kibsi

COMPUTER VISION FOR MANUFACTURING

WHAT YOU NEED TO KNOW

Kibsi (kibsi.com) is a low-code computer vision platform that instantly turns video from customer's existing camera feeds into actionable insights and alerts, helping improve efficiency, increase safety, and enhance overall performance for manufacturers and dozens of other industries.

Manufacturing customers can solve common problems using our pre-made templates or solve any bespoke problems by building a Kibsi application in our drag-and-drop environment.

WHAT IS COMPUTER VISION?

Computer vision (CV) is the subcategory of artificial intelligence (AI) that focuses on building and using digital systems to process, analyze and interpret visual data. The goal of computer vision is to enable computing devices to correctly identify an object or person in a digital image and take appropriate action.

HOW COMPUTER VISION WORKS

Computer vision for video is a technology that analyzes and interprets visual data from video feeds to transform unstructured visuals into structured data.

Input:
Video footage is fed into the computer vision platform (e.g. Kibsi) from cameras. This can include existing security cameras or any other IP camera.

Analysis:
The computer vision platform processes the video data, using pre-trained models to recognize patterns, objects, and movements.

Action:
Based on the analyzed data, the system can trigger real-time alerts, generate structured data for analysis, or interact with other applications via APIs.

1

77%
of manufacturers consider computer vision important for meeting their business goals (IBM, 2021)

2

51%
of the global computer vision market is covered by its industrial segment alone (Grand View Research, 2021)

3

CV market CAGR **2023-2030**, with manufacturing as one of its fastest-growing segments (Mordor Intelligence, 2023)

THE NEED FOR COMPUTER VISION

Greater productivity
Adopting computer vision, accelerates manufacturing cycles, resulting in a 12% growth in labor productivity and 10% in total production output.

Cost optimization
Increased productivity a via computer vision-based maintenance (up to 50%, based on McKinsey's estimates) translate into a general reduction in operating costs.

Improved quality
Computer vision-driven robots operate with surgical precision, ensures better product quality, minimize human error, and an overall reduction of 10-20% in QA operations cost.

Improving safety
The computer vision system can detect situations that can compromise employee safety and can send alerts and/or capture statistics to help with safety training.

USE CASES FOR COMPUTER VISION

Personal Protective Equipment (PPE) Monitoring
Continuously monitor and verify that all workers are wearing the correct safety gear.

Forklift Safety Alerts
Generate proximity alerts and capture analytics when forklifts are too close to people or other objects.

Defect Detection
Identify flaws in products as they move down the production line. Capture statistics or alert workers.

Worker/Machine Interactions
Monitor machinery and equipment to ensure workers are interacting with them safely.

Distribution Solutions
Validate labels, package contents, and other shipping requirements in real time saving time and resources.

THE FUTURE OF COMPUTER VISION IN MANUFACTURING

The computer vision market has been expanding across multiple industries in the past years, leading to an expected growth of **$17.4 billion** in revenue by **2023** and **$41.11 billion** by **2030** (according to Allied Market Research).

The market for computer vision is developing nearly as fast as the capacities. It's anticipated to reach **$26.2 billion by 2025**, developing more than **30% for every year**. Artificial intelligence is the future, and computer vision is the most amazing appearance of that future.

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