TRIFORK.

AI use cases in manufacturing, supply chain & operations

Trifork has identified 29 high-value AI use cases, mapped by impact and ease of implementation across **Computer Vision, Predictive AI, and Generative AI.**

Computer vision

Computer vision enables machines to capture and interpret visual data at scale, detecting objects, patterns, and anomalies to power industrial applications and drive smarter, more efficient decisions.

Predictive AI

Predictive AI analyzes large datasets to uncover patterns and forecast risks, such as customer churn, equipment failure, or supply-chain disruption, with greater speed and accuracy.

Generative AI

Generative AI uses deep-learning models to generate content, text, images, audio, video, or code, accelerating creativity and personalization while raising challenges around accuracy, bias, and intellectual property.

By the numbers: How AI is transforming manufacturing performance

$7.6B

Projected AI market value in manufacturing (2025)

39%

Of companies report EBIT impact of AI at enterprise level

16%

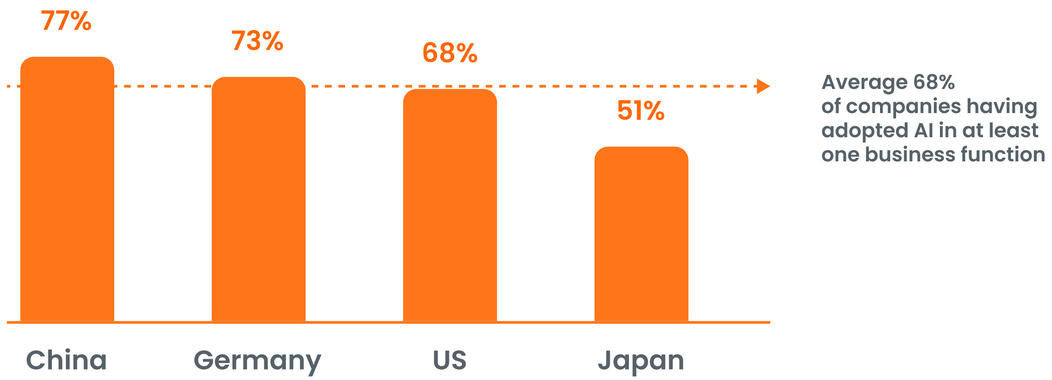
Actually hit their AI targets

14%

Savings on addressed manufacturing cost from early adopters

AI around the globe: Adoption trends across countries and industries

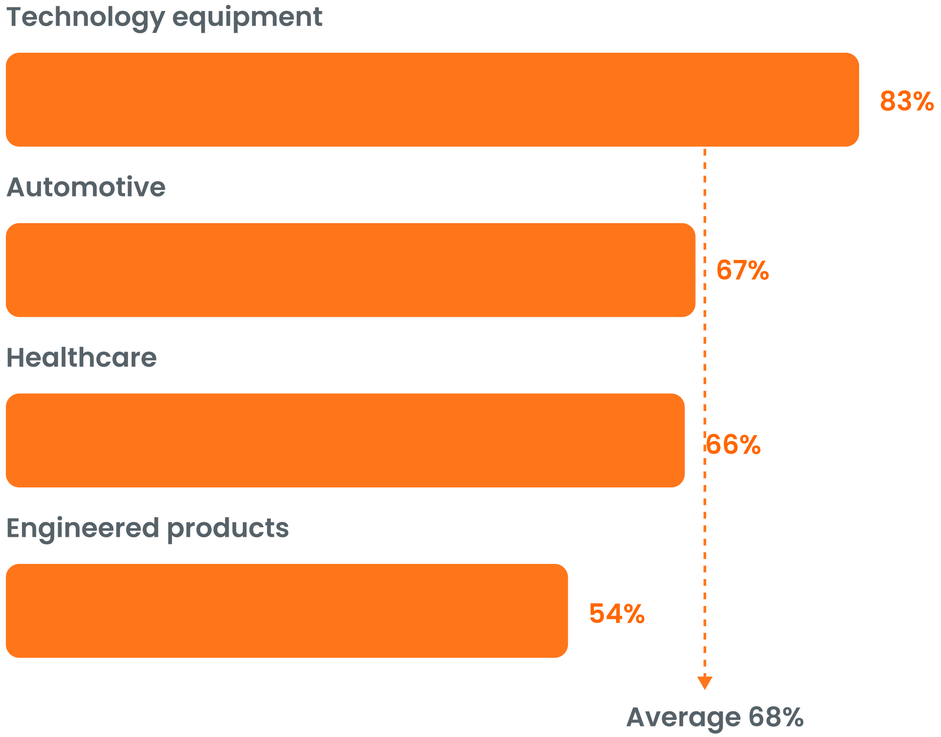
Share of companies having fully implemented AI in at least one business function, by country (%)



89% average

Share of companies planning to implement (or further implement) AI in the next three years, by country (%)

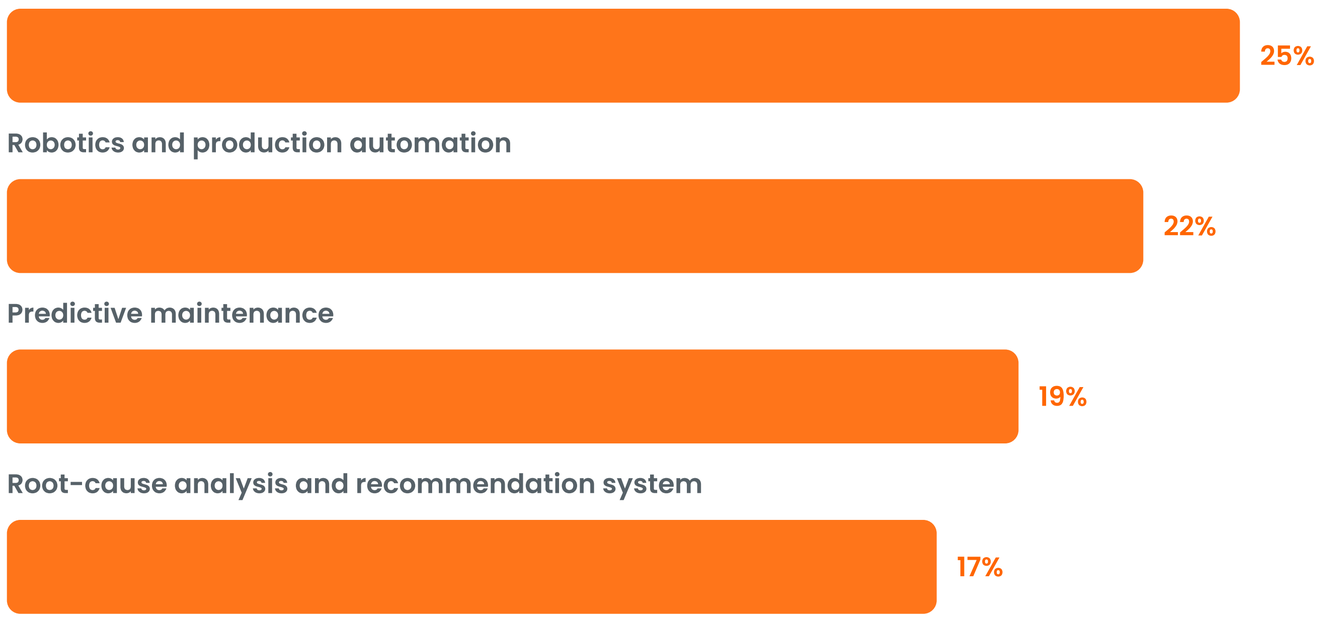
Share of companies having fully implemented AI in at least one business function, by industry (%)



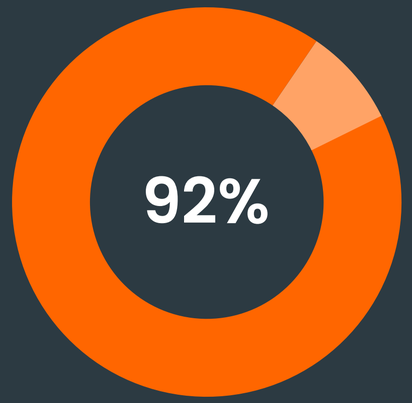
Source: BCG global AI survey, 2023.

Smart manufacturing: How AI powers core operations

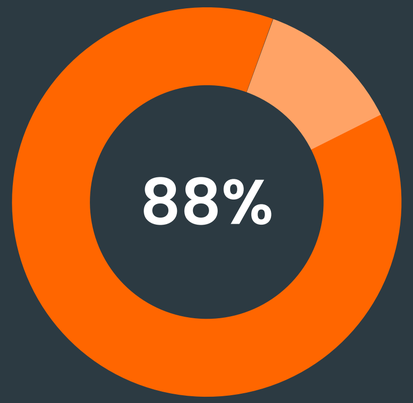
Share of companies having the AI application fully rolled out (%)



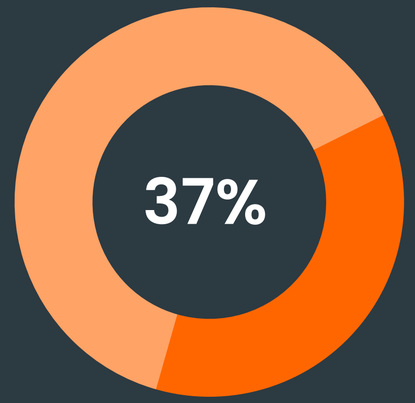
Bridging the gap: Why many manufactures miss their AI targets



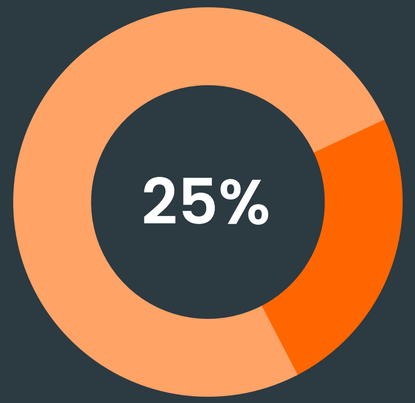
Lack of an AI-related people and organization foundation



Lack of an AI-related technology infrastructure



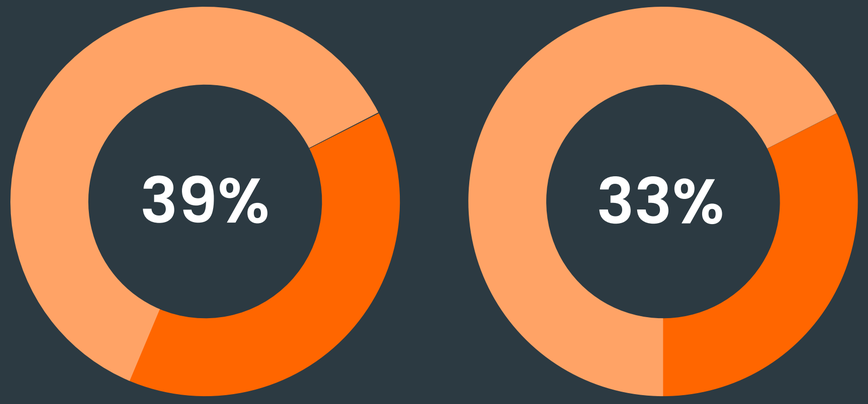
Implemented AI pilots not easily scalable because of too much customization



Implemented AI pilots not delivering the expected impact

Scaling roadblocks: What holds manufacturers back from enterprise-wide AI

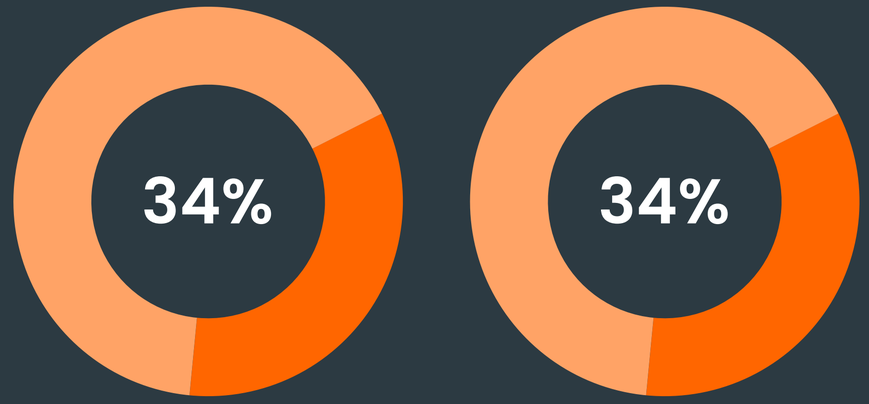
People and organization



Lacking digital skills and capabilities

Lacking AI strategy and roadmap

Technology infrastructure



Lacking data processing

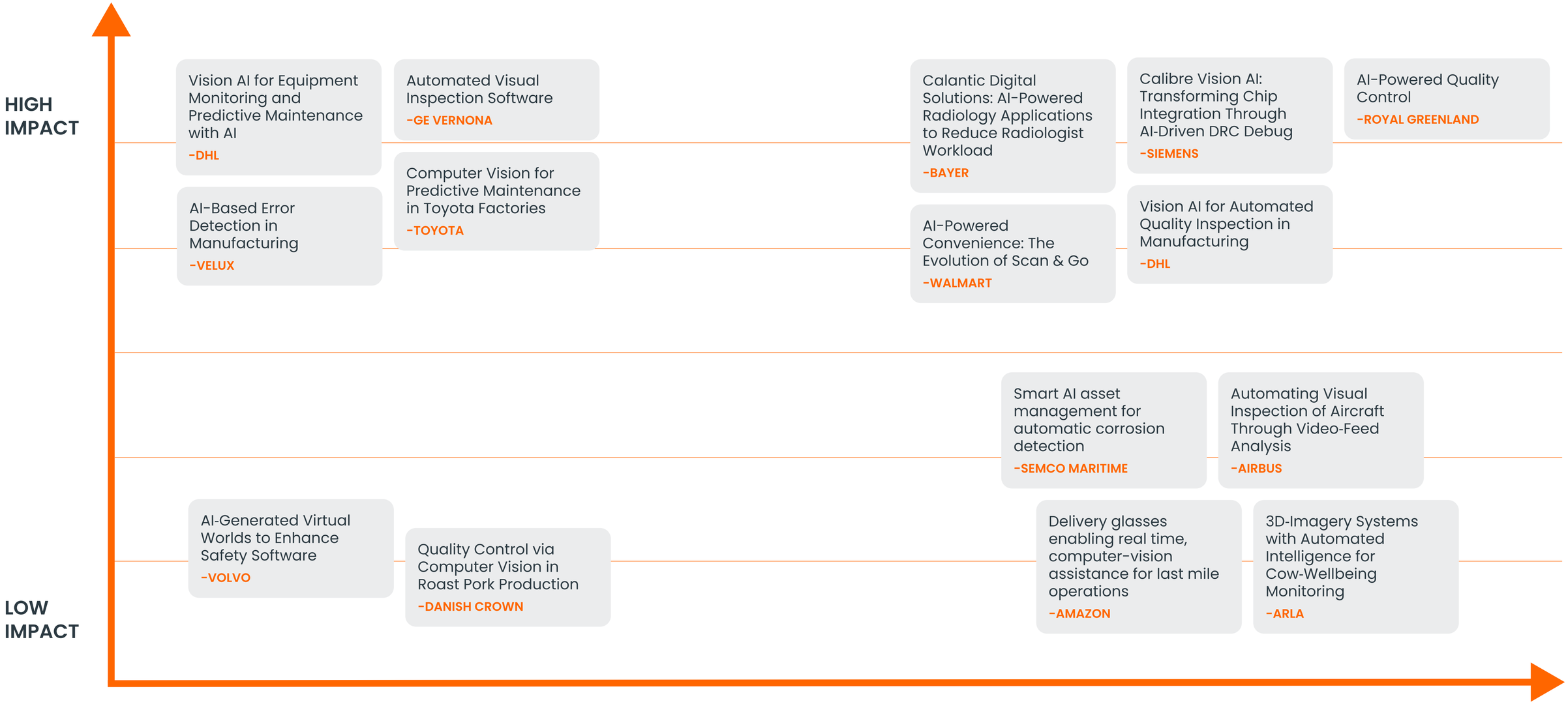
Lacking visualization infrastructure

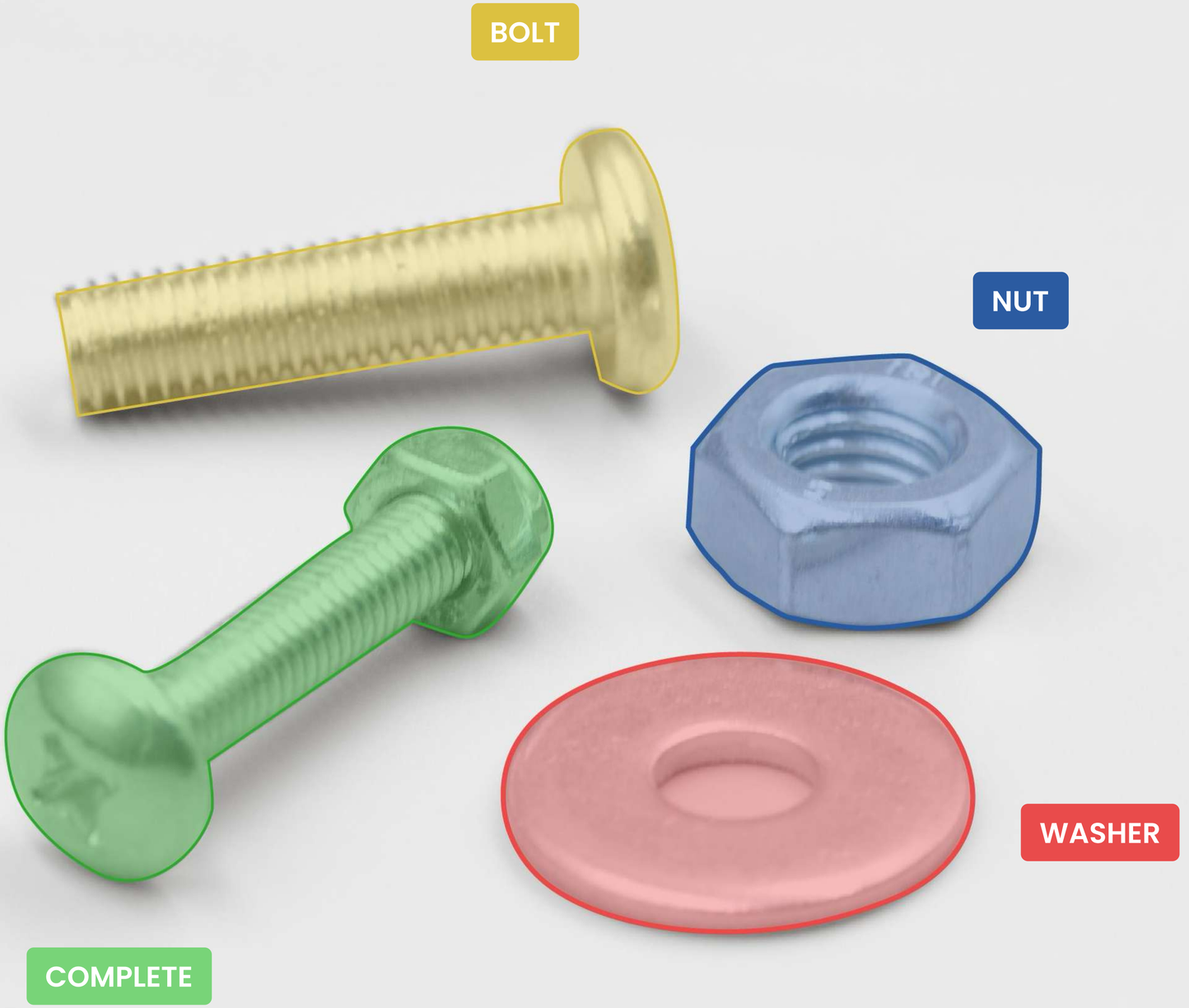
“Across manufacturing, supply chain and logistics, AI is becoming a cornerstone of modern operations. The real breakthrough happens when companies apply AI to concrete challenges.”

Jeppe Hesseldal Otten

Director, Enterprise AI

Computer vision cases




BOLT
NUT
WASHER
COMPLETE

Big bets

These use cases are classified as "big bets" due to their potential to significantly improve core operations. They offer high impact but require strong data foundations and modern, integrated systems to succeed.

GE VERNOVA

VELUX®

DHL

Automated visual inspection software

TECHNOLOGY

Autonomous Inspection is a cloud-based computer vision system that analyzes camera feeds, converts visuals into time-series data, and delivers actionable alerts based on real-time insights

COMPANY

GE Vernova

PHASE

Pilot / Early operational deployment

Challenge

Traditional asset inspection workflows in the energy and industrial sectors are highly manual, resource-intensive, slow to scale and often involve safety risks (e.g., inspections at height or in hazardous zones). Such inspections also struggle to cover dispersed assets and produce consistent, high-quality data.

Solution

Autonomous Inspection automates image capture and anomaly detection, converting camera feeds into structured data and triggering alerts or work orders for remote, scalable asset-health monitoring.

Impact

The system boosts factory uptime, improves quality by catching issues earlier, reduces downtime risk and supports more efficient, proactive maintenance and operations.

GE VERNOVA

AI-based error detection in manufacturing

TECHNOLOGY

A computer vision AI system that inspects wooden parts on the production line, detecting color and structural defects in real time via edge-to-cloud processing.

COMPANY

VELUX

PHASE

POC

Challenge

Manual quality assurance of wooden components was time-consuming, inconsistent, and limited by human subjectivity. The natural variation in wood colour and structure made it difficult to apply traditional rule-based inspection, leading to inefficiencies and higher costs in maintaining the company's strict quality standards.

Solution

VELUX and Trifork built an AI-based defect detection system that analyzes multi-angle production images in real time, distinguishing natural variations from true defects to standardize quality control and free operators for higher-value tasks.

Impact

Inspection speed and accuracy increased dramatically, reducing faulty components and ensuring consistent product quality across production sites.

VELUX®

Vision AI for equipment monitoring and predictive maintenance with AI

TECHNOLOGY

Computer vision + ML monitor equipment in real time, detecting early wear and anomalies to enable predictive maintenance before failures occur.

COMPANY

DHL

PHASE

Operational / Scaling Up

Challenge

Manufacturers often rely on scheduled or reactive maintenance, which makes it difficult to detect early warning signs of mechanical failure. Minor issues that go unnoticed can lead to costly downtime, reduced output, and inefficient resource use, particularly in high-speed, complex production environments where continuous monitoring is difficult to achieve manually.

Solution

DHL's Vision AI platform integrates visual sensors and AI analytics into the production line to monitor equipment automatically. The system identifies deviations from normal operation and provides early alerts so maintenance can be scheduled before breakdowns occur. This predictive approach reduces reliance on manual inspections, optimises repair schedules, and helps maintain consistent production flow.

Impact

The system minimises unplanned downtime, reduces maintenance costs, and improves equipment reliability, leading to higher productivity and smoother operations.

Computer vision for predictive maintenance in toyota factories

TECHNOLOGY

Toyota uses AI-powered computer vision systems, through edge-deployed 3D cameras and processors, to monitor factory floor operations and equipment states in real time

COMPANY

Toyota

PHASE

Operational / Scaling Up

Challenge

Manual inspections and traditional sensor-only maintenance regimes made it difficult to detect subtle inefficiencies, wearable equipment misalignments, mobility issues or impending machine failures before they caused downtime or quality issues.

Solution

Toyota installed hundreds of edge AI devices in its North American manufacturing plants. These systems continuously capture and analyse human motion and machine activity on the line, detect anomalies (in ergonomics, assembly work, machine behaviour) and trigger interventions to prevent defects, downtime and worker injury.

Impact

Reduced unplanned downtime and improved quality while enhancing safety and productivity.

Quick wins

These use cases are considered "quick wins" as they offer high impact with relatively easy implementation. They can be deployed rapidly, require minimal system changes, and deliver immediate value to operations and customer experience.

Calantic digital solutions: AI-powered radiology applications to workload

TECHNOLOGY

AI radiology tools that automate imaging workflows and assist detection by analyzing scans for patterns and anomalies that may be missed manually.

COMPANY

Bayer

PHASE

Operational / Scaling Up

Challenge

Radiologists face high workloads and time pressures, making it difficult to handle increasing patient volumes while maintaining accuracy and speed in diagnoses. Manual imaging processes are time-consuming and limit the capacity to deliver timely, treatment-critical insights.

Solution

Bayer deployed AI-powered applications to automate routine image analysis tasks, highlight areas of concern, and accelerate diagnostic workflows. By integrating seamlessly into existing radiology systems, the solution provides actionable insights directly in the radiologist's workflow, enabling faster and more precise decisions.

Impact

Reduced radiologist workload, faster image analysis, improved detection accuracy, more timely diagnoses, and enhanced patient care by enabling radiology teams to handle higher patient volumes efficiently.

Calibre vision AI transforming chip integration through AI-driven DRC debug

TECHNOLOGY

Calibre Vision AI uses artificial intelligence and advanced visualization to rapidly analyze and cluster millions of design rule check (DRC) violations for faster, more efficient chip verification

COMPANY

Siemens

PHASE

Operational / Scaling Up

Challenge

Modern integrated circuit (IC) designs generate billions of DRC violations at advanced process nodes. Traditional tools struggle with the data scale, slow loading times, and limited insight into root causes, hindering efficient design closure.

Solution

Siemens implemented Calibre Vision AI, leveraging AI algorithms and a compressed OASIS results format to cluster violations into meaningful groups (“Signals”), visualize patterns across entire chips, and support seamless collaboration among design teams. The system also integrates with existing Calibre and layout environments, enabling context-aware debugging and streamlined issue resolution.

Impact

Faster verification cycles, reduced debug time, and improved collaboration.

SIEMENS

AI-powered quality control

TECHNOLOGY

An AI-driven computer vision system on SAP BTP that analyzes shrimp images to automatically assess quality and deliver real-time results to lab technicians

COMPANY

Royal Greenland

PHASE

Operational / Scaling Up (proof of concept validated; deployment across sites underway)

Challenge

Manual sampling was slow and subjective, limiting batch checks and creating inconsistent grading across factories, which made global quality standards and data sharing difficult.

Solution

Trifork and Royal Greenland co-developed an AI-powered inspection tool that uses image recognition to evaluate shrimp samples, seamlessly connecting to SAP systems for data processing and reporting. The platform continuously improves through new data and feedback, enabling adaptive learning that refines accuracy over time and enhances cross-site comparability of results.

Impact

Inspection coverage increased from ~10 % to ~30 %, improving efficiency and consistency across production sites.

BY APPOINTMENT TO THE ROYAL DANISH COURT

Royal Greenland®

AI-powered convenience: the evolution of scan & go

TECHNOLOGY

A computer vision–based mobile checkout system that verifies cart contents at store exits and uses generative AI to enhance engagement, ensuring accurate, seamless, theft-prevented shopping.

COMPANY

Walmart

PHASE

Operational / Scaling (pilot of exit computer-vision system in ~10 Sam's Club locations, with planned nationwide rollout).

Challenge

Manual exit checks in the Scan & Go flow created delays and inconsistency, slowing traffic and reducing convenience while still requiring staff effort to balance speed and loss prevention.

Solution

Sam's Club introduced an AI-powered "Seamless Exit" that uses computer vision to compare cart contents with digital receipts in real time. This automation removes the need for manual checks, identifies discrepancies instantly, and allows associates to intervene only when needed, making the checkout and exit experience faster and more efficient.

Impact

The AI-powered system speeds up checkout, improves accuracy, and enhances customer convenience, driving strong adoption with over 9.6 million app downloads to date.

Walmart

Vision AI for automated quality inspection in manufacturing

TECHNOLOGY

Computer vision and deep learning automate quality inspection in manufacturing, detecting subtle defects and handling multiple inspection tasks across production lines.

COMPANY

DHL

PHASE

Operational / Scaling Up

Challenge

Manual quality inspections in manufacturing are labour-intensive, time-consuming, and subject to human error. Identifying minute defects or inconsistencies at high production speeds is difficult, often leading to reduced quality consistency and higher operational costs.

Solution

DHL's Vision AI system integrates computer vision and deep learning technologies to continuously monitor production lines. Cameras capture high-resolution images that are analysed by AI models trained to detect specific defects, such as cracks, misalignments, or surface flaws. The system is adaptable, enabling retraining for new inspection tasks and simultaneous monitoring of multiple production processes.

Impact

The system improves inspection accuracy, reduces defects, and accelerates production processes. It enhances quality consistency, minimises errors, and provides valuable data for ongoing process optimisation.


ECNIC
TECNIC
TECNIC
Producció

Tactical opportunities

These use cases are relatively easy to implement with minimal disruption to existing systems, but offer limited impact on core operations. They are valuable for experimentation, brand building, or enhancing customer touchpoints.

AIRBUS amazon Arla SEMCO maritime

Automating visual inspection of aircraft through video-feed analysis

TECHNOLOGY

AI computer vision analyzes live assembly line video to verify major task completion and large component installation, using deep learning models trained on over a million labeled examples.

COMPANY

Airbus

PHASE

Pilot / Early operational deployment

Challenge

Manual judgement and logging in aircraft final assembly made step verification slow, inconsistent, and prone to documentation and traceability errors.

Solution

Airbus deployed an AI video-analysis platform that automatically detects and timestamps assembly milestones, logs them into production systems, and scales traceability from hundreds to millions of images with reduced manual effort.

Impact

The AI-enabled inspection and logging system enables faster assembly step completion, higher traceability of installation work, and fewer human errors, resulting in improved manufacturing efficiency and quality.

AIRBUS

Delivery glasses enabling real time, computer-vision assistance for last mile operations

TECHNOLOGY

Smart glasses with AI and computer vision that give drivers hands-free navigation, package scanning, and proof-of-delivery in their field of view.

COMPANY

Amazon

PHASE

Pilot / early operational deployment in North America.

Challenge

Drivers juggle devices, navigation, and packages, especially in the last 100 yards, causing slowdowns, higher cognitive load, and more delivery errors.

Solution

The smart glasses activate on arrival and provide hands-free package lookup, navigation, scanning, and proof-of-delivery, reducing errors and keeping drivers focused and efficient.

Impact

The new wearable system accelerates delivery workflows, reduces reliance on handheld phones, enhances driver focus and safety, and supports faster, more accurate deliveries in busy last-mile operations.

amazon

3D-imagery systems with automated intelligence for cow-wellbeing monitoring

TECHNOLOGY

3D imagery systems using computer vision and automated intelligence to monitor each cow's body condition, mobility, and weight before changes are visible to the human eye.

COMPANY

Arla Foods UK

PHASE

Pilot

Challenge

Traditional welfare monitoring of dairy cows relied on visual inspections and periodic checks, making early detection of health or mobility issues difficult. Delays in identifying problems could reduce milk yield, increase medication use, and negatively affect fertility rates.

Solution

Arla UK deployed a 3D-imagery system that continuously scans cows in motion, using AI to compare each animal's current state to historical data and automatically flag subtle changes. This enables farmers to intervene earlier in health or mobility issues, optimise production, and improve overall herd wellbeing.

Impact

Early detection of cow-health issues, improved mobility and fertility, reduced medication use, better milk production, and enhanced welfare tracking across the herd.

Smart AI asset management for automatic corrosion detection

TECHNOLOGY

An AI asset-inspection system that uses computer vision to detect corrosion automatically and integrates image, sensor data, and analytics into existing monitoring workflows.

COMPANY

Semco Maritime

PHASE

Operational / Scaling Up

Challenge

Manual inspections were slow, inconsistent, and costly, making it hard to monitor corrosion continuously across large, distributed assets, especially in harsh offshore conditions where risks could go unnoticed between scheduled checks.

Solution

Semco Maritime and Trifork built an AI platform that detects corrosion from visual and sensor data, feeds results into asset-management workflows, and enables predictive maintenance with reduced on-site inspections.

Impact

Improved early-detection of corrosion, reducing inspection effort and enabling more proactive maintenance of critical infrastructure.

SEMCO maritime


BRÆNDBARE
VÆSKER
3
CONTAINER
UN 1202

Long shots

These use cases often involve high cost and complexity, with limited return on investment or unclear operational value. They can drain resources without delivering meaningful impact if not carefully scoped or aligned with business needs.

AI-generated virtual worlds to enhance safety software

TECHNOLOGY

High-fidelity 3D virtual environments (using Gaussian splatting) that turn real sensor data into realistic scenes for training and validating driver-assistance and safety systems at scale.

COMPANY

Volvo Cars

PHASE

Pilot / Early operational deployment

Challenge

Real-world testing can’t reliably capture rare, unpredictable edge-case scenarios, making it slow, costly, and difficult to fully validate advanced driver-assistance safety systems.

Solution

Volvo generates virtual worlds from real incident data and modifies them to expose safety systems to rare and risky scenarios, enabling faster iteration, earlier issue detection, and more robust performance before real-world deployment.

Impact

This approach lets Volvo speed up training and validation of its driver-assistance and safety systems, improving their reliability and responsiveness in previously under-tested situations, while reducing real-world testing time and cost.

Quality control via computer vision in roast pork production

TECHNOLOGY

A computer-vision system that captures images of roast pork, uses ML to assess visual quality indicators, and classifies products into quality grades.

COMPANY

Danish Crown

PHASE

Pilot / Proof-of-Technology

Challenge

Roast pork quality is hard to standardize because of natural variation and subjective visual grading, making manual inspection slow, inconsistent, and difficult to scale without large, well-labeled training data for reliable AI models.

Solution

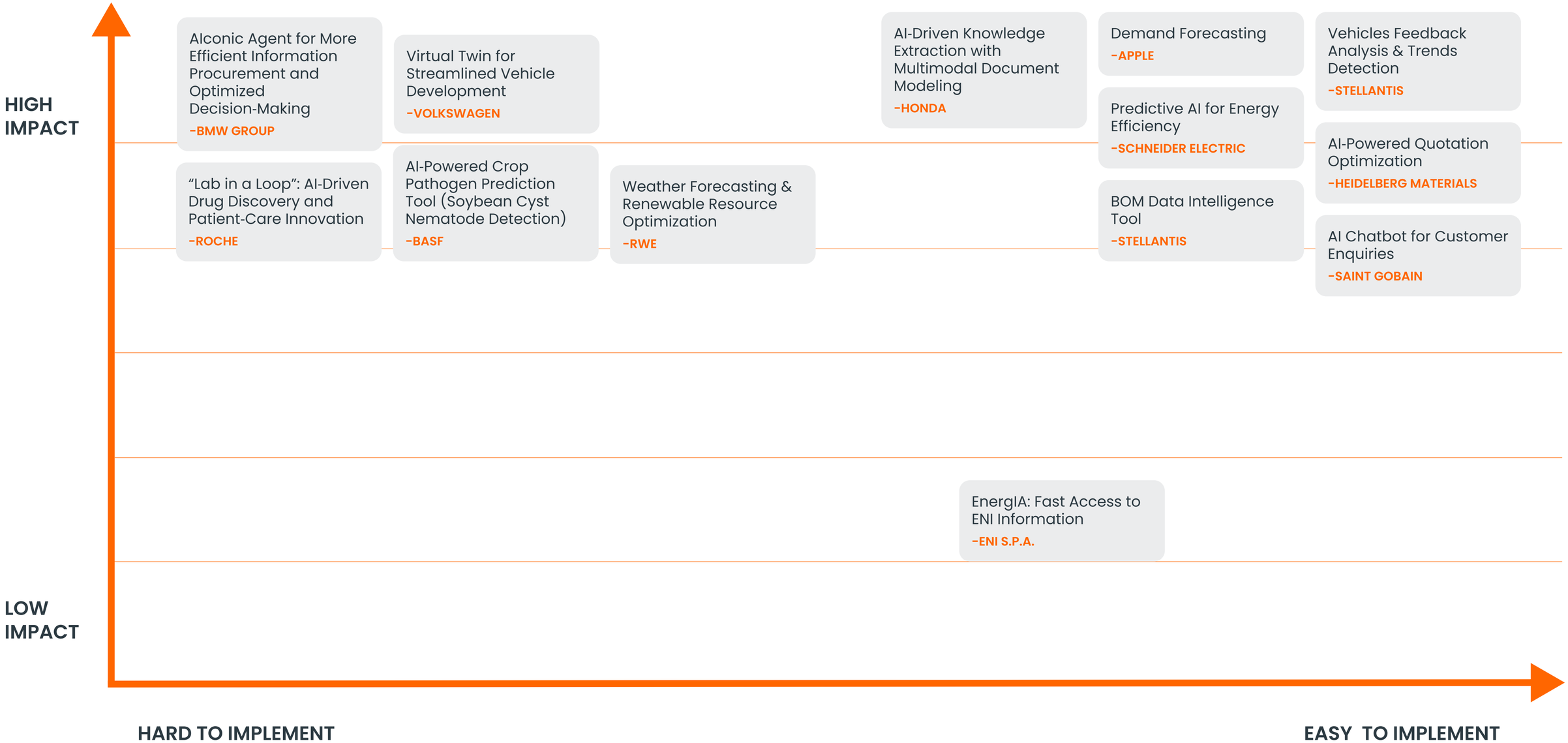
Danish Crown collected image data in production, applied machine-learning models to classify roast pork quality and then simplified the classification into binary high/low quality to improve model performance; this enables faster, more objective detection of sub-standard items and supports potential automation of quality-control processes.

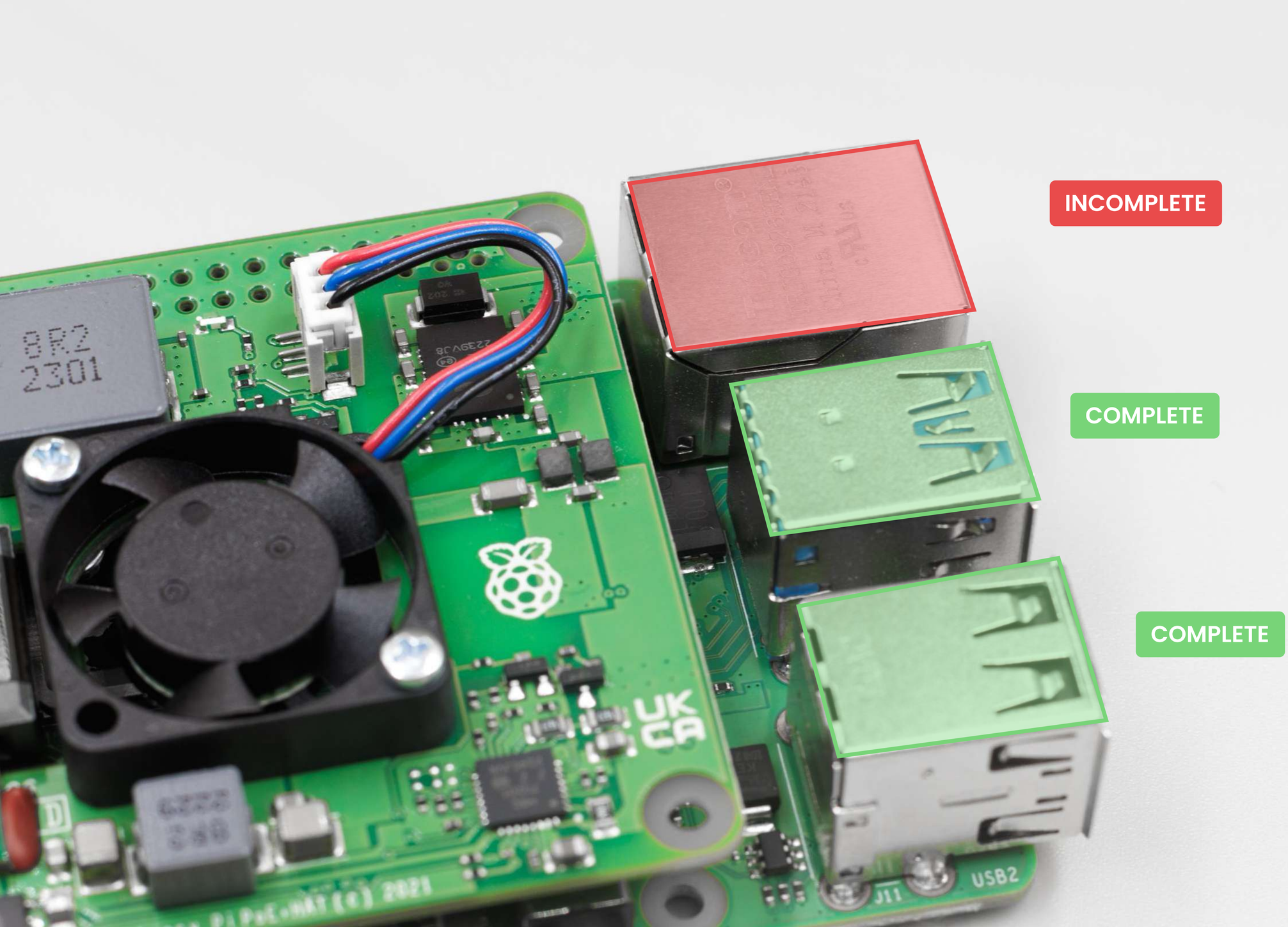
Impact

While still early, the model achieved ~58.5% accuracy on the original 5-class problem and ~84% accuracy when simplified to the binary classification, indicating strong potential to reduce waste, improve consistency and scale quality-control automation.

Danish Crown

Gen AI and Predictive AI cases




INCOMPLETE
COMPLETE
COMPLETE
USB2
J11

Big bets

These use cases are classified as "big bets" due to their potential to significantly improve core operations. They offer high impact but require strong data foundations and modern, integrated systems to succeed.

AIconic agent for more efficient information procurement and optimized decision-making

TECHNOLOGY

AIconic is a generative AI agent that automates procurement tasks, searches internal data, and supports decision-making in BMW's purchasing operations.

COMPANY

BMW Group

PHASE

Operational / Scaling Up

Challenge

Procurement and supplier-offer evaluation involved many repetitive, manual tasks (e.g. offer comparisons, tender management, gathering supplier & purchasing data), with slow information retrieval and limited decision support. These inefficiencies limited productivity in Purchasing.

Solution

Deploy AIconic to centralize procurement knowledge, automate routine tasks, improve internal search via multi-agent NLP, and evolve toward proactive, autonomous supplier-monitoring and process automation, supported by training, governance, and adoption frameworks.

Impact

Faster, more precise information lookup, reduced manual effort in tendering and offer evaluation, significantly increased productivity in purchasing teams, over 1,800 users and 10,000+ searches early on, showing strong adoption and value.

Virtual twin for streamlined vehicle development

TECHNOLOGY

A virtual twin platform that uses AI and unified data to simulate and refine vehicle designs and production workflows before physical manufacturing.

COMPANY

Volkswagen AG

PHASE

Operational / Scaling Up (long-term partnership, deploying across VW, Audi, Porsche brands)

Challenge

Vehicle development cycles are long and complex, involving many iterative physical prototypes, design revisions, compliance and regulatory testing, plus coordinating across brands, factories and teams. Traditional workflows lead to delays, high costs, and inefficiencies.

Solution

VW creates virtual twins for each vehicle program, enabling simulations, tests, and refinements in a collaborative virtual environment before any physical build. This approach streamlines workflows, optimizes resources, improves collaboration, ensures early regulatory and sustainability compliance, and speeds up time-to-market.

Impact

Faster development cycles, reduced prototype and engineering costs, better alignment between design and manufacturing, and accelerated time to market.

“Lab in a loop”: AI-driven drug discovery and patient-care innovation

TECHNOLOGY

Generative AI models trained on large lab and clinical datasets predict new targets and molecule designs, which are tested and fed back to continually refine the models.

COMPANY

Roche

PHASE

Operational / Scaling Up

Challenge

Drug discovery is notoriously slow, expensive and has a high failure rate, about 90 % of candidates fail in pre-clinical or clinical phases, and the process can take more than a decade. The sheer complexity of biological data and the sequential “trial-and-error” approach create bottlenecks in finding viable therapies.

Solution

Roche’s “lab in a loop” strategy uses AI models trained on existing experimental and clinical data to generate predictions for new drug targets and molecules. These predictions are tested in the lab, giving new data that retrains and refines the models, creating a continuous feedback cycle that speeds up discovery and improves model accuracy.

Impact

The approach enables faster exploration of novel therapeutic targets, enhances the efficiency of molecule design and testing, and has the potential to reduce time-to-market for new therapies and improve patient outcomes.

AI-powered crop pathogen prediction tool (soybean cyst nematode detection)

TECHNOLOGY

BASF uses AI to standardize agronomic data and predict location-specific SCN infestation risk, enabling earlier and more targeted field decisions.

COMPANY

BASF

PHASE

R&D and early deployment

Challenge

SCN causes major soybean yield losses but is hard to detect early. Traditional methods are slow, manual, and often overlooked. Data across regions is fragmented, making it difficult to scale predictive insights. Farmers need early warnings to take preventive action at planting.

Solution

BASF's AI-powered tool applies machine learning to harmonize and analyze diverse agronomic and soil datasets, generating early, field-specific SCN risk forecasts that help farmers proactively select resistant seed varieties, plan treatments, and optimize planting strategies, while enabling seamless integration into BASF's wider digital farming platforms.

Impact

Enables earlier, data-driven SCN management, reducing crop losses and improving planting decisions across varied growing conditions.

BASF
We create chemistry

Weather forecasting & renewable resource optimization

TECHNOLOGY

RWE uses on-premise AI weather models to produce high-resolution, real-time forecasts, enabling more precise renewable generation planning, storage use, and trading decisions.

COMPANY

RWE

PHASE

Operational / Scaling Up

Challenge

Weather variability impacts renewable output, but traditional forecasts were too slow and low-resolution to guide efficient trading and asset management, leading to imbalance costs and higher operational risk.

Solution

RWE deployed AI weather models on a scalable private cloud, producing high-resolution, near real-time forecasts that improve renewable scheduling, storage use, and energy trading decisions.

Impact

Greater forecast precision improves asset utilization, lowers imbalance costs, enhances trading outcomes, and supports RWE's decarbonization goals.

RWE


SEMCO
maritime

Quick wins

These use cases are considered "quick wins" as they offer high impact with relatively easy implementation. They can be deployed rapidly, require minimal system changes, and deliver immediate value to operations and customer experience.

AI-driven knowledge extraction with multimodal document modeling

TECHNOLOGY

A multimodal AI that extracts and converts slide content into structured, searchable knowledge for RAG

COMPANY

Honda Motor Co., Ltd

PHASE

Pilot / Operational

Challenge

Honda had very slow and manual documentation modelling. Much of the engineering know-how was trapped in PowerPoint decks rich in diagrams and graphics but with little usable text, creating knowledge models (even for just 2-3 components out of 20,000+) took about 400 hours, making scaling impractical.

Solution

They applied AI to automatically extract and convert diagram and graph-based content into text, to populate a knowledge database, used RAG style search for engineers to retrieve and reuse know-how more efficiently; this reduces the manual burden of modelling documentation.

Impact

Documentation modelling time reduced by about 67%, with 30-50% savings in development, planning and management work.

Demand forecasting

TECHNOLOGY

AI-driven demand forecasting that combines product and regional sales data with market signals, integrated directly into Apple's supply and logistics planning systems.

COMPANY

Apple

PHASE

Operational / Scaling Up

Challenge

Apple must forecast demand across a large, fast-changing global market, where shifting consumer behavior and external disruptions make traditional methods unreliable, risking stock imbalances and supply chain inefficiencies.

Solution

Apple uses AI-driven forecasting models that merge sales, regional trends, and macroeconomic data into its supply planning systems, enabling near real-time adjustments and smarter global inventory coordination.

Impact

Reduced uncertainty in planning, fewer instances of excess inventory or stock shortages, better alignment of production capacity with market demand, faster reaction to emerging trends.

Vehicles feedback analysis & trends detection

TECHNOLOGY

Stellantis uses AI and LLM analytics to analyze fleet, customer, and diagnostic data, quickly spotting patterns to improve vehicle quality and performance.

COMPANY

Stellantis

PHASE

Operational / Scaling Up

Challenge

Stellantis had large volumes of fleet and customer feedback, but manual analysis was slow, delaying insights and hindering early detection of quality issues.

Solution

Stellantis deployed AI tools to automatically analyze feedback at scale, detect recurring issues and sentiment trends, link them to components or models, and rapidly inform quality teams for faster fixes and improved reliability.

Impact

Faster detection of issues, smoother corrective actions, improved vehicle quality and customer satisfaction, and shorter feedback loops from field to engineering.

STELLANTIS

Predictive AI for energy efficiency

TECHNOLOGY

An ML and IIoT platform that monitors plant energy use, detects anomalies, and optimizes utility systems in real time.

COMPANY

Schneider Electric

PHASE

Operational

Challenge

Industrial plants use significant energy, but complex, variable utility systems and limited real-time visibility make manual optimization difficult, leading to inefficiencies.

Solution

An ML and IIoT platform that unifies utility data to monitor energy usage, detect anomalies, and gradually shift from recommendations to autonomous optimization across sites.

Impact

Up to ~10% utility energy reduction, ~40% lower emissions, sub 3 month payback, one semiconductor plant saved ~$1M and ~10,000 tons CO_2 annually.

Schneider Electric

AI-powered quotation optimization

TECHNOLOGY

Heidelberg Materials uses an AI pricing system that pulls quote requests, aggregates internal data, and recommends optimal price ranges to speed up and strengthen sales decisions.

COMPANY

Heidelberg Materials

PHASE

Operational / Scaling Up, starting with ~50% of quote inquiries handled via the AI system, now moving toward full adoption.

Challenge

Manual, experience-based quoting was slow and inconsistent, leading to long turnaround times, pricing variability, and missed opportunities due to limited insight into what wins vs. loses.

Solution

The system automates most of the quote preparation by quickly aggregating relevant internal data, generating optimal pricing bands, allowing sales managers to balance margin versus volume, and surfacing historical won and lost quotes to inform decisions, delivering faster, more consistent, and data-driven pricing.

Impact

Heidelberg Materials saves over 10,000 hours/year, achieves ~2% better conversion, delivers quotes in under an hour instead of eight, and gains more optimized margins.

Heidelberg Materials

BOM data intelligence tool

TECHNOLOGY

An AI tool that analyzes BOM databases to help engineers compare and optimize components, enabling reuse and efficiency across Stellantis' global vehicle lineup.

COMPANY

Stellantis

PHASE

Operational / Scaling Up

Challenge

Managing thousands of components across many vehicle variants and brands, with risk of duplication, inefficiencies, and inconsistencies. Traditional manual analysis and part selection is slow, error-prone, and leads to higher cost and lower standardization.

Solution

Deploy a BOM Data Intelligence tool that auto-analyzes components to flag redundancies, suggest better alternatives, and drive global reuse/standardization, learning from engineering choices and integrating with design/PLM to speed decisions.

Impact

Reduced design and engineering time for part selection, greater standardization, improved reuse of components, cost reductions, more efficient resource utilization across Stellantis' engineering teams.

STELLANTIS

AI chatbot for customer enquiries

TECHNOLOGY

Saint-Gobain uses a Voiceflow-based AI chatbot on its website to answer FAQs about products, brands, and careers, with both text and voice interaction.

COMPANY

Saint-Gobain S.A.

PHASE

Operational

Challenge

Visitors seeking information (about products, brand, careers) had to navigate multiple sites or use contact forms. This made getting answers slower and less convenient. There was a need for a first-level support channel that works anytime, to reduce friction and improve self-service.

Solution

Saint-Gobain rolled out an always-on, multilingual AI chatbot built on Voiceflow that engages users through text or voice, delivers instant answers to common queries, and intelligently routes them to the right brand, product, or career page, providing seamless, 24/7 self-service support directly within the website experience.

Impact

Quicker, easier access to information for users, lower load on human support, improved user experience across multiple touchpoints

SAINT-GOBAIN


10 CM
20 CM
15 CM

Tactical opportunities

These use cases are relatively easy to implement with minimal disruption to existing systems, but offer limited impact on core operations. They are valuable for experimentation, brand building, or enhancing customer touchpoints.

EnergIA: fast access to ENI information

TECHNOLOGY

EnergIA is a generative AI tool with RAG that answers questions using ENI's official content, updating in near real time in both Italian and English.

COMPANY

ENI S.p.A.

PHASE

Operational

Challenge

Users (stakeholders, public, investors) needed fast, intuitive access to ENI's large and frequently updated body of content, but conventional site navigation and keyword search could not keep pace with the growing volume and complexity of materials, making it difficult to quickly find accurate, contextual information.

Solution

ENI deployed EnergIA, a multilingual generative AI assistant built with retrieval-augmented generation that continuously indexes official ENI content in near real time, allowing users to interact conversationally, receive verified answers with cited sources, and seamlessly explore complex corporate information.

Impact

Faster access to official information, improved user experience, and more transparent communication with stakeholders through source-backed AI responses.

Partner with Trifork to build **future-ready vision solutions** that increase production reliability, cut errors and deliver consistently measurable results.

Read more about our cases here

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TRIFORK.

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