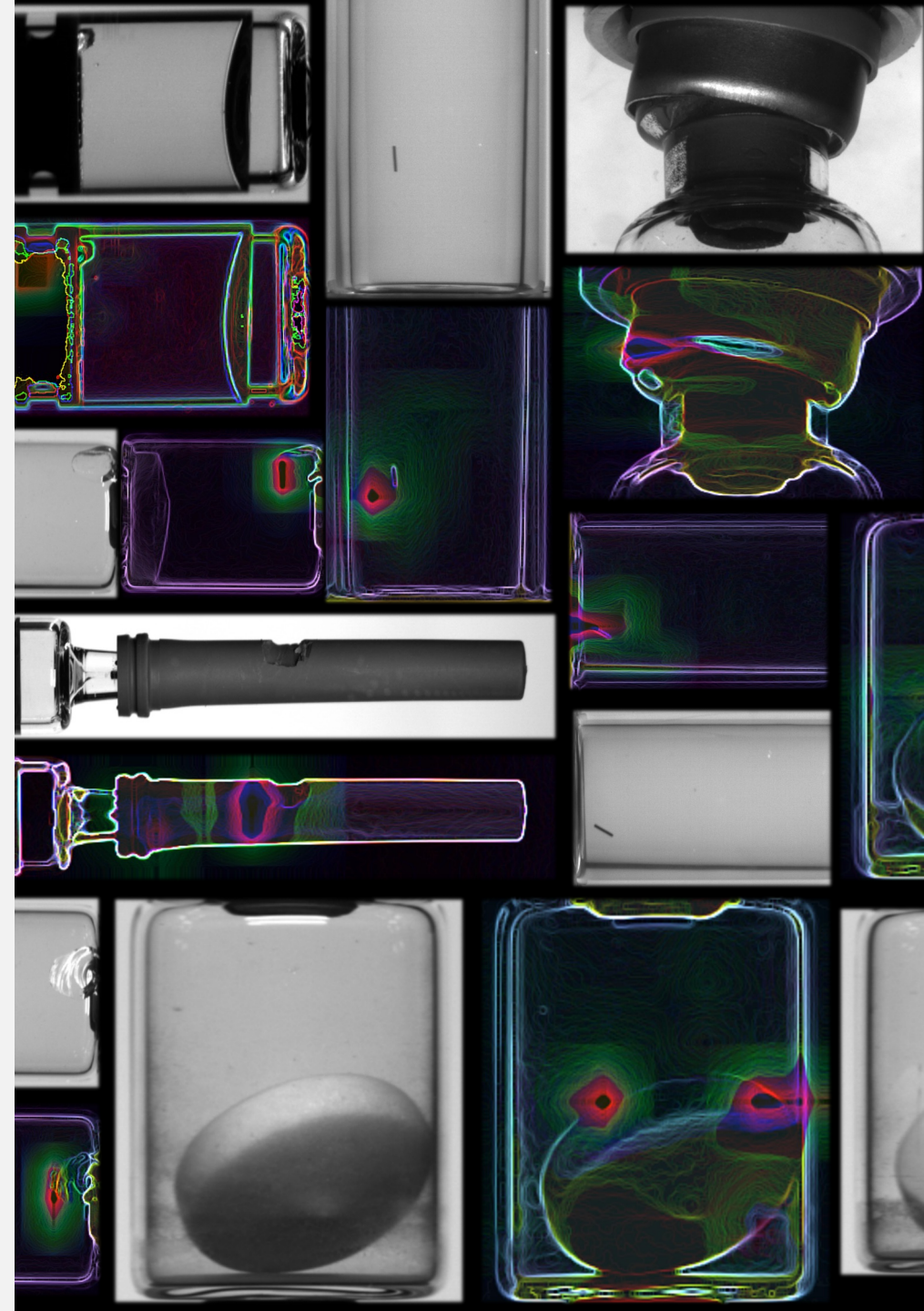
IMAGE-
BASED

AI-POWERED
CLASSIFICATION

SEQUENCE-
BASED

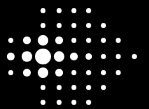
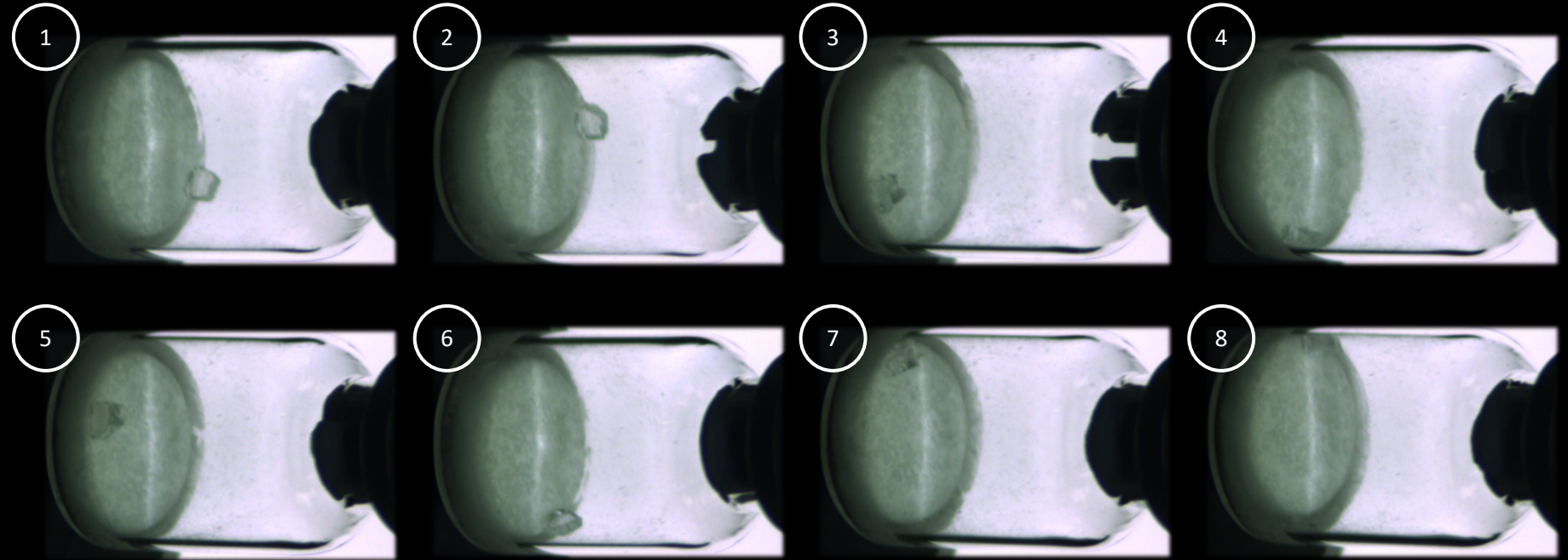
AI-POWERED
CLASSIFICATION

OBJECT
DETECTION



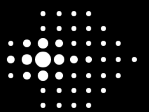
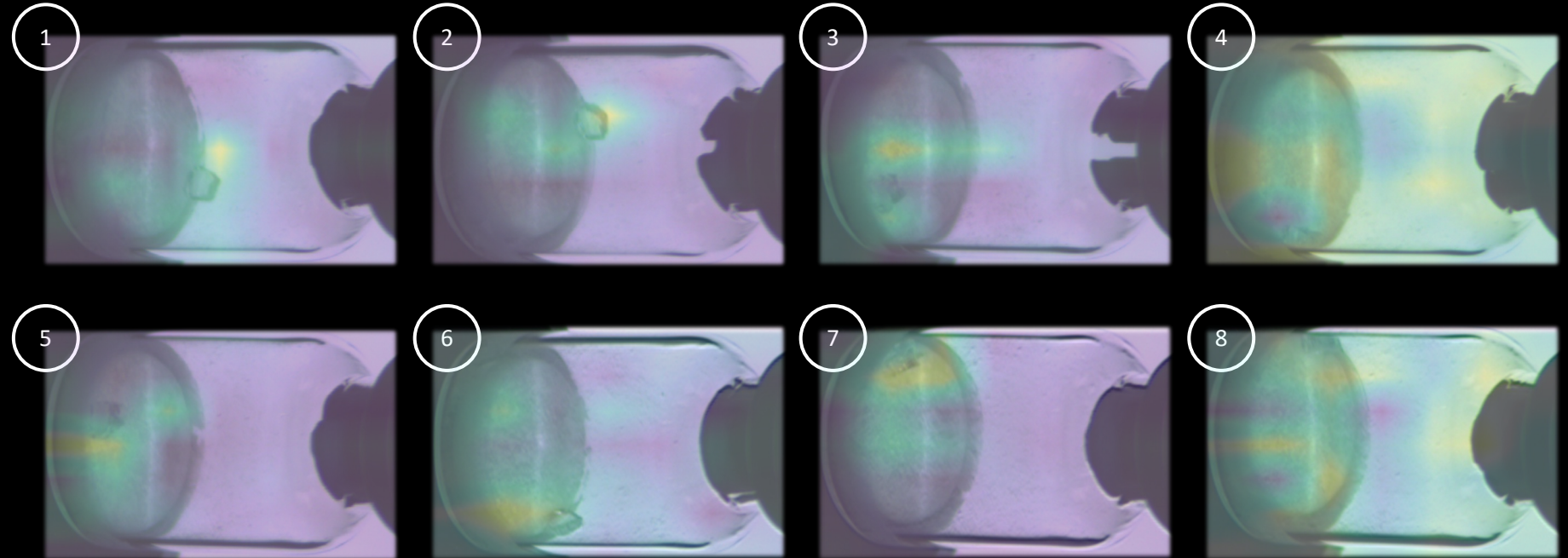
Visual Examples

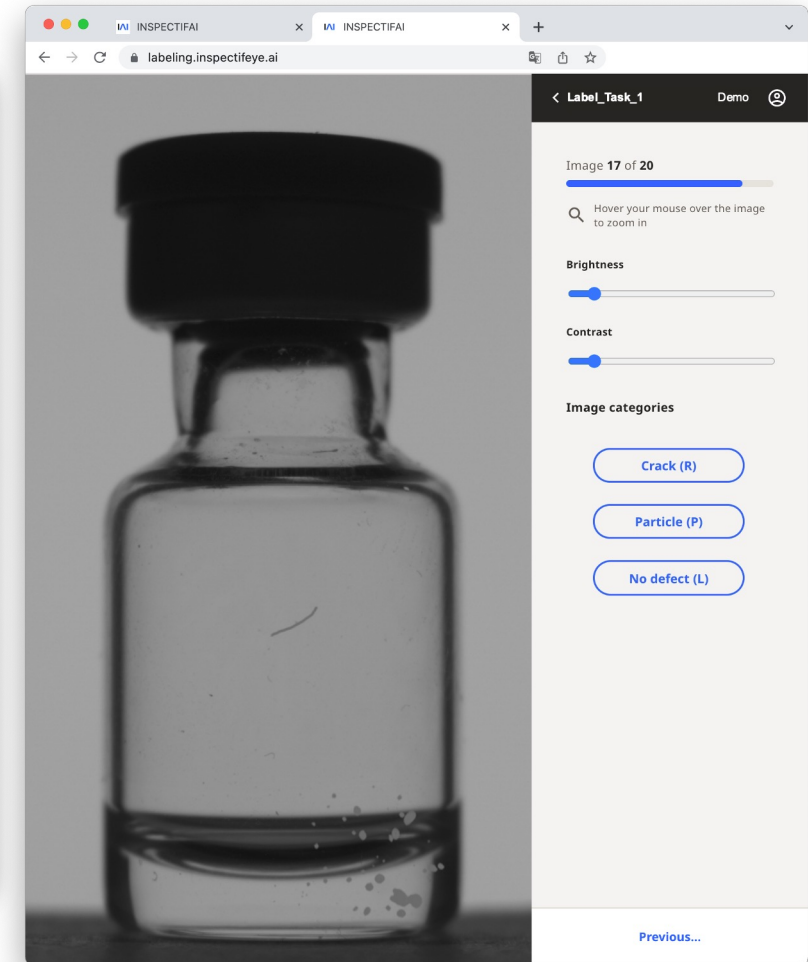
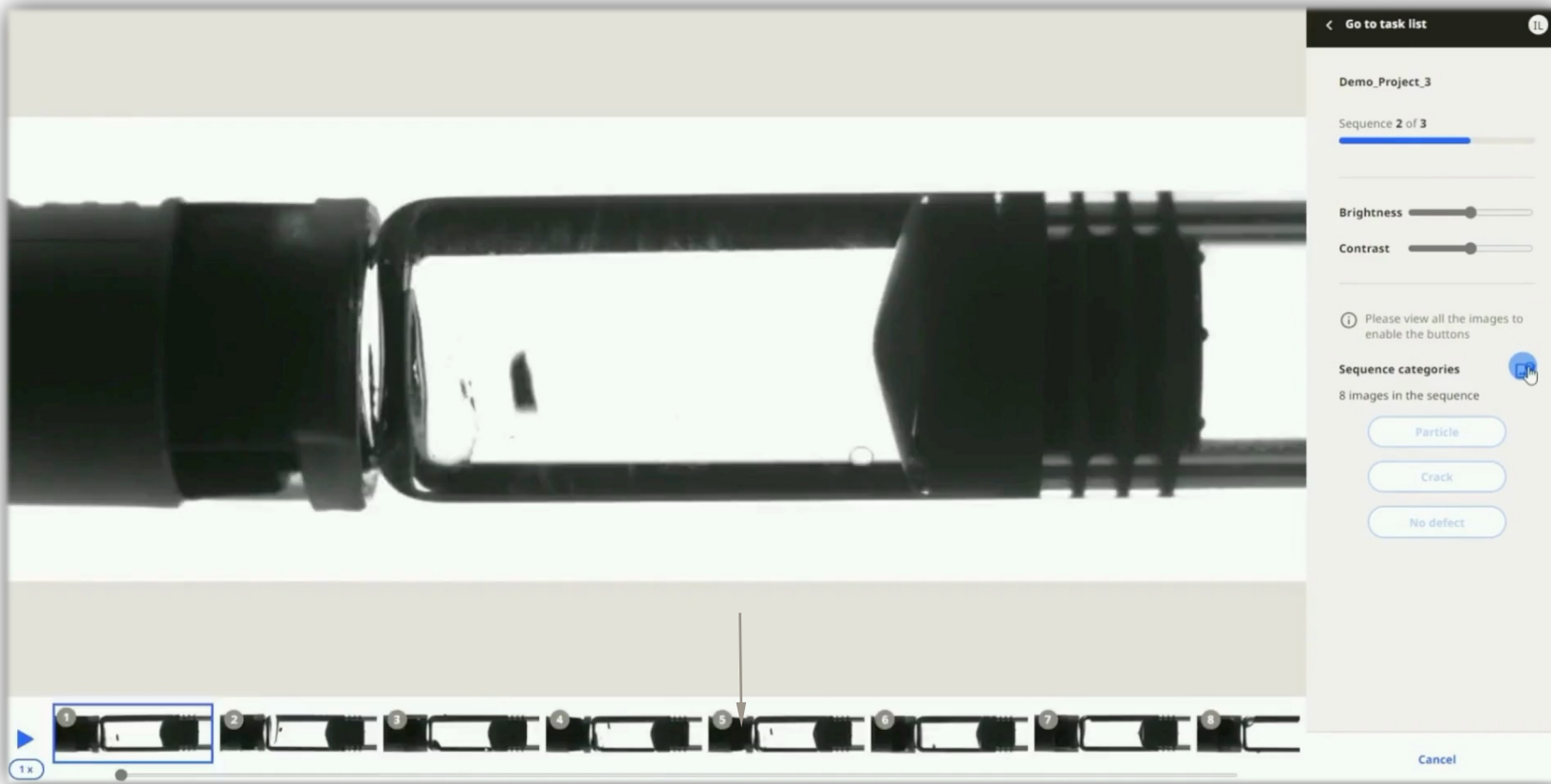
Originals



Visual Examples

Heatmaps



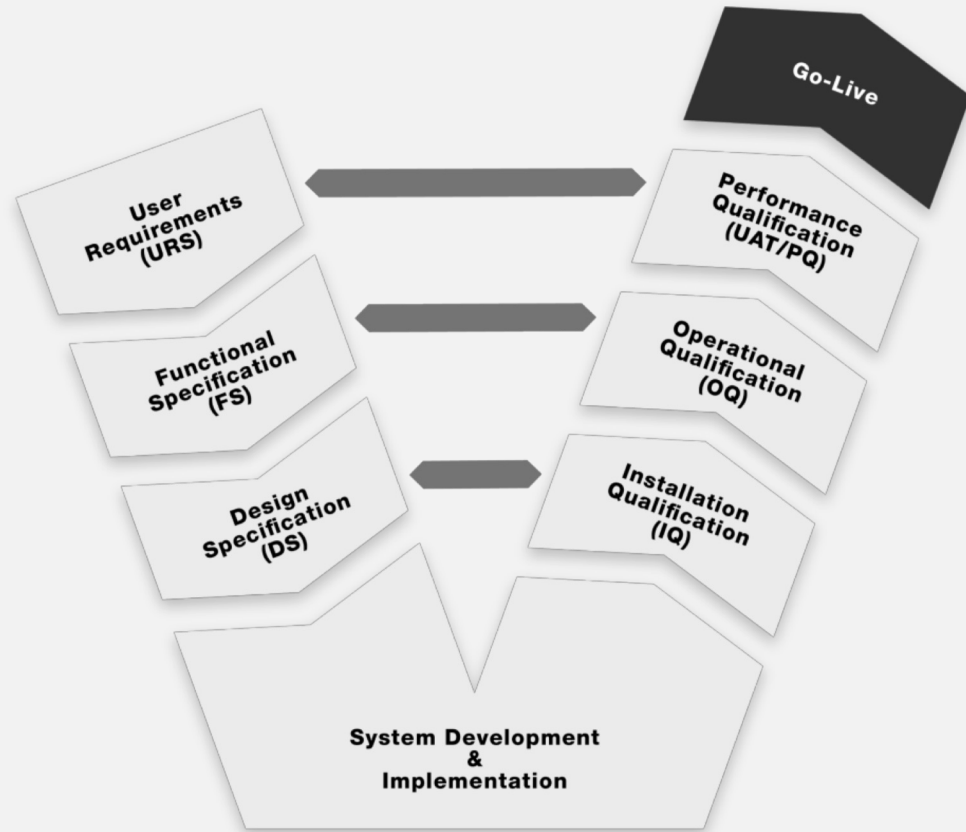


COMPLIANCE **EXCELLENCE**







The Power of Regulations



InspectifAI delivers all relevant GxP documentation



GxP QUALIFICATION PACK

-  **Functional Specification,** incl. Design Specifications
-  **Installation Qualification,** incl. Plan, Protocol, Report
-  **Operation Qualification,** incl. Plan, Protocol, Report
-  **Performance Qualification,** incl. Plan, Protocol, Report
-  **Model Change Report**
-  **Risk Analysis, FMEA Edge Device**

The collage displays a variety of GxP documentation templates. Key elements include:

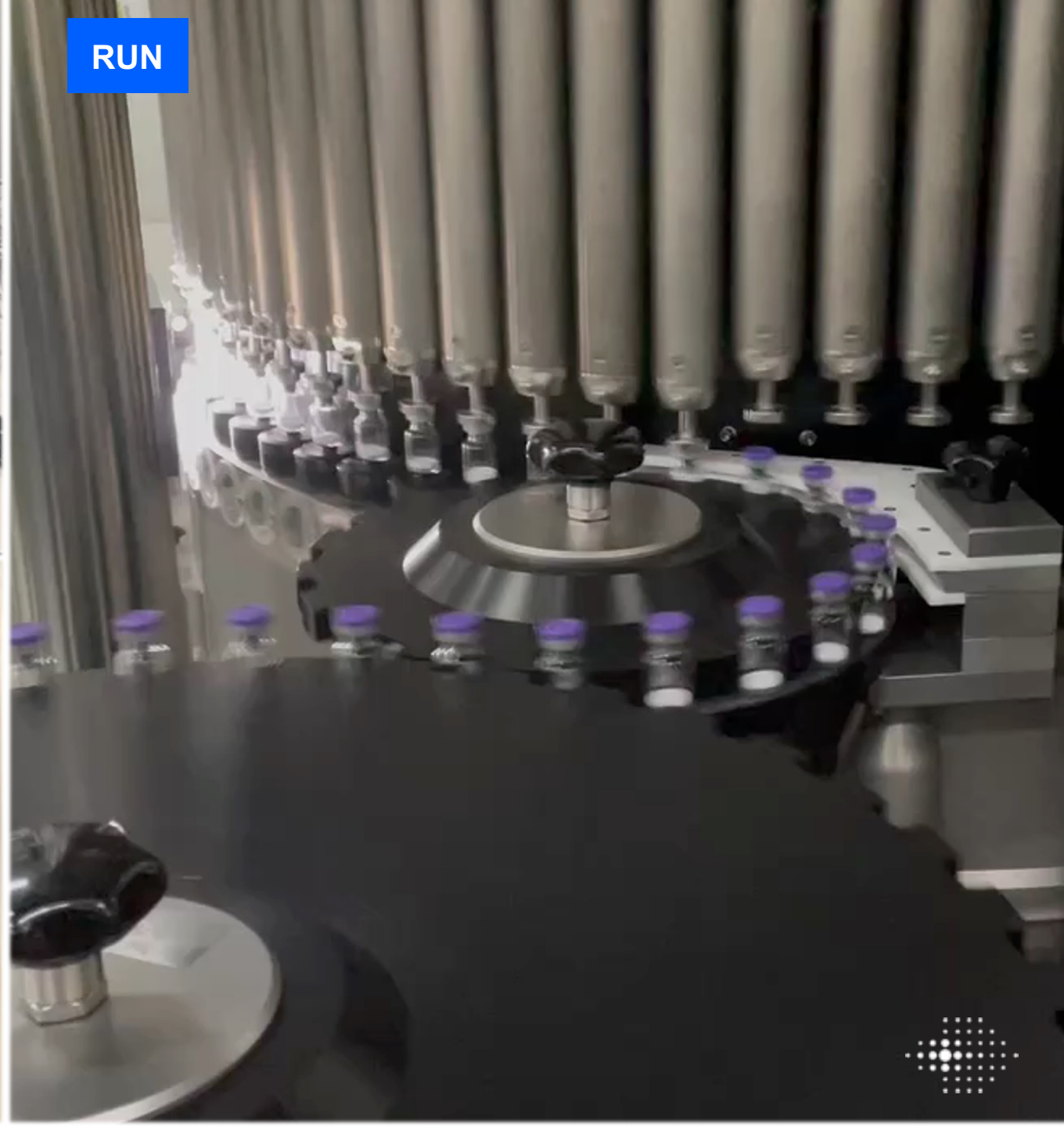
- Model Change Report Cover Page:** A blue header with the InspectifAI logo and the title 'Model Change Report'. It includes a subtitle 'InspectifAI supported drug & patient safety' and a list of authors and approvers.
- Table of Contents:** A page listing sections such as Introduction, General regulatory or GMP requirements, Scope, Change description, Execution (Design & Training), and Results (Verify QI/M), with corresponding page numbers.
- Model Change Report Content Pages:** Multiple pages showing detailed text, tables, and structured data. For example, one page shows a table for 'Statistical performance of the model (execution matrix)' with columns for 'Metric', 'Value', 'Target', and 'Status'. Another page shows a 'Description of datasets used' table with columns for 'Dataset name', 'Description', 'Number of samples', 'Qualified samples', 'Information about data acquisition?', and 'Number of runs'.
- Visual Performance of the Model (Thermograms):** A page featuring several heatmaps (thermograms) used for visual performance verification.

But how to provide value?

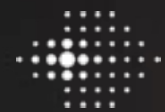
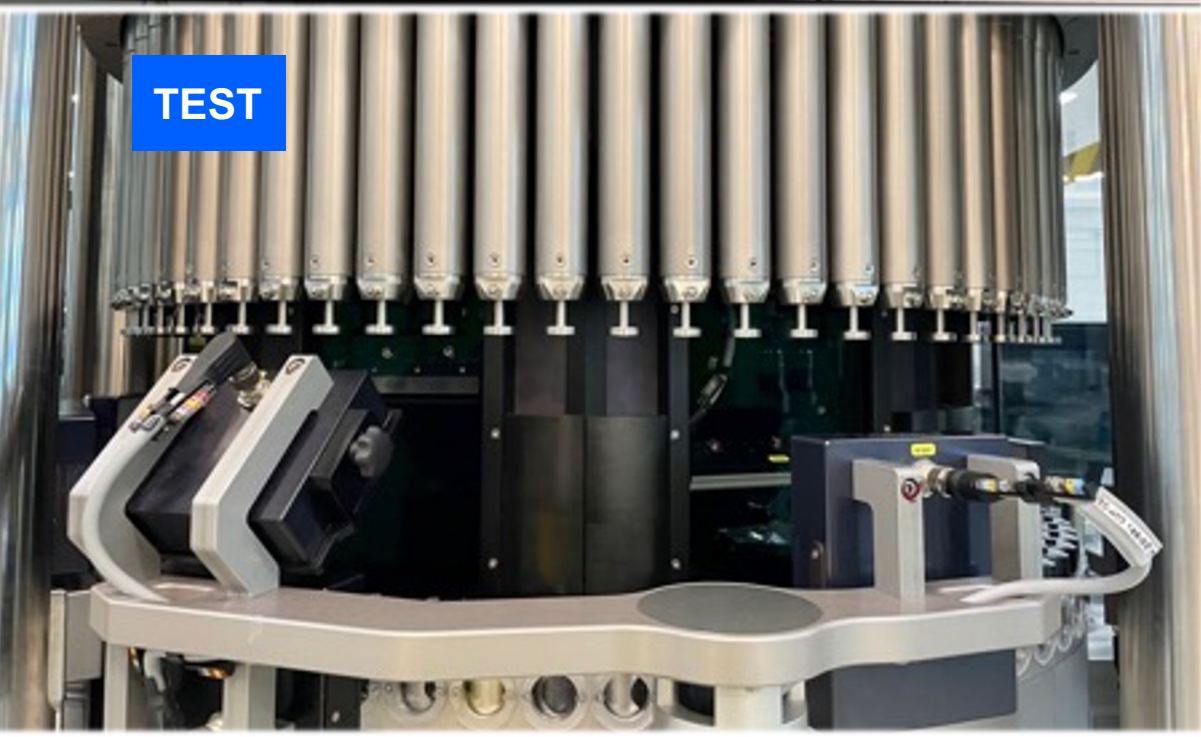
CONFIGURE



RUN



TEST



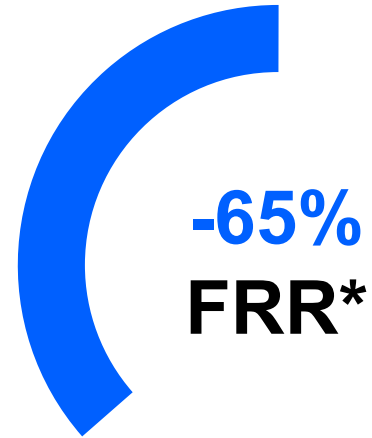
Soooo?

What are the

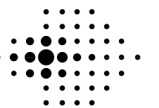
live-results?



Lyo cake
Inspection



*FRR normalized on the FRR of the traditional vision system



Further live-results from the shopfloor?



Vials
particle inspection



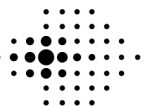
-81%
FRR*

Syringes
particle inspection

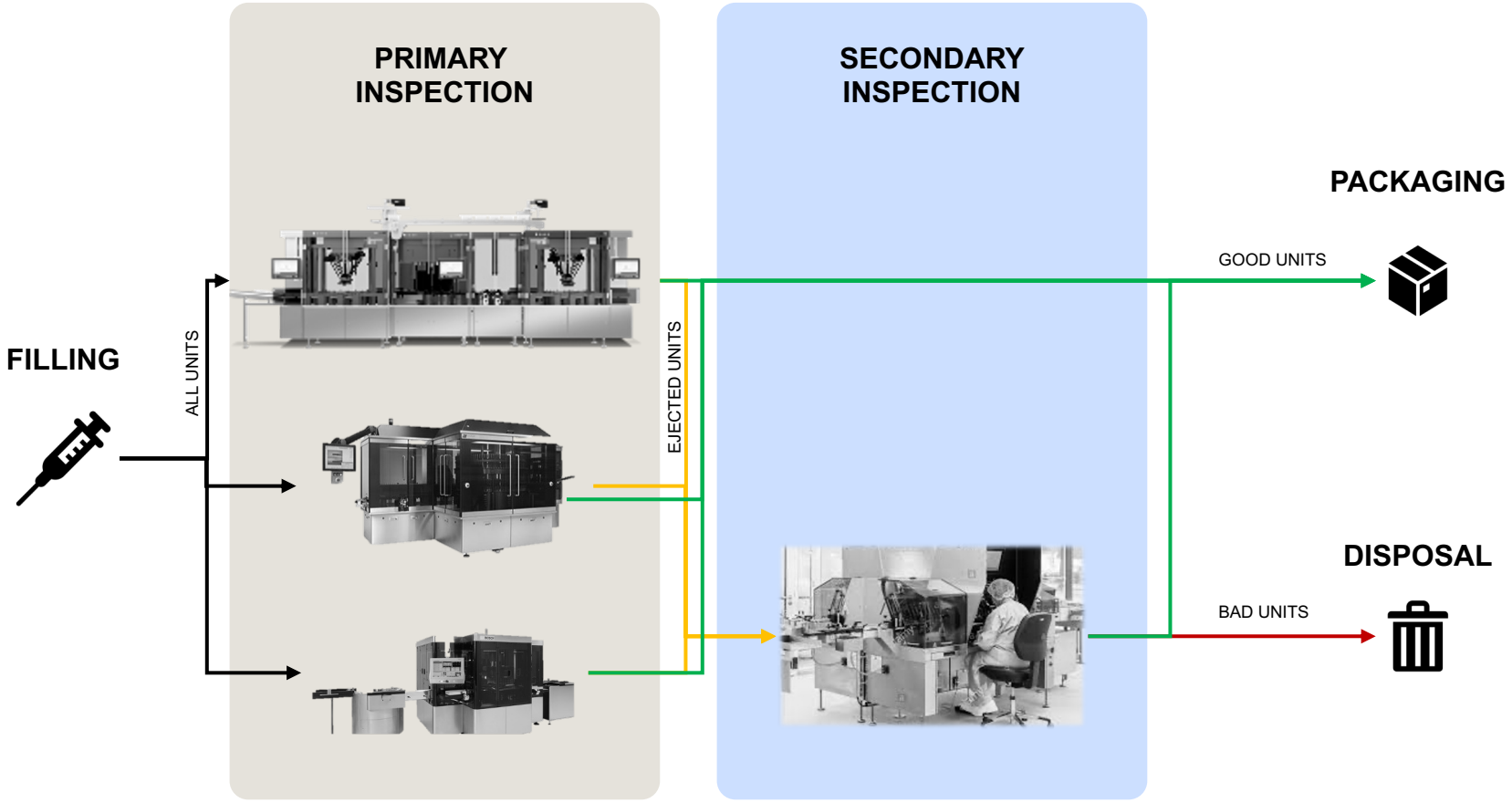


-91%
FRR*

*FRR normalized on the FRR of the traditional vision system



Pharmaceutical visual inspection



Reduction from a three to a two shift model in secondary inspection