3Cloud

HOW COMPUTER VISION ENSURES QUALITY, SAFETY, & CUSTOMER SATISFACTION
Revolutionizing Your Business with Real-Time Monitoring & Prevention

Imagine monitoring physical shipments and construction sites in real-time, detecting potential issues, and preventing theft. With computer vision, it is possible to ensure the quality and safety of your products while enhancing customer satisfaction. You can stay ahead of the competition by leveraging cutting-edge sensors and cameras to detect irregular packaging or pallet conditions. Doing so can save on costs associated with delays, theft, and other related issues while improving efficiency, safety, and customer satisfaction. In today's fast-paced world, staying ahead of the curve with computer vision technology can give you the competitive edge you need to succeed.

Sample Business Cases

- Logistic companies face significant losses due to freight violations such as pallet damage or product damage. However, computer vision technology can prevent such losses by detecting potential issues in real-time through sensors and cameras. Companies can then take necessary measures to remedy the issue before it becomes a bigger problem. Furthermore, computer vision technology can monitor pallet conditions and ensure proper handling and security, thus reducing the risk of pallet damage and ensuring timely delivery of shipments. It can also detect irregularities in product packaging, such as tears or dents, indicating potential product damage, thereby enhancing the quality of the delivered products.

- Theft prevention is a critical concern for construction companies as it can cause significant losses in materials, equipment, and other resources. To mitigate this risk, companies should invest in computer vision technology. This advanced technology enables real-time monitoring of construction sites, detecting any suspicious activity and unauthorized individuals. With computer vision technology, companies can ensure the safety of their materials and equipment, enhancing the construction site's security.

- Commodity supply chains, like grain consolidators, live on quality control and volume. they must carefully inspect incoming grain deliveries to determine the appropriate rate per pound based on the grain's type and quality; however, this probing process requires experienced operators. Labor shortages in rural areas and a surge in grain deliveries have led to overworked probe operators and long waiting times for delivery drivers. Computer vision technology can provide this level of inspection and validation faster than manual processing – eliminating waiting times for delivery drivers reduces costs for grain shippers and consolidators alike.

Technology Challenges

IOT Device Selection and Management

Real Time Feedback Loop with Human

Imtermittent Network Connectivity at Device Edge
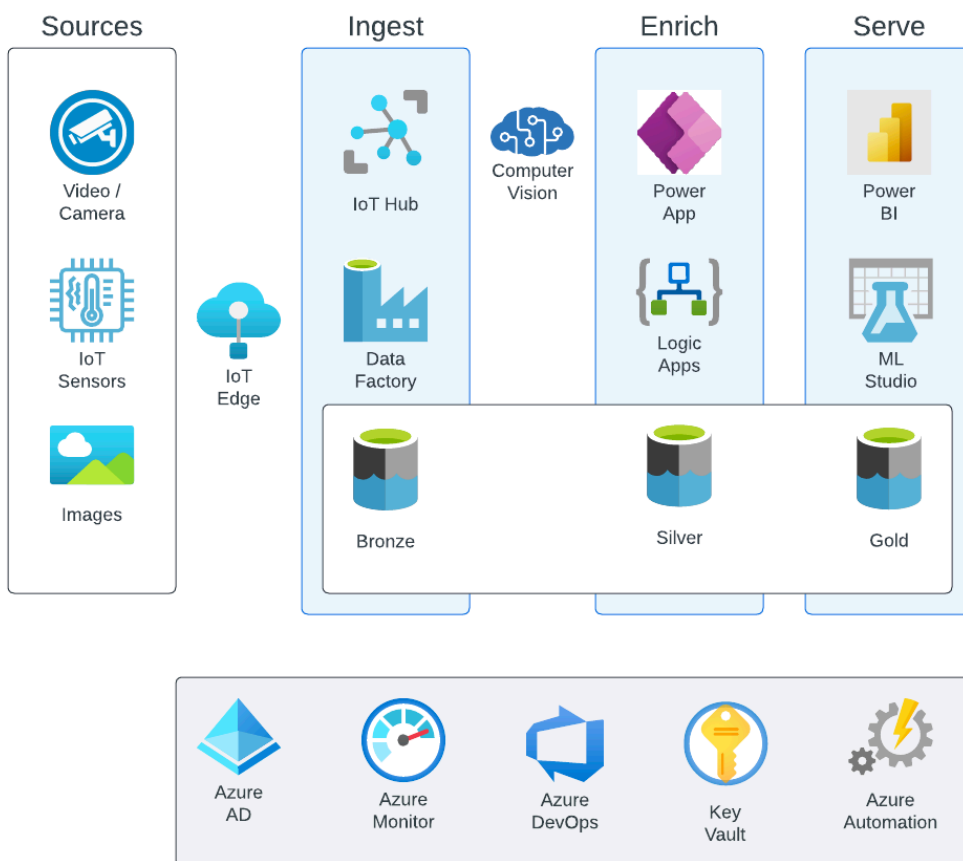

System Orchestration (aka E2E Workflow)

ML Model Development, Training and DevOps

System and Data Security

Architecture Approach

Sources
Video / Camera
IoT Sensors
Images

IoT Edge

Ingest
IoT Hub
Data Factory

Computer Vision

Enrich
Power App
Logic Apps

Serve
Power BI
ML Studio

Bronze
Silver
Gold

Azure AD
Azure Monitor
Azure DevOps
Key Vault
Azure Automation

Why 3Cloud

3Cloud is your one accountable partner to deliver Azure infrastructure, data and analytics, and application development with the fastest time to value from our experience, tools, and accelerators. 3Cloud is the largest pure-play Azure partner in the ecosystem with unequaled expertise in Azure. We have hundreds of Azure experts, including MVPs and Fast Track Solution Architects, with thousands of hours implementing cutting edge solutions with Microsoft's most advanced technology.

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