



aws INNOVATE

MODERN APPLICATIONS EDITION

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Event-driven production line anomaly detection with AWS

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Solutions Architect

Amazon Web Services



Agenda

- Industrial revolution
- Industry challenges
- Solution overview & architecture
- Demo
- Business benefits

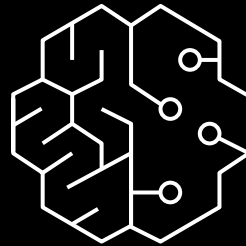
Digital manufacturing is sparking an industrial revolution

Automated Inspection



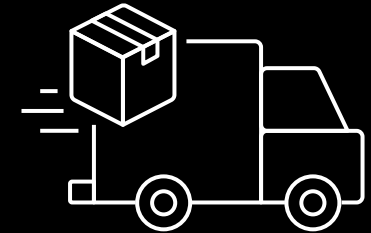
Even the most manual processes are turning towards automation

Innovation



Innovations in machine vision, deep learning and robotics are revolutionising the production lines

Faster time-to-market



Products get to the market with less waste, faster, and on-time

Industry challenges – High cost of quality (CoQ)



Business Challenge

Reduces Cost of Quality to less than 10% of revenue (typically 15% - 40%) by reducing scrap, rework, warranty cost, customer returns and corrective actions.



Technical Challenge

Manual quality control procedures, and lack of ability to capture and leverage image data for identifying anomalies resulting in sub-par yield.



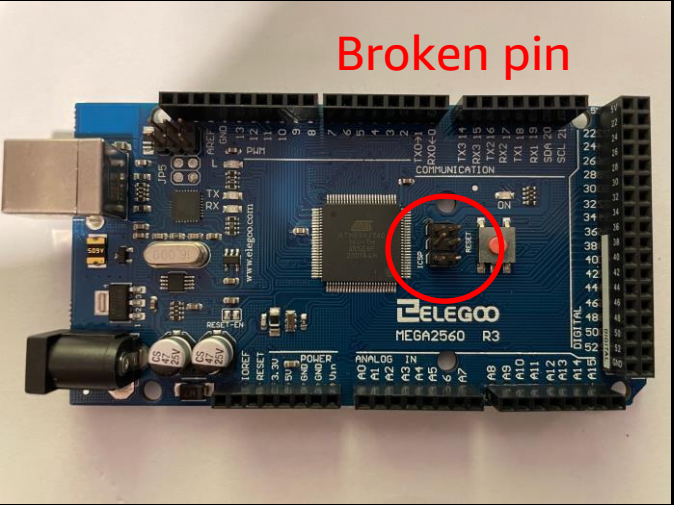
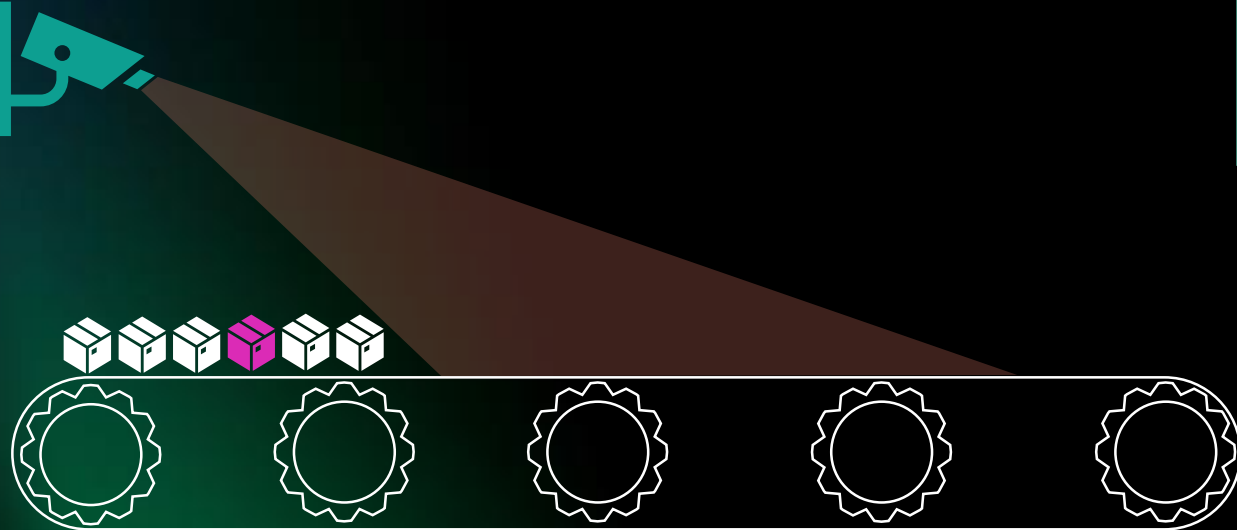
Process Challenge

Sub-optimal quality processes limits ability to perform root causes analysis, waste of time in corrective and preventive actions, and change management.

Solution overview

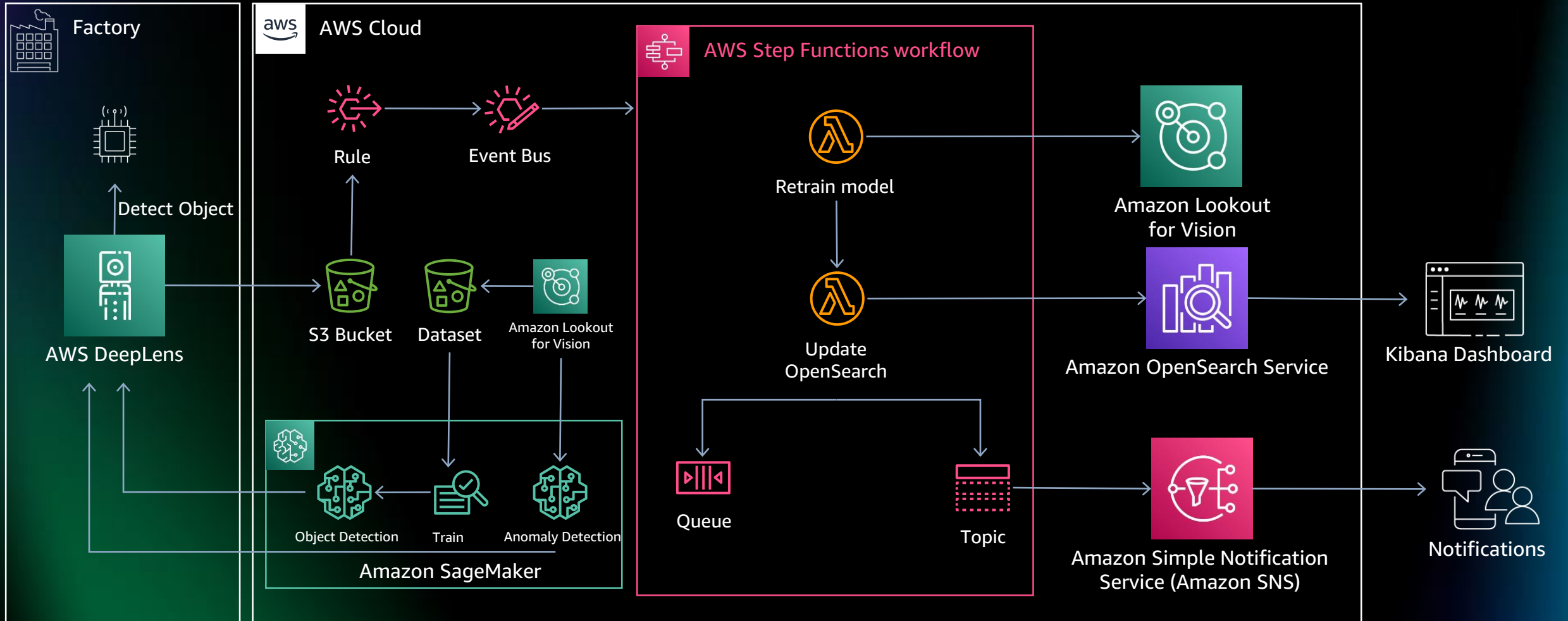
ANOMALY DETECTION USING COMPUTER VISION

AWS DeepLens

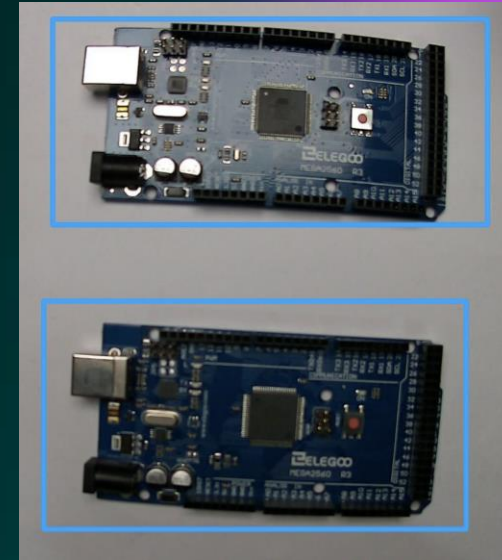


Solution overview

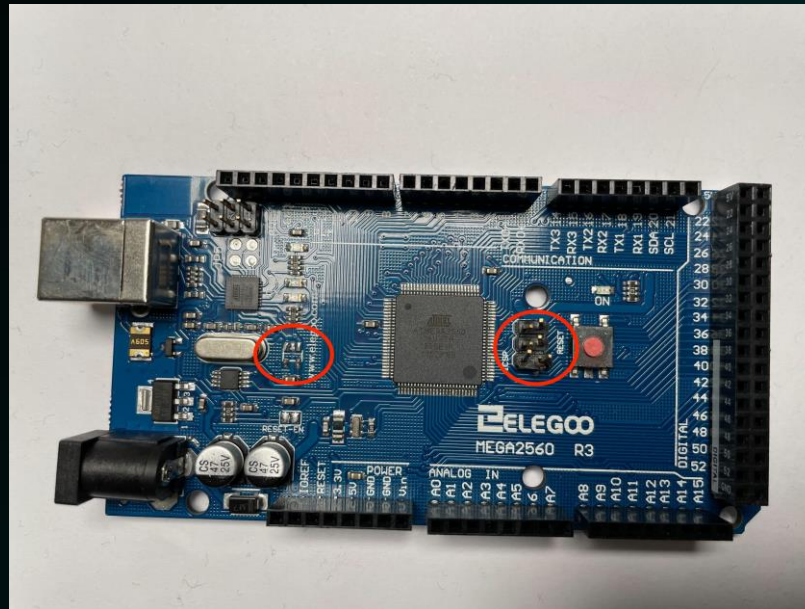
ARCHITECTURE



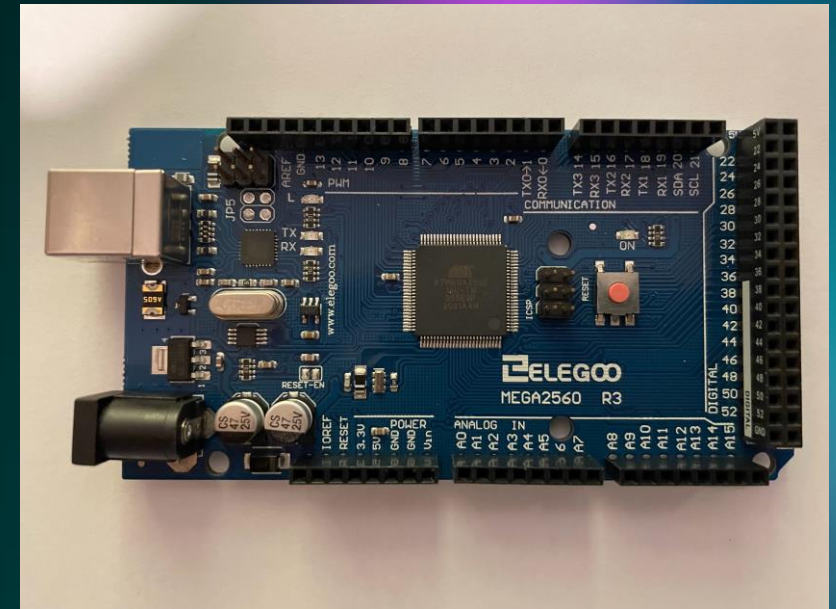
Demo



Demo



Anomaly

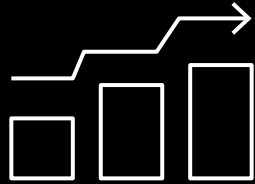


Normal

Delivers benefits that matter most



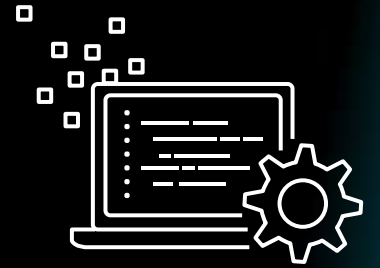
Maximize profitability



Increase in yield



Improve customer satisfaction



Increase flexibility

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Thank you!