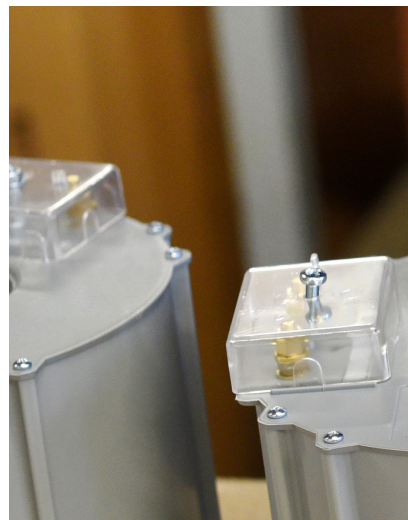# Digitize Your Manual Manufacturing with Vaira

Vaira™ helps manufacturers digitize, automate, and upgrade error-prone manual processes and decisions to boost productivity and increase profits. The camera-based solution is powered by a scalable suite of shop floor-ready apps built on proven machine vision and AI expertise for frontline manufacturing operations, with two-way integration to resource planning tools to help drive continuous analysis, insight, and improvements.

1 Digitize & Automate

Reduce costs and ensure quality with machine vision and AI insight that makes human decisions consistent, reliable, and trackable

2 Communicate & Integrate

Streamline your operations with IoT-ready connectivity between apps and resource planning databases, cameras and imaging devices, sensors, processing tools, and PLCs

3 Analyze & Trace

Gain data from manual manufacturing processes for real-time end-to-end operations insight to drive analysis, tracking and reporting, and continuous improvement initiatives

4 Scale & Customize

Increase productivity with prepackaged apps easily trained on your unique requirements, with flexible customization options and "no code" tools to design unique workflows

Vaira™

Pleora Technologies

Pre-Packaged Apps to Streamline Your Operations from End-to-End

Pleora delivers Vaira, a suite of scalable apps to digitize and automate manual and paper-based manufacturing processes, all backed by over two decades of expertise in machine vision and real-time automation connectivity and a simplified, user-friendly approach to deploying advanced AI capabilities on the shop floor.

Visual Inspection

Reduce human error and ensure consistent and reliable product quality decision-making, visually train new employees, gather data for continuous improvement

Machine vision expertise precisely highlights product differences to reduce quality escapes, with AI-based decision-support guiding operators through assembly and inspection processes to ensure consistent and reliable results. The unique AI capabilities are transparently trained on operator decisions, meaning you don't need algorithm expertise or numerous images to teach the system. Customize the app for your own workflows, including notifying supervisors, lead hands or managers of product anomalies.

Product Tracker

Streamline processes and drive analysis-based continuous improvement by saving, storing, and sharing visual images and data from your manual processes

Capture, store, and share images and operator notes of every outgoing visually inspected or manually assembled product for traceability, inventory management, batch tracking, and to speed customer issue resolution. Store product images and data locally or in the cloud, and connect with manufacturing planning systems to gather and analyze end-to-end product information.

RMA Reporting

Avoid costly product returns by using data from Return Merchandise Authorization reports to identify patterns, improving manual manufacturing steps
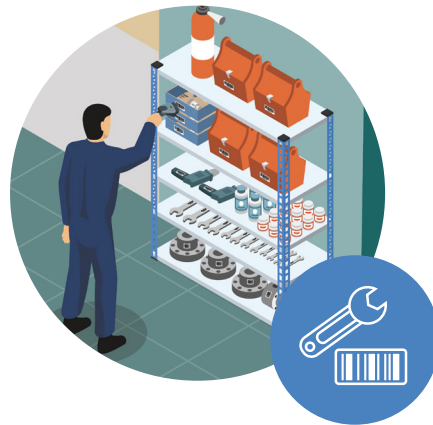
Acquire product images and operator notes for product returns in a digital RMA Report that integrates with your manufacturing resource planning system to help speed trend and root cause analysis and support continuous improvement initiatives. In combination with data from the Product Tracker app, you can verify the exact state of a product when it left your facility.

Checklist & Work Instructions

Eliminate error-prone manual data entry, speed manufacturing steps, simplify training for new employees to reduce errors, waste, and production delays

Convert paper-based processes, including assembly and changeover steps, into electronic checklists that ensure your staff is using the latest instructions to eliminate errors, waste, and delays. Speed training for new employees and processes, while gathering data for regulatory reporting requirements. Incorporate interactive documents, web links, images, and videos to clearly and visually explain process steps. Add Visual Inspection to compare against instructions and capture images during in-process steps.

Asset & Tool Management

Reduce costly downtime due to lost, misplaced or improperly used tools and assets on the shop floor

Camera-based app scans a barcode or unique identifier to "check-in" and "check-out" assets and tools used in production. Customize the app to create email and text alerts or a dashboard view to easily see which tool is being used and who is using it in real-time, and compile reports to optimize the use of your assets.

Digital Job Traveler

Improve operator efficiencies by error-proofing manual data entries and reducing time spent reviewing documentation, while capturing, storing, and sharing end-to-end manufacturing data

Create digital work orders that instantly provide your operators with the latest schedule, requirements, and priorities they need for their exact jobs. Gather a complete picture of your operations, including accurate data that provides real-time visibility as production steps occur and analytics and reporting to help identify and avoid errors. Save and store a digital record of all completed jobs, for every product, for audits and regulatory requirements.

Reduce Costs, Increase Efficiencies, and Ensure Quality

Ensuring Brand Quality for Consumer Goods

Dairy Distillery operates in a highly competitive market where brand influences consumer choice. To help ensure brand consistency, the distillery uses Vaira's suite of pre-packaged apps to add decision-support during manual in-process manufacturing and final inspection steps.

The system visually guides an operator as they manually place product labels to ensure brand elements remain consistent and aligned. For outgoing quality control, the Visual Inspection app has been trained to provide a quick "pass/fail" assessment on labelling – including alignment, verifying the correct labels have been used, and bar codes are readable.

Vaira helps the distillery:

- Increase production and reduces costs by avoiding rework and downtime
- Reduce risk of poor quality and mislabeled products reaching store shelves
- Eliminate subjective, stressful and time-consuming decision-making for employees

End-to-End Quality for Electronics Manufacturing

DICA provides high quality electronic assembly services for a diverse range of industries. The manufacturer is deploying Vaira's Visual Inspection app to add automated decision-support for operators to help detect product errors commonly missed by automated optical inspection (AOI), such as component orientation, solder defects, through-hole issues, and labelling.

The manufacturer also uses Vaira's Product Tracker and RMA Reporting apps to gather data around its manual processes to help ensure end-to-end quality. DICA uses the apps to capture an image of every manually inspected board in combination with RMA data to help speed resolution when an in-field issue is detected.

Vaira helps the electronics manufacturer:

- Ensure consistent, reliable and traceable human decision-making for incoming, in-process, and outgoing inspection steps
- Detects defects commonly missed by automated optical inspection (AOI)
- Gather actionable data on manual steps to help ensure end-to-end quality and speed issue resolution

*Learn more at **pleora.com***