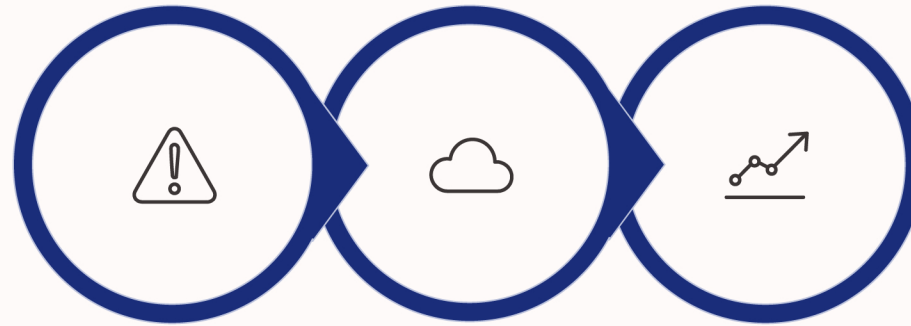


Manufacturing: Vision-AI for Zero-Defect Production Lines

The Hook: Scaling quality control to 24/7 autonomous operations.



Challenge

MeridianSoft

Impact

A global electronics manufacturer relied on manual visual inspection for quality control, resulting in a 4% defect rate reaching the final customer. We deployed a **Google Cloud Vision AI** solution at the edge. Using custom-trained models, high-speed cameras on the assembly line now detect microscopic defects in real-time, triggering automatic alerts and line pauses.

The Impact



Defect Rate <0.5%

Dropped from 4% to less than 0.5%



Operational Excellence

Saved \$1.2M annually in rework and warranty claim costs.



24/7 Reliability

Eliminated human fatigue as a factor in quality assurance.