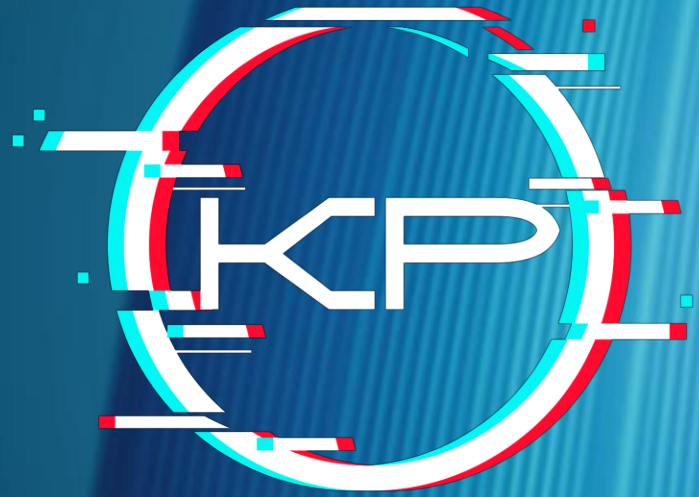
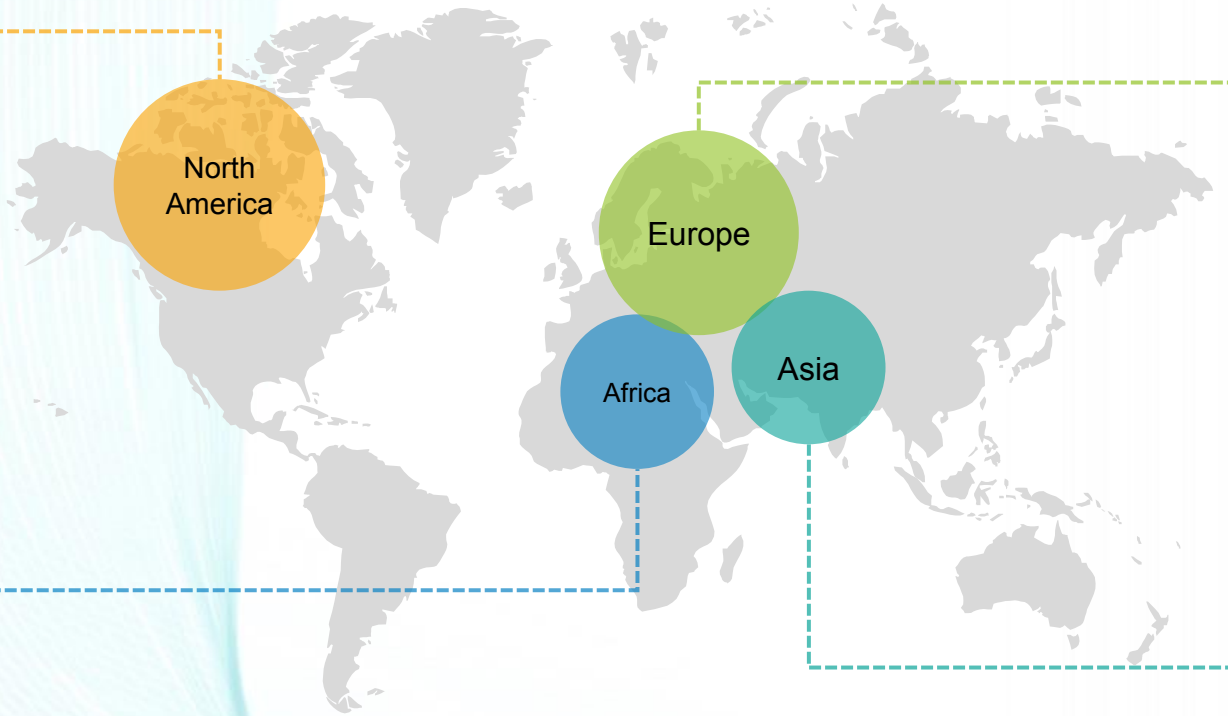


KEEPATH

AN INDUSTRY 4.0 COMPANY

The energy behind KeePath



North America
Alberta, Canada

Africa
New Cairo, Egypt

Europe
Berlin, Germany
Stockholm, Sweden

Asia
Dubai, UAE
Abu Dhabi, UAE
Muscat, Oman

Our Expertise

Our Team

Powered By

Our Partners

The energy behind KeePath

Our Expertise

- A collective experience of over 38 years in Mechanical, Electrical and Communications Engineering.
- Over 12 years experience in Robotics and Algorithm (AI) development.
- A collective experience of over 80 years in the Oil & Gas Industry.
- Over 25 years of experience in the Metal, Glass and Fabrics manufacturing and processing.
- Over 35 years experience in technical and non-technical training.
- A collective experience of 100 years in Hospitality & Entertainment.

Our Team

"45" Full Time Equivalents (FTEs) & Consultants based in Germany.

Over **"120"** singed consultants in Europe and the Middle-East

"30" Full Time Equivalents (FTEs) & Consultants based in Egypt.

Powered By

IEEE Celebrating 125 Years of Engineering the Future

IAS IEEE Industry Applications Society

Our Partners

Ecoman Training Consulting

Smart Sensor Devices Environmental Sensors

PROMIRR Progressive Displays

SNEXUS Synergy Nexus Group Energy & Heavy Industry Services

AGOFS Oilfield Services

VIRTUAL REALITY FOR ENTERPRISE

Innovations & next-generation technologies have completely changed the way we work and live.

AI & virtual reality are some of the major technologies available that affected how we communicate, work & travel. We are in the midst of a complete digital revolution.

CAPTIVATE PEOPLE`S MINDS

The technology is stunning. It allows to tailor business scenarios that serve your needs while choosing from 360° view, 3D designed computer generated elements, photo-realism, animations with haptic feed-back. A complete physical immersion that makes your options un-limited.

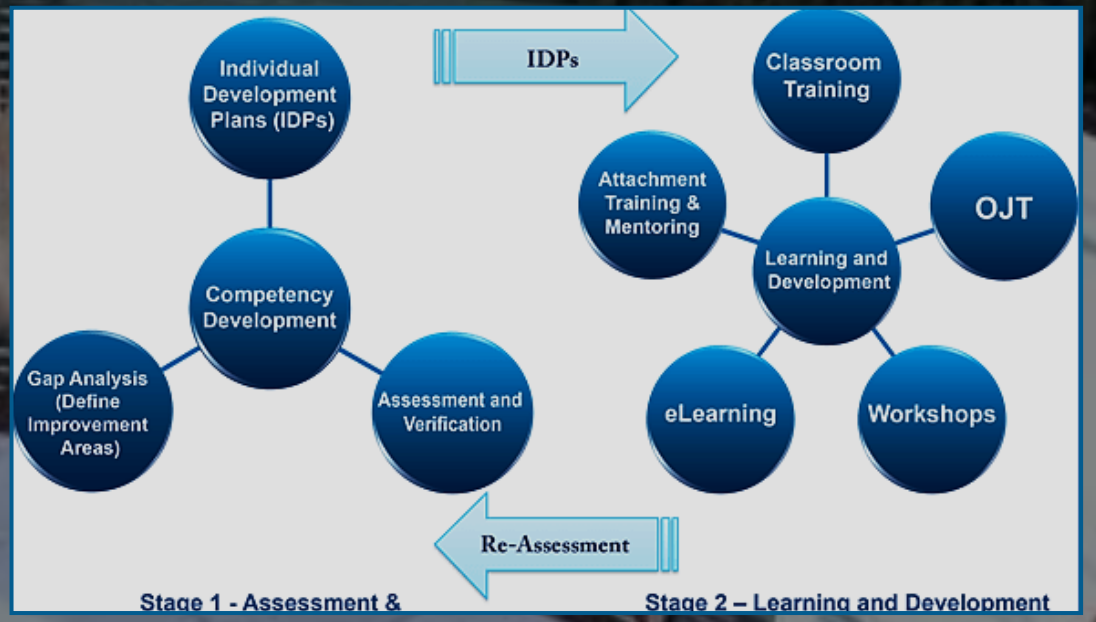
PERSONALIZE EVERY EXPERIENCE

The technology is flexible and transforming businesses; from entertainment & media to healthcare & manufacturing.

At KeePath labs, with a vision of a VR-Powered future, we are working on immersive use cases for businesses and a full-fledged center of excellence, enabling enterprises to rapidly assimilate and achieve their goals through the deployment of VR technology.

As an example; in a VR module for manufacturing, KP creates different user-interface modes inside the same environment, allowing an effective way to measure individual core-competencies within a specific Competency Assurance Program (CAP).

i.e. free hand mode, show me mode, support mode and do it mode.

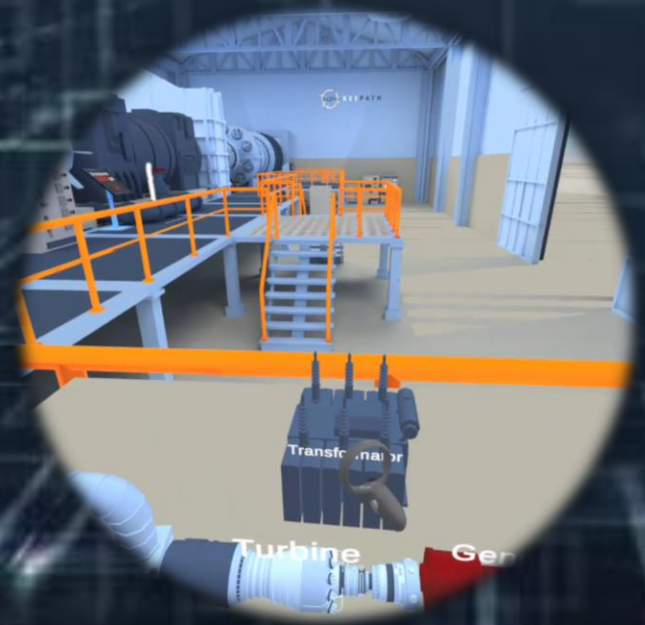



CONVINIENT
SAFE
ACCELERATE LEARNINGS
MODULAR
SCALABLE

VR IMPELEMENTATION ROAD MAP

Given our experience in building VR solutions, KeePath is well-positioned to partner with customers on their digital transformation journey wherever they are. Follow a “4” steps program with our experts:

EXPLORE : understanding your technology adoption level.
DEMONSTRATE :articulate the potentials & possibilities within your mission
KICK START : with the most essential needed scenarios critical to your business
PILOT GROUPS : before the full adoption is brought to a the entire workforce.



Regardless the size of your enterprise, VR technology is here to uplift performance in numerous use-cases

If you are a learning & development expert seeking training efficiency and monitoring, or a technical guru looking into how specific tasks are being carried-out, or need a proactive first-response team who's capable of handling/tackling challenges without loses, or you have experienced that training contents lacks individuality and flexibility.

Then challenge your status-quo to reach your greatest potentials; we guarantee the transformation of your entire business and your day to day way-of-life!

SAFETY

- Real-like safety drill scenarios with no risks
- Simulation of workplace environment for risk assessment

Competencies based training

- Virtual Training Simulation (Machine Breakdown, WCM tools, SMED, Procedures)
- Virtual Test to assess competence with automatic gap identification, definition and required training.

Shared meetings platform

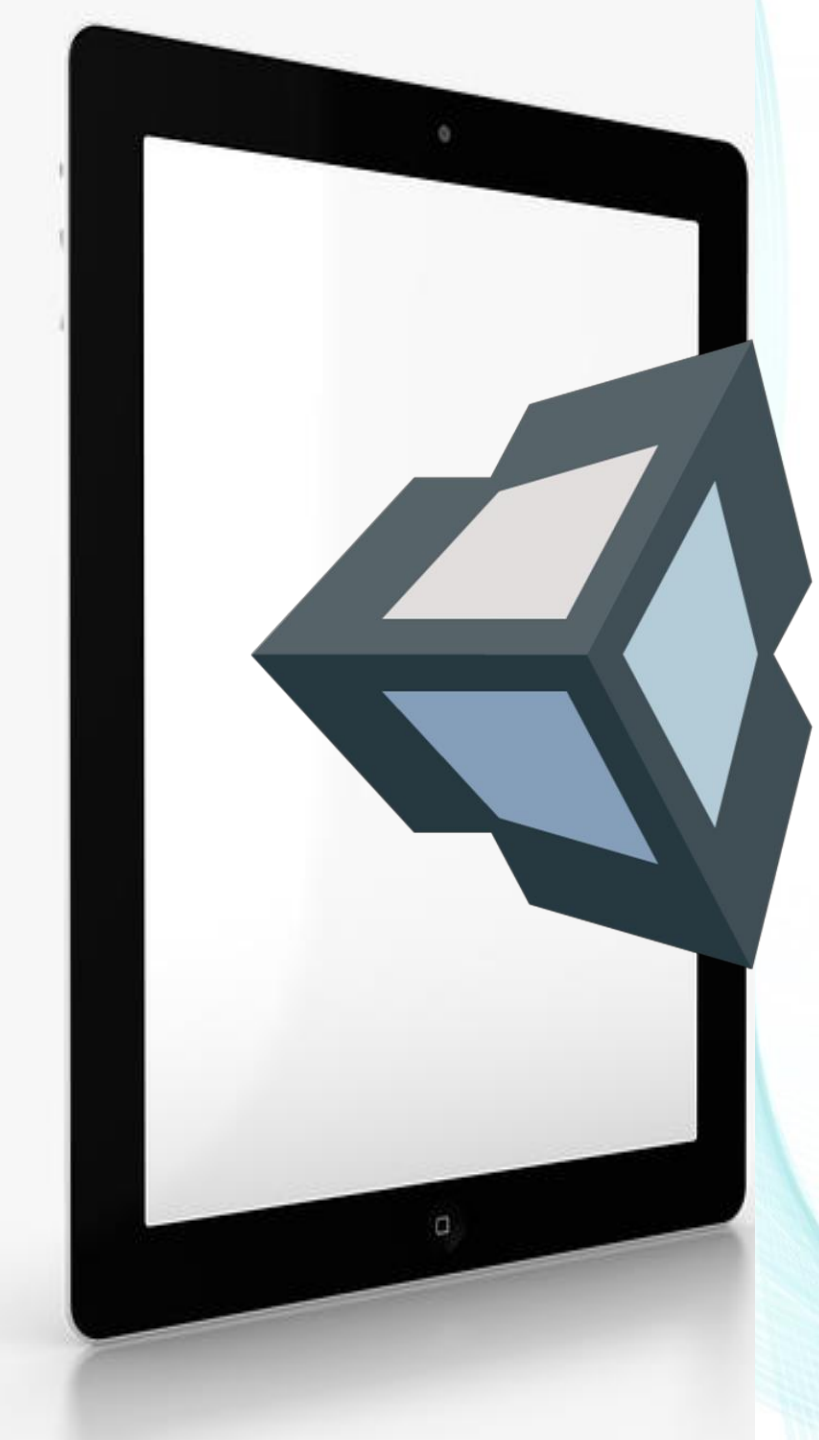
- Real-Time Kanban optimal size and frequency Simulation.

Early Process designs

- Digital Twin plant simulation

BENEFITS

- Reduce travel costs
- Remote Inspection
- Greater Retention of learned skill
- Improve employee performance
- Collaborate Remotely
- Faster troubleshoot and repair
- Enable Just-in-time training
- Jobs done faster with less errors
- Iterate designs quickly
- Sell Better with visualization
- Avoid costly delays
- Share designs to make faster decisions



Augmented & Mixed Reality

LIFE ENHANCED

In simple terms, while Virtual Reality replaces your vision, Augmented Reality adds to it.

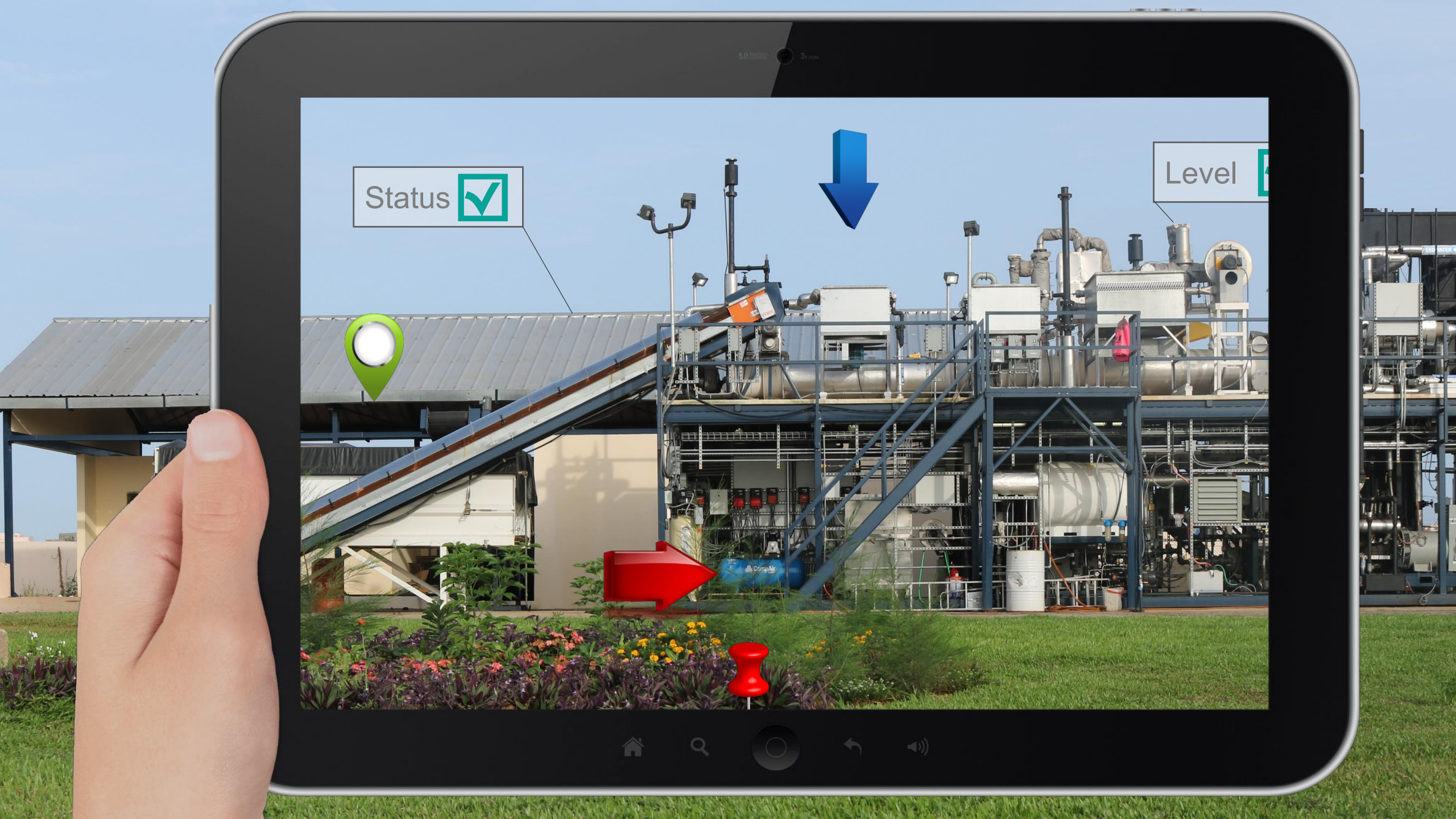
Mixed Reality on the other hand is the merging of real & virtual worlds producing environments where physical & digital objects exists and interacts in real time.

Both exhibits the potentials to address enterprises and industrial challenges that was previously perceived as undefeatable.

EMBRACE
Augmented Reality

DISCOVER
NEW WORK NORMS

Re-write the rules on how consumers and employees interacts with workspaces and products. Augmented & Mixed Realities are helping organizations around the world to reinvigorate, inspire, guide and truly innovate their businesses and customers paradigm.


Status
Level

Augmented & Mixed Reality Benefits

Maximize skills and train efficiently

Refill the skills reservoir

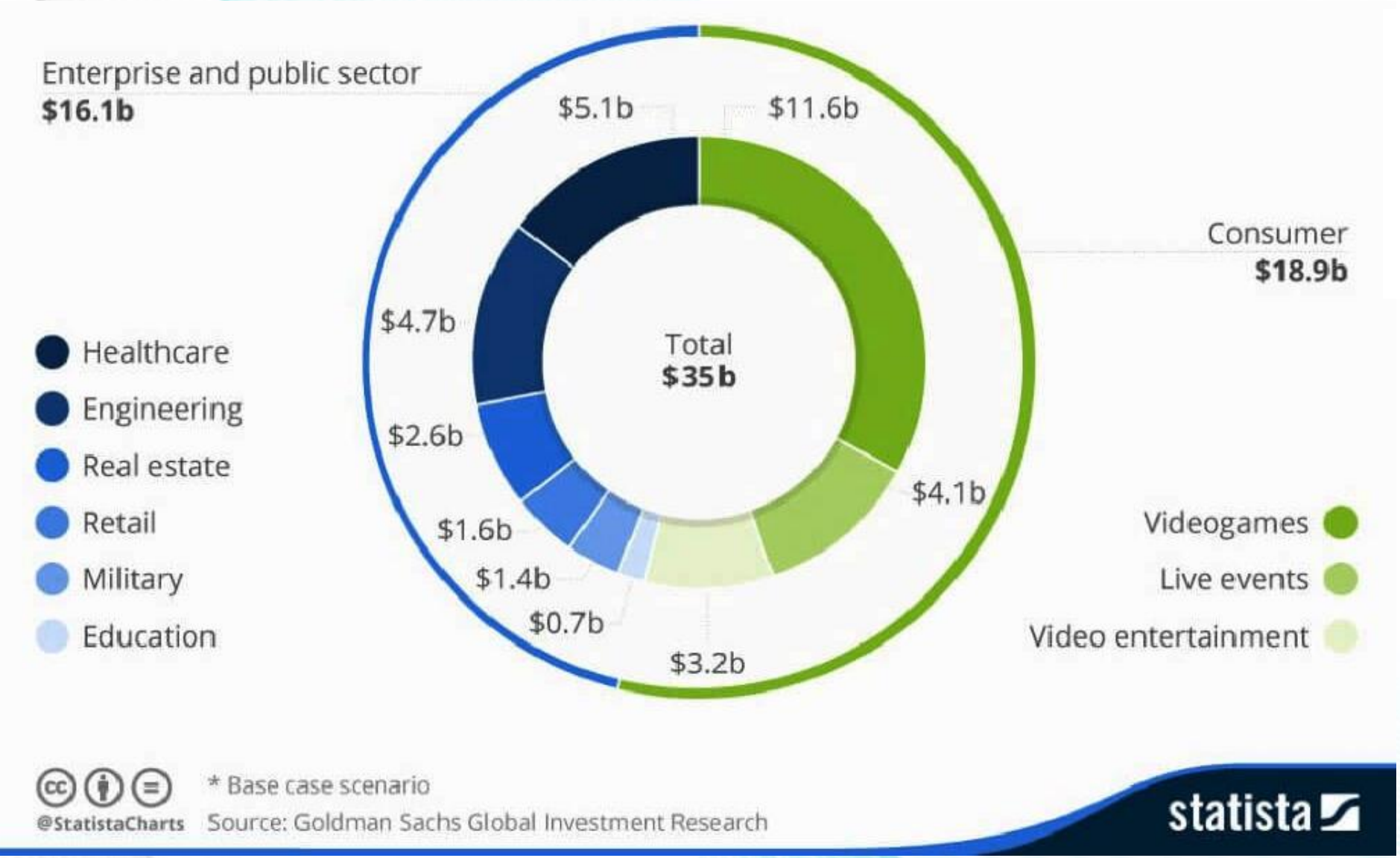
Minimize the skills gap

Create sharable experts archives

Reduce on-job human errors

Maintain expertise in interactive means

How organization are leveraging on Alternate Realities (VR/AR/MR)?



Mixed Reality for Safety

- Space
- Defense/ Public Sector
- Services/ Firefighting, First Responders

Mixed Reality Customer Experiences

- Retail & Shopping Experience
- Automotive
- VR in Entertainment, Gaming, Amusement Parks

Field Service & Remote Assistance

- Manufacturing & Shop Floor
- Oil & Gas & Utilities sector
- Telecom Installations& Services

AR & MR Tech is here to uplift performances with KeePath

Here are some of the use cases

SAFETY

- AR Google / Mobile technology visualization for out-of-sight hazards (ex. suspended loads).
- Real-Time safety parameters monitoring with AR google visualization while patrolling (ex. Potential accidents and/or history in specific locations)

Focused improvement & Maintenance

- Google/Mobile technology visualization on how to solve anomalies.
- Google/Mobile technology visualization of malfunctioning parts condition.
- Glass visualization of CIRL/AM/PM/SOP/OPL/SMP SMED procedures for efficient on-job support.

Autonomous Maintenance

- Real-Time parameters monitoring with AR google visualization while patrolling.
- Google/Mobile technology visualization on how to solve anomalies.
- Google/Mobile technology visualization of malfunctioning parts condition.

Warehouse / Logistics

- AR-glasses visualization of loading/unloading procedure goods.
- AR-glasses/Mobile technology visualization of parts & stock comparison.

Professional Maintenance

- Glass/Mobile technology visualization of components life-span & maintenance-cycles.
- Glass/Mobile technology visualization of spare parts & stock comparison.
- Glass/Mobile technology visualization of AM/CIRL/PM status while patrolling on the shop floor.

Quality / Process Control

- Real time Glass/Mobile technology Visualization of Product Defects from cameras inspection systems

MACHINE VISION

According to the Automated Imaging Association (AIA), Machine Vision encompasses all applications in which a combination of hardware & software provide operational guidance to devices in the execution of their functions, based on the capture & processing of images.

While many of the computer vision technologies uses many of the same Algorithms and approaches in Academic, Educational and Governmental services, the constraints are many for the industrial application and for different reasons.

With our PATENTED machine learning Algorithms

Our AI will identify the pre-defined features of your product images

Then understand their interaction

And model them

No need for sampling less set of data for your performance validation

Thousands of precise models are created at super fast speed

To deliver better control of your products & activities

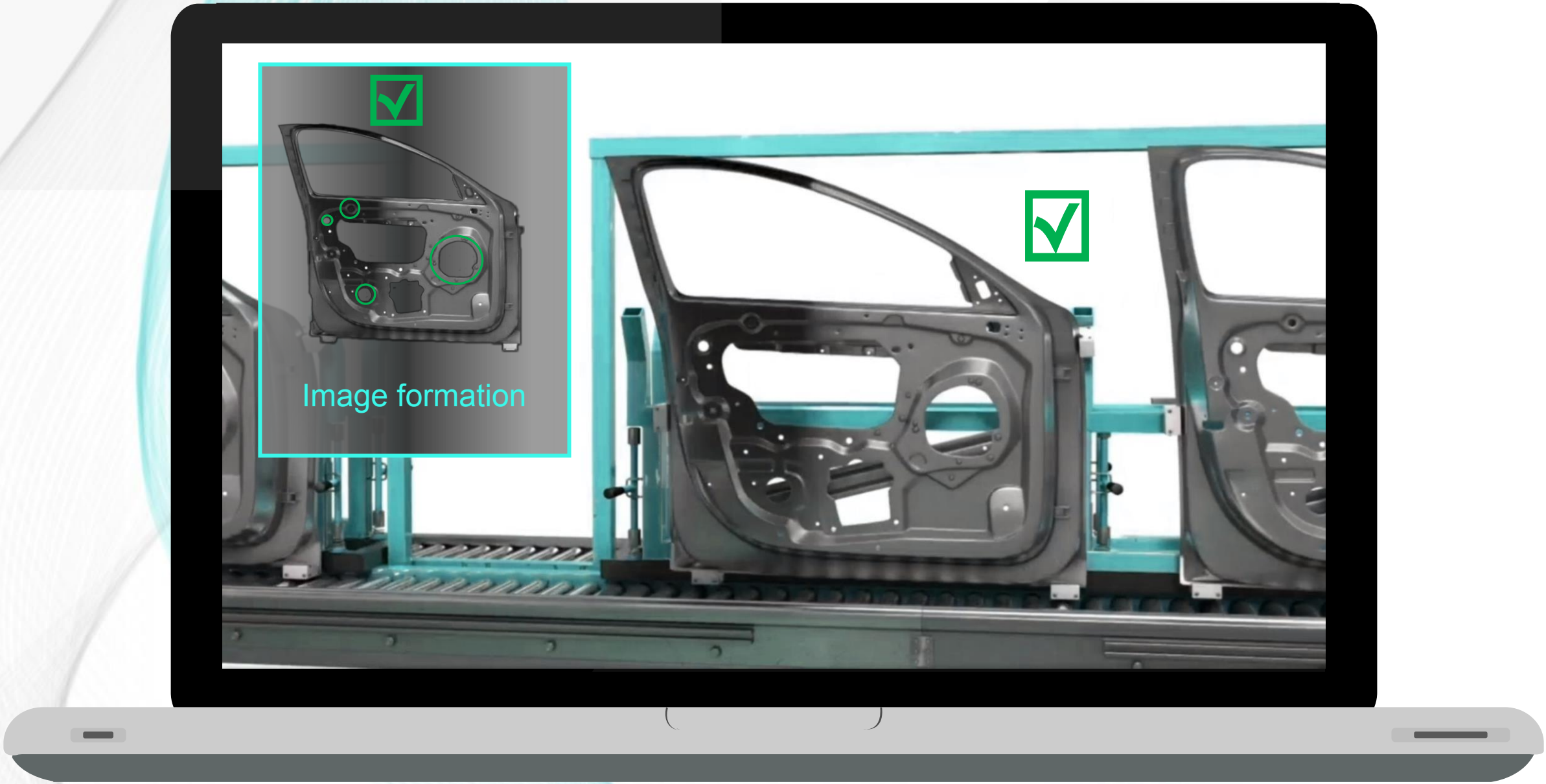
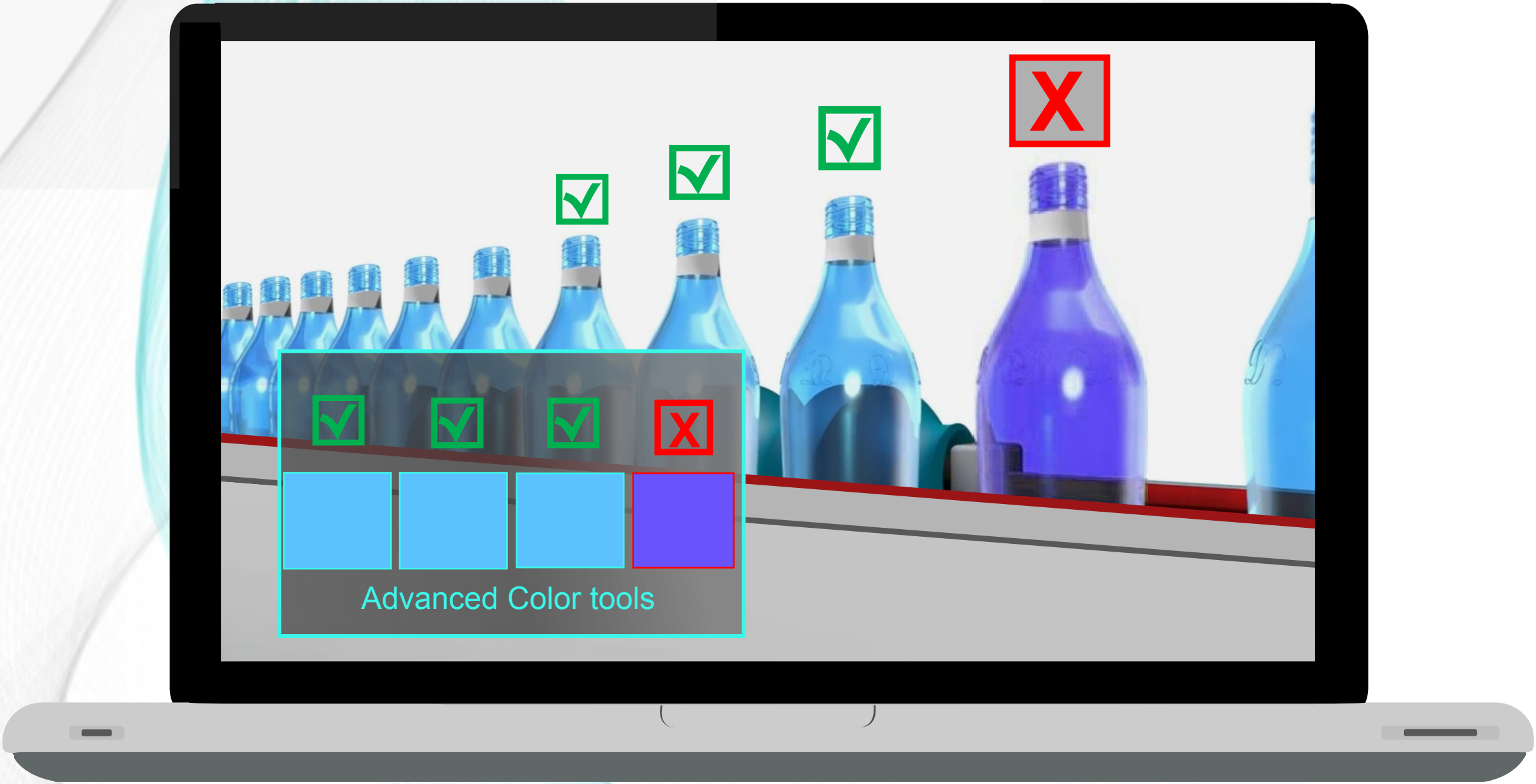
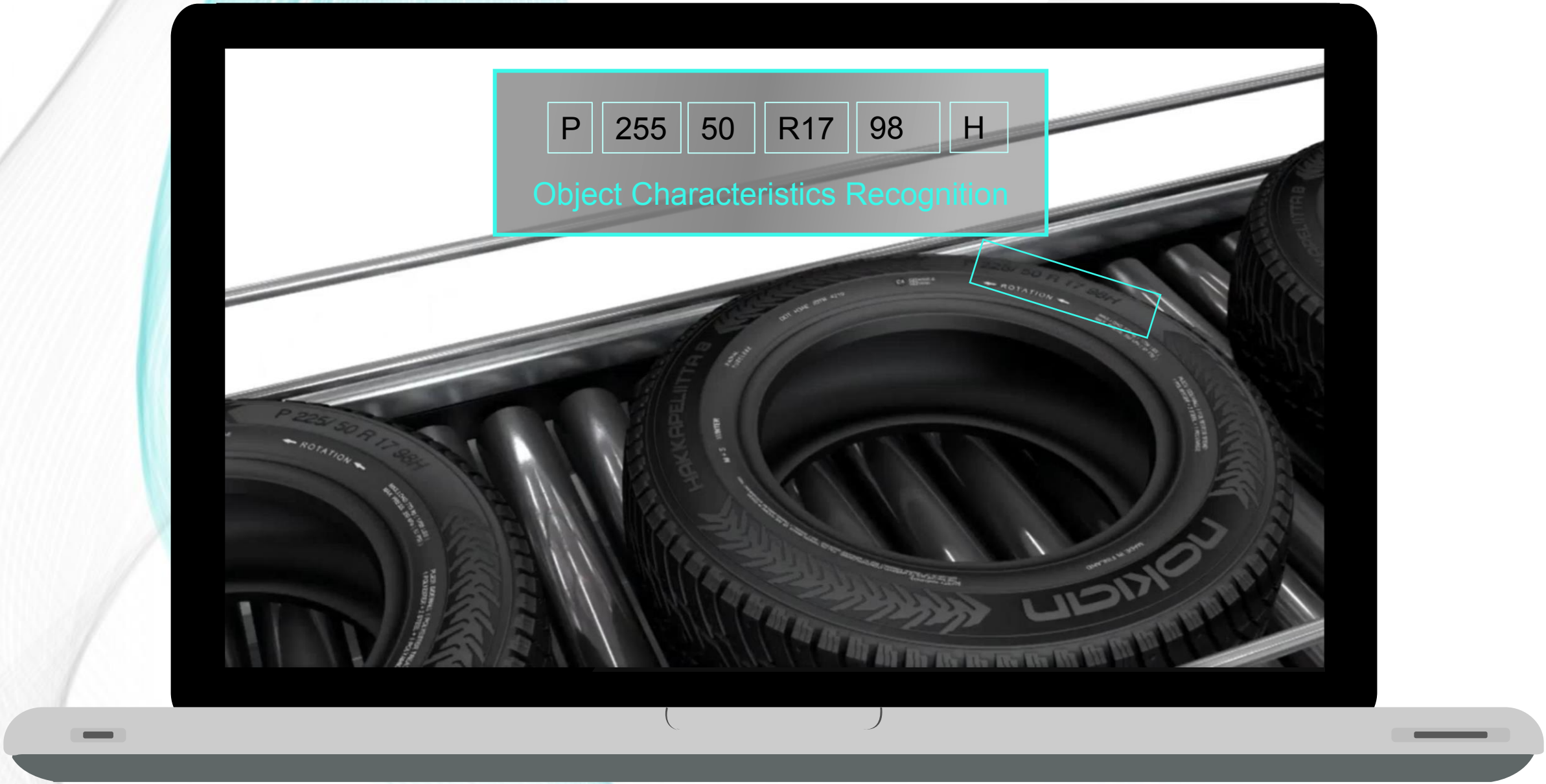


Image formation

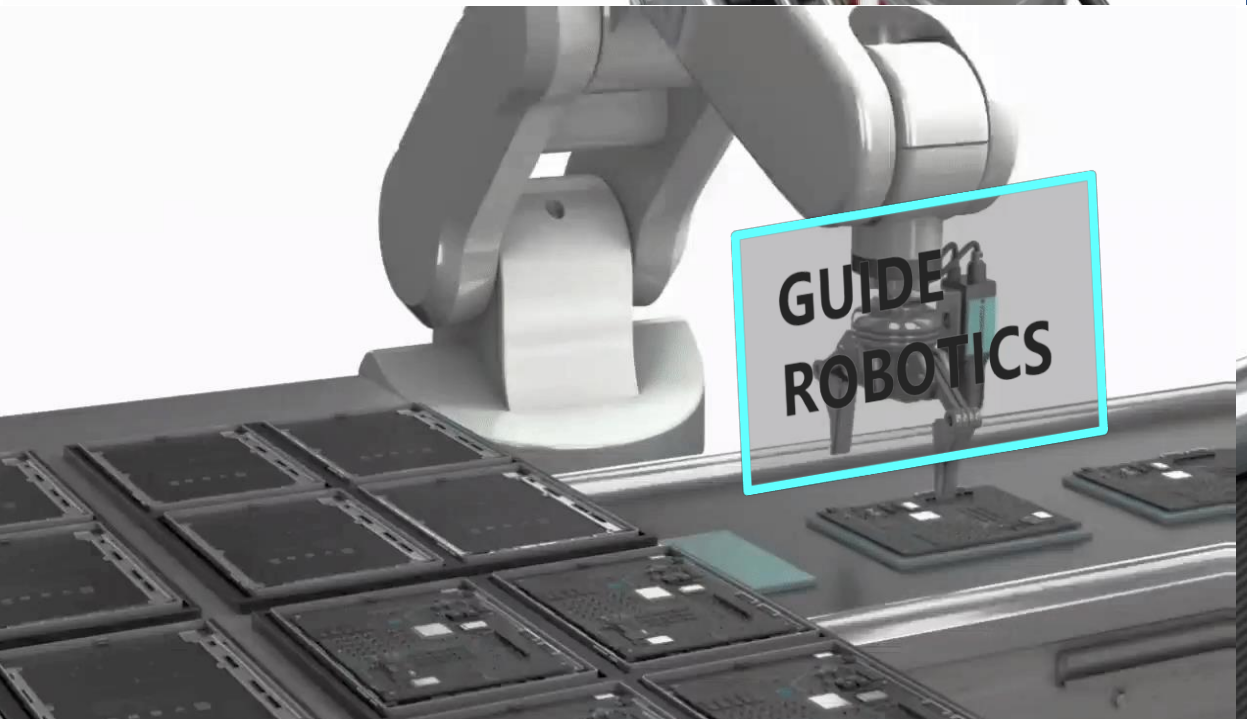

Advanced Color tools

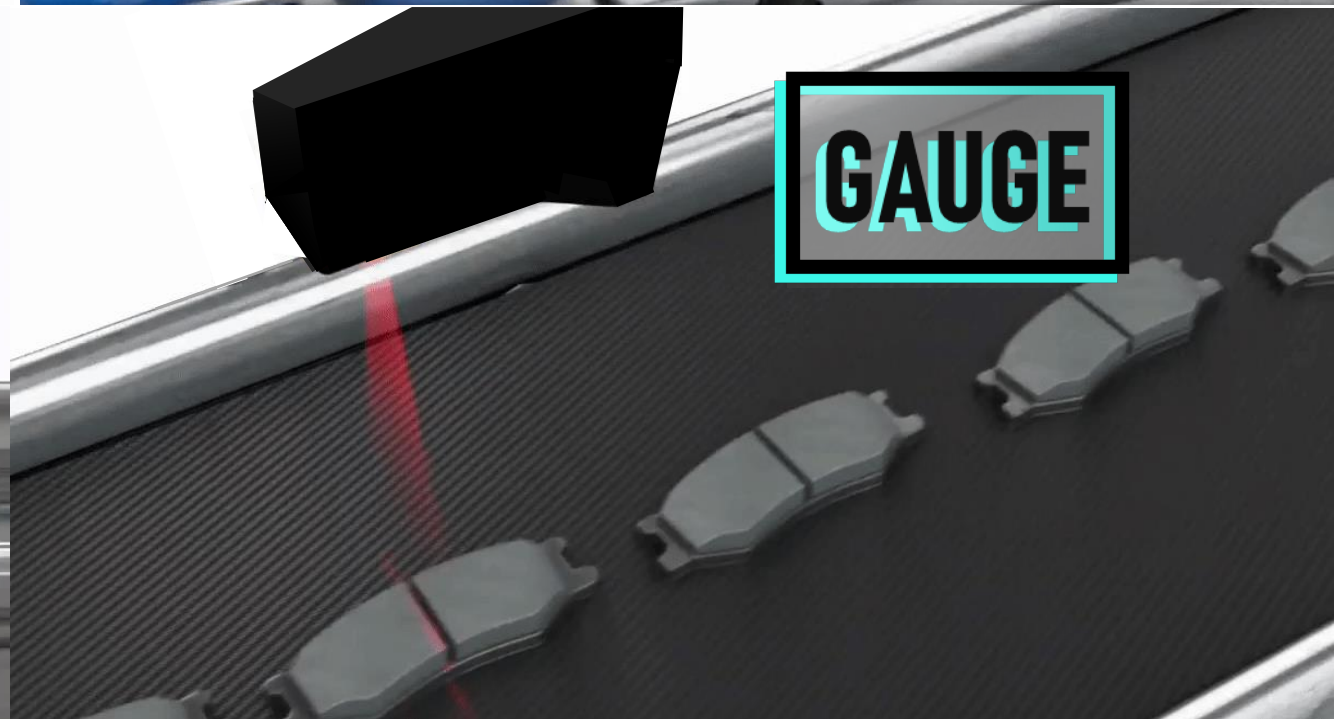

P
255
50
R17
98
H
Object Characteristics Recognition
ROTATION
ROTATION
HAKKAPELIITTA 8
nokian


X: 55mm
Y: 220mm
Z: 35mm
3D vision
measurements


IDENTIFY


INSPECT


GUIDE
ROBOTICS


GAUGE

INDUSTRY 4.0

MACHINE VISION is changing industries

Most manufacturers use Machine Vision as it is better suited to repetitive inspection tasks than humans and can inspect hundreds -if not thousands- parts per minute using Deep Learning AI models that continuously learn and instantly ACTS!

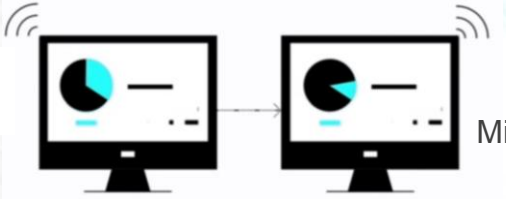
Quality Control

Optimize Quality with machine learning
Quality control for nonlinear defects pattern

Productivity

Maximize output with deep learning

Efficiency



Minimize waste while maximizing output

COMPUTER VISION

IT WORKS
THE WAY

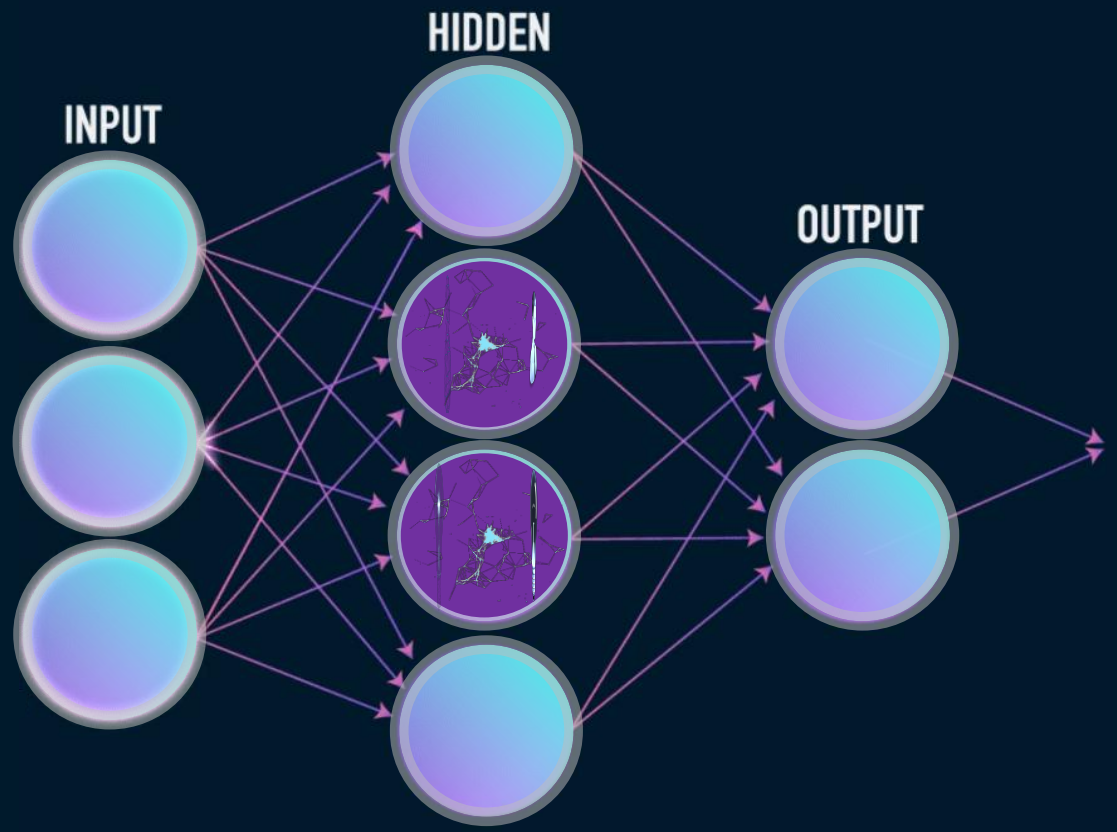
YOUR VISUAL
SYSTEM WORKS

CAPTURES & UNDERSTANDS

The useful information from images or a sequence of images

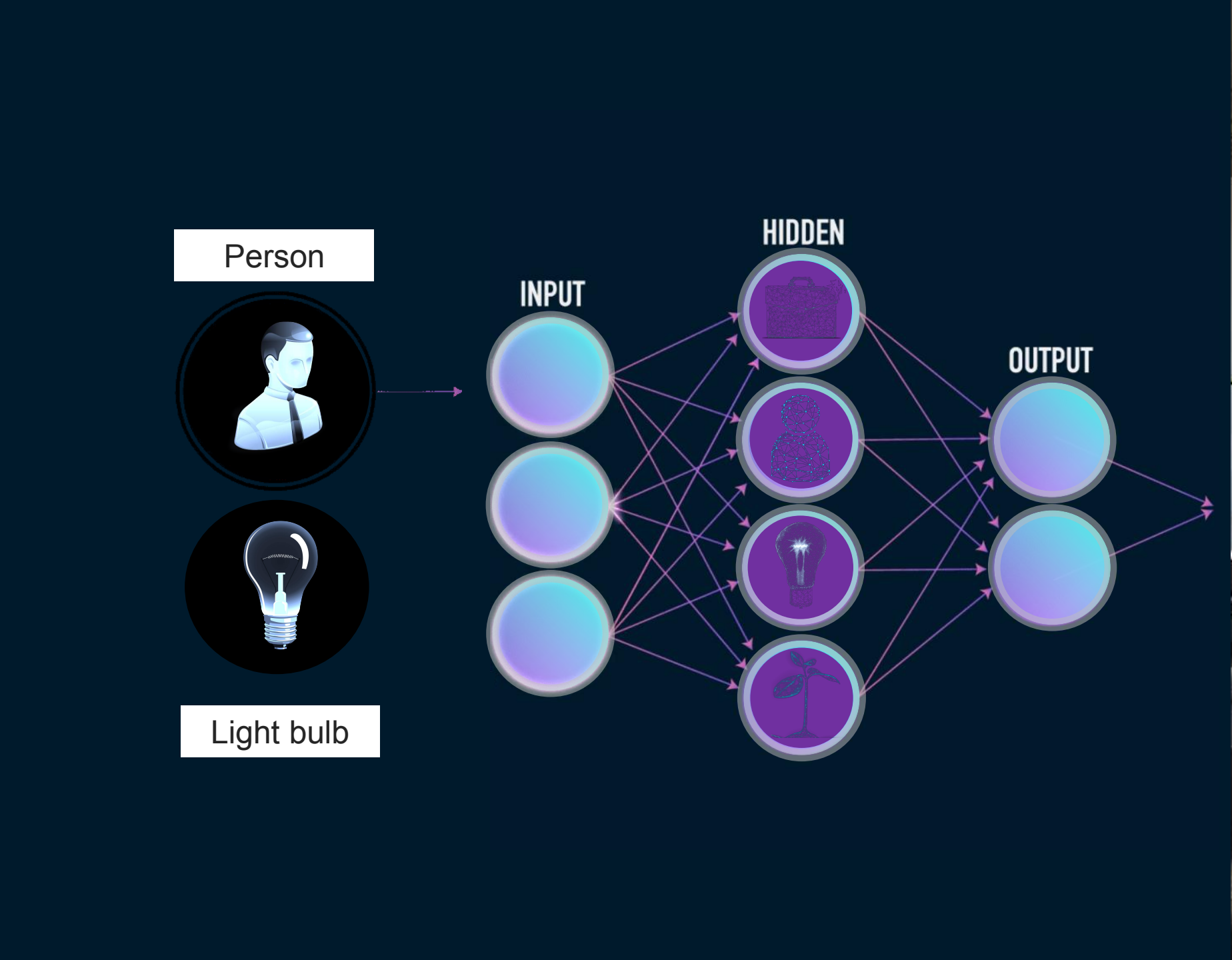
LEARNS

With AI neural networks that mimics how the human brain works

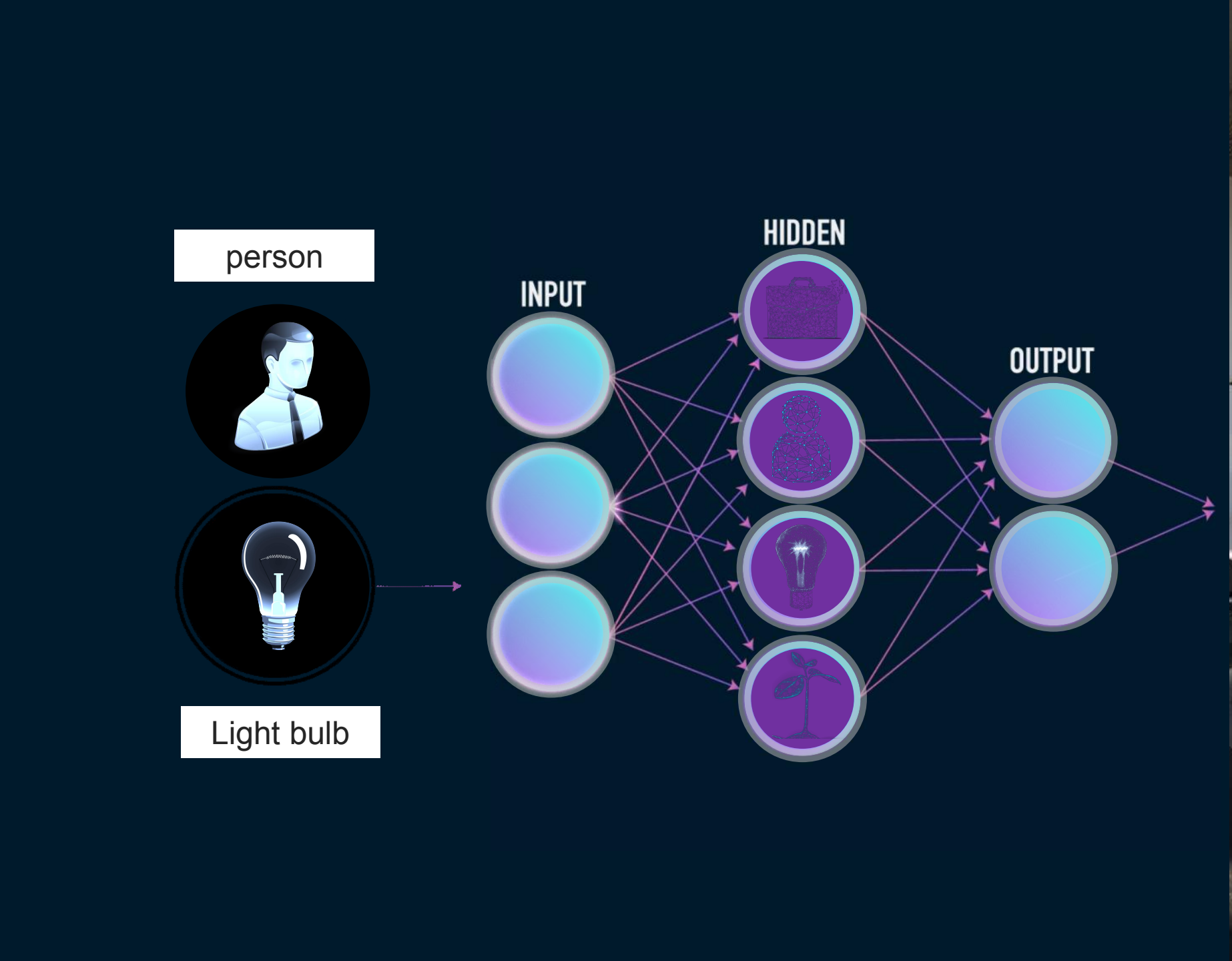


IDENTIFIES

Locates & tracks objects then react to what they are designed to do


Person
Light bulb
INPUT
HIDDEN
OUTPUT


person
person


person
Light bulb
INPUT
HIDDEN
OUTPUT


Light bulb
Light bulb
Light bulb
Light bulb
Light bulb

THE KEY APPLICATIONS OF COMPUTER VISION

OBJECTS

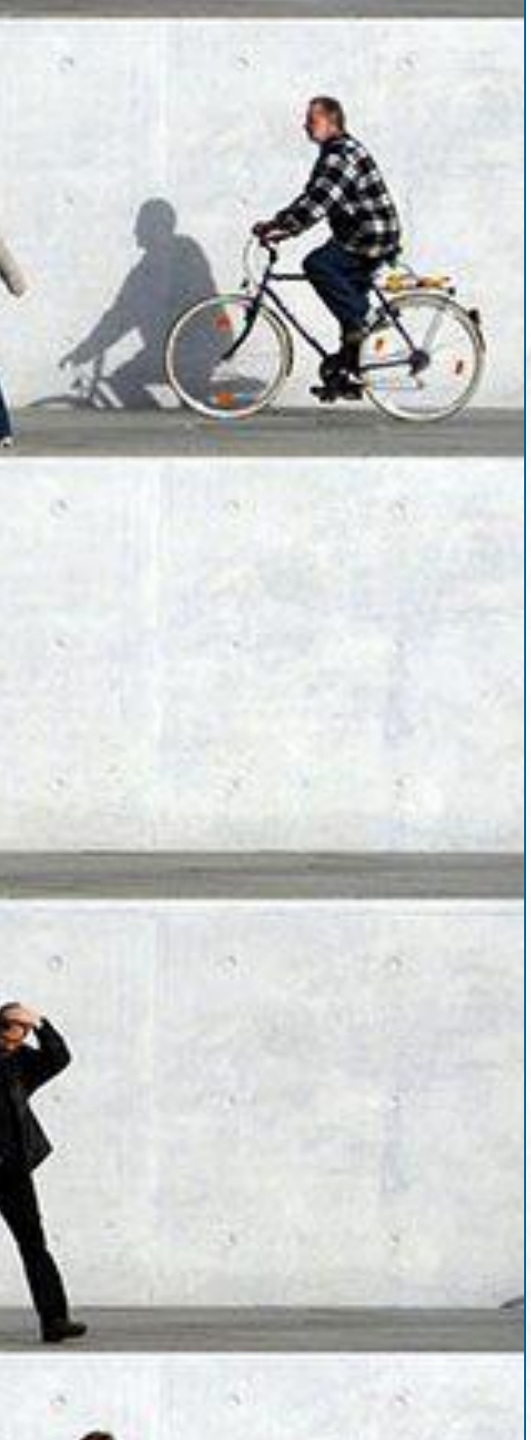
- Object Classification – What broad category of object is in the image?
- Object Identification – Which type of a given object is in the image?
- Object Verification – Is the object in the image?
- Object Detection – Where in the image is a specific object?
- Object Recognition – What objects are in the image and where are they?
- Object Tracking – Tracking a specific object across a series of images
- Semantic/Instance Segmentation – Breaking down the object into its components including counting

DOCUMENTS

- Object Character Recognition (OCR) – What is written in a particular image (i.e. text and numbers)
- Document Analysis – Analyse a document and provide me the information I enquired about

PEOPLE

- Facial Recognition – Identify gender, age, cultural appearance, emotions, etc.
- Action Recognition – Identifying a specific action/gesture of a person
- Mood and Sentiment - Forecasting someones reactions or current mood
- Crowd Dynamics – Counting people and tracking their density / direction

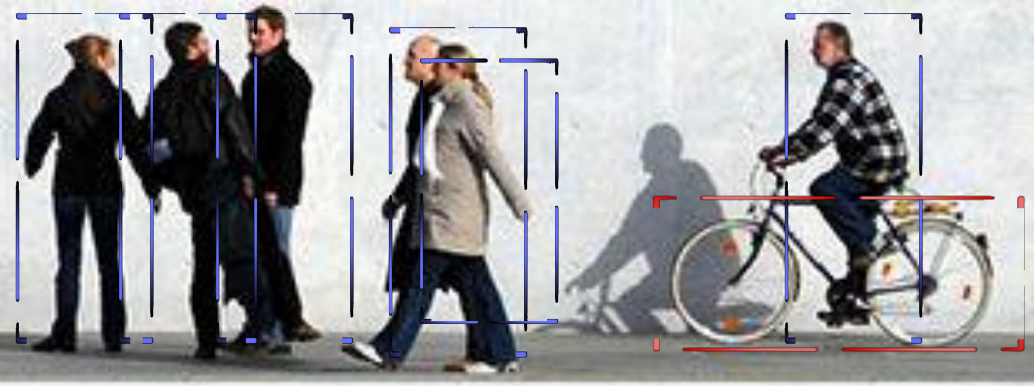


OBJECTS & PEOPLE DETECTION

KP – MODEL

For Safety Intelligence

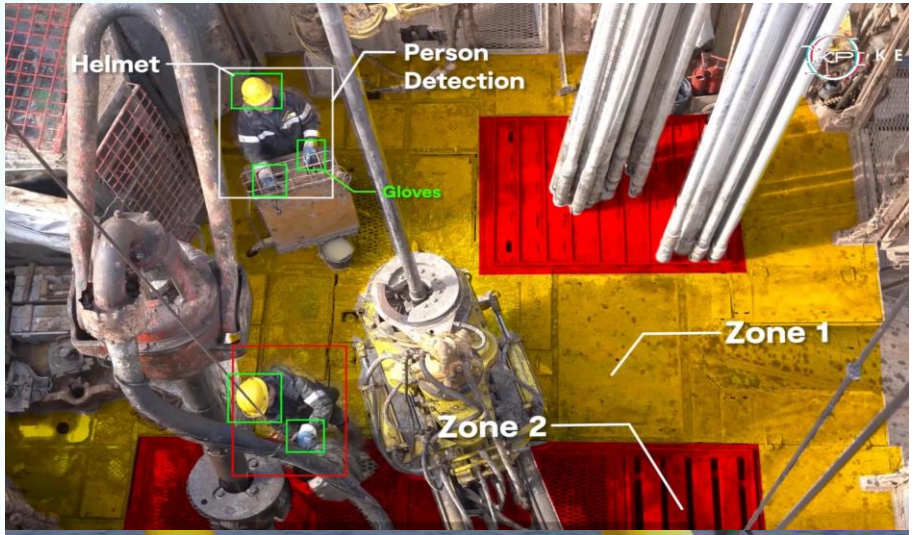
FOR EVERYDAY

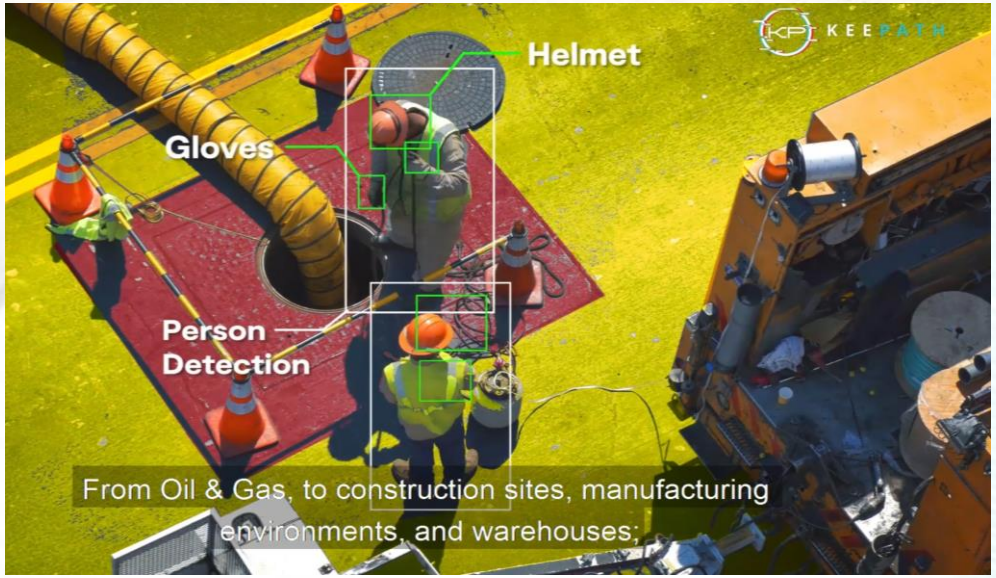


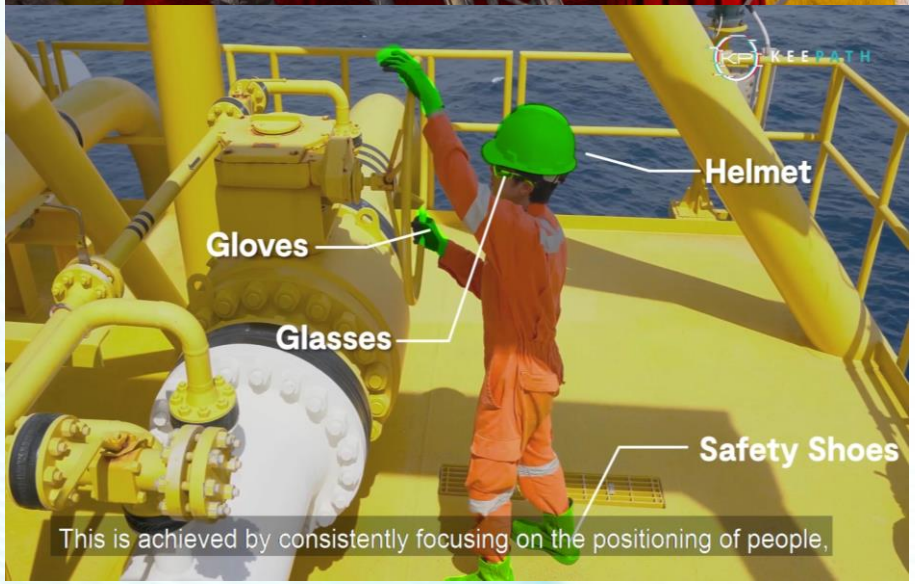
LIFE

ENVIRONMENT

OPTIMUM FOR MANUFACTURING ENVIRONMENTS







Computer vision is here

Using Deep Learning AI models for **People & Objects Detection** that continuously learn and instantly ACTS!

SAFETY

- Continuous PPE check use with Camera (CCTV)
- Machine Learning to prevent unsafe conditions
- Real-Time Cloud-based automatic analytics
- Instant alert systems for first responders to non-use of PPEs
- Pedestrian equipped with digital live map of forklift in movement
- Forklift embedded with screens showing data of humans in the area
- Detection of unsafe conditions and lift items
- Alarm System for excessive workload

Warehouse / Logistics

- Vocal/Maps interactive guide to find the SKU
- System for workload calculations and monitoring
- Production pace tuning according to buffer levels
- Automatic request on workplace device of switching workstation

Workplace organization

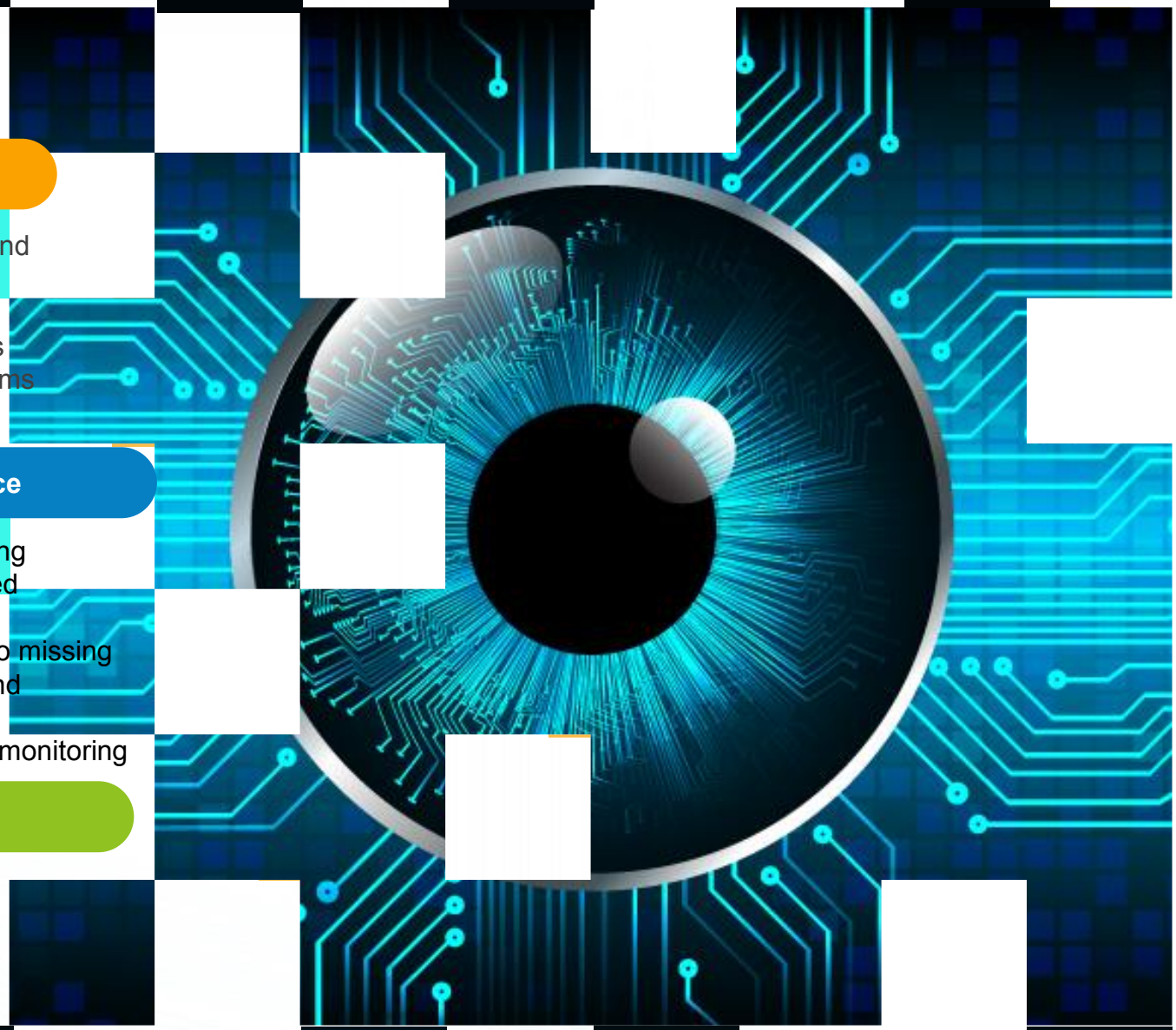
- Ergonomics monitoring and instant alarms
- Calculating current area situation vs organizations standard and instant alarms (ex. missing tools)

Autonomous maintenance

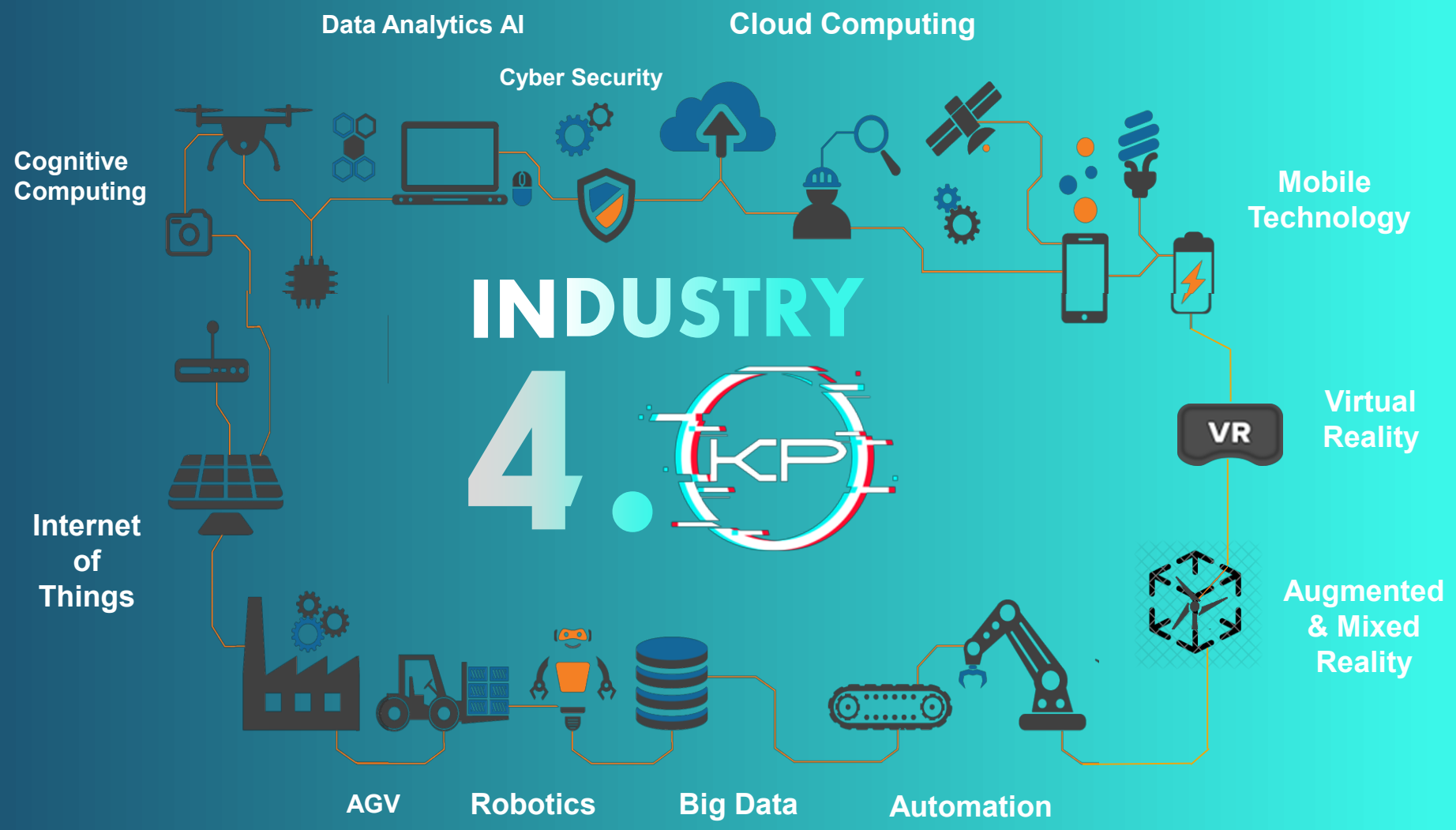
- Dirt source auto monitoring
- Auto reminders of planned CIRL/AM/PM activities
- Automatic Warning due to missing of the basic conditions and messaging
- Continuous parts / stock monitoring

Environment

- Monitoring and automatic warning with workplace device of abnormal condition of the component



KEEPATH



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