

DELLTechnologies



Computer Vision AI Solutions

Data-driven insights that deliver
actionable business outcomes

[Start Here](#)

Dell Computer Vision AI

Table of Contents

- The Dell AI Factory with NVIDIA3
- Computer Vision AI Defined4
- The Dell Technologies Difference 5
- 5 Business Outcome Categories7
- Top Industries Using Computer Vision AI 8
- Customer Spotlight: Northwestern Medicine 9
- Customer Spotlight: Subaru Corporation10
- Computer Vision AI Resources 11

What's an AI factory? →



Dell AI Factory

WITH NVIDIA

What's an AI Factory?

In the age of AI, traditional IT infrastructures and operating models are not enough to handle the rigorous demands of AI. A new approach is required that's tailored to meet AI's needs. This is the AI factory.

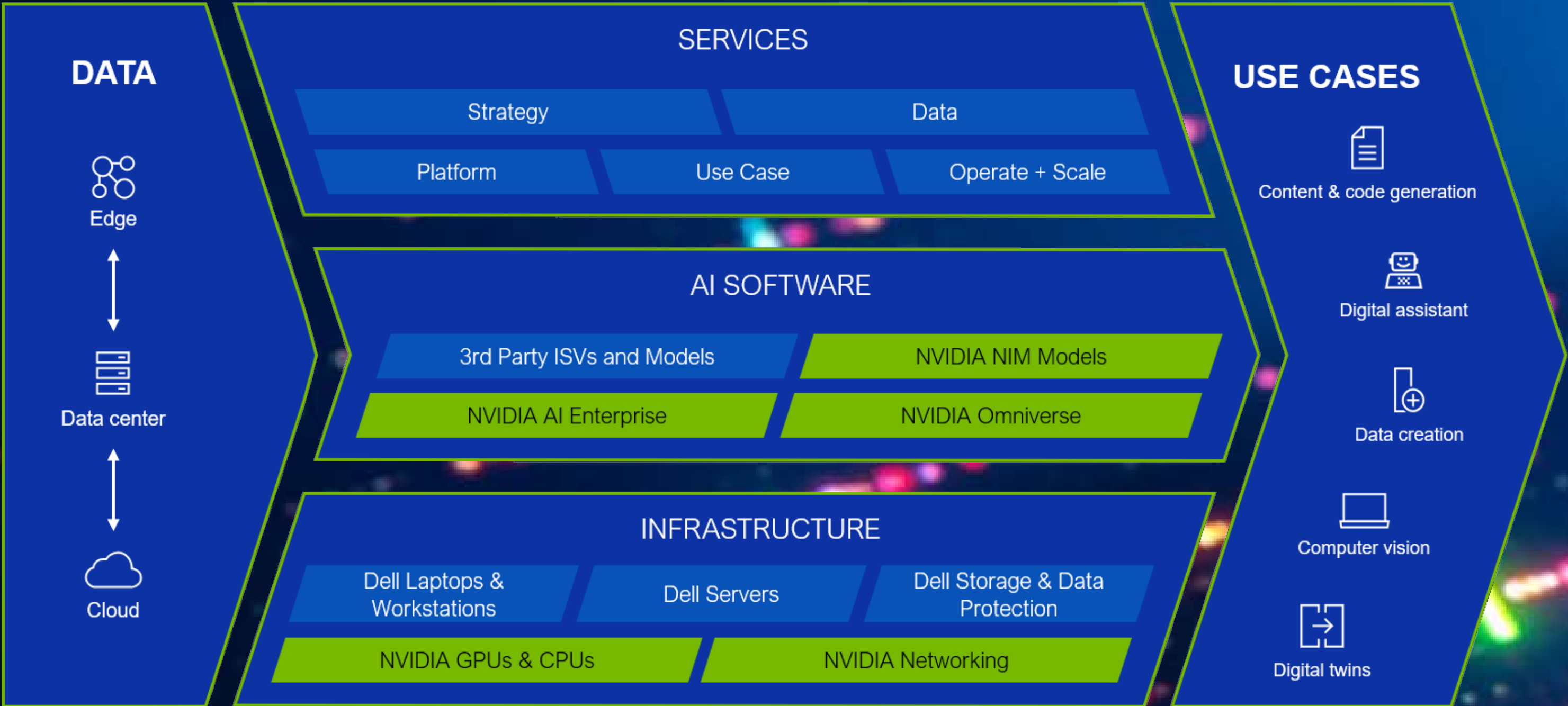
Just like physical factories fueled the industrial revolution, AI factories will drive the AI revolution. But instead of producing physical goods, they create actionable intelligence, fresh content and new insights. Every business will come to need an AI factory, and those most adept at establishing their AI factories to produce fast, repeatable results will have a critical advantage as we move further into the AI era.

How has computer vision evolved? →

AI Factory Vision

Dell Technologies and NVIDIA help organizations build their own AI factories to create transformative outcomes, consistently, and at scale, so they can gain an edge. And we're doing this through the Dell AI Factory with NVIDIA.

The AI Factory accelerates AI innovation in organizations of all sizes. It comprises a portfolio of products solutions and services from Dell and NVIDIA tailored for AI workloads and designed for fast, repeatable outcomes. It's versatile and capable of operation across various environments, be it cloud, data centers, workstations, AI PCs or edge locations. **The graphic below breaks down the Dell AI Factory with NVIDIA.**

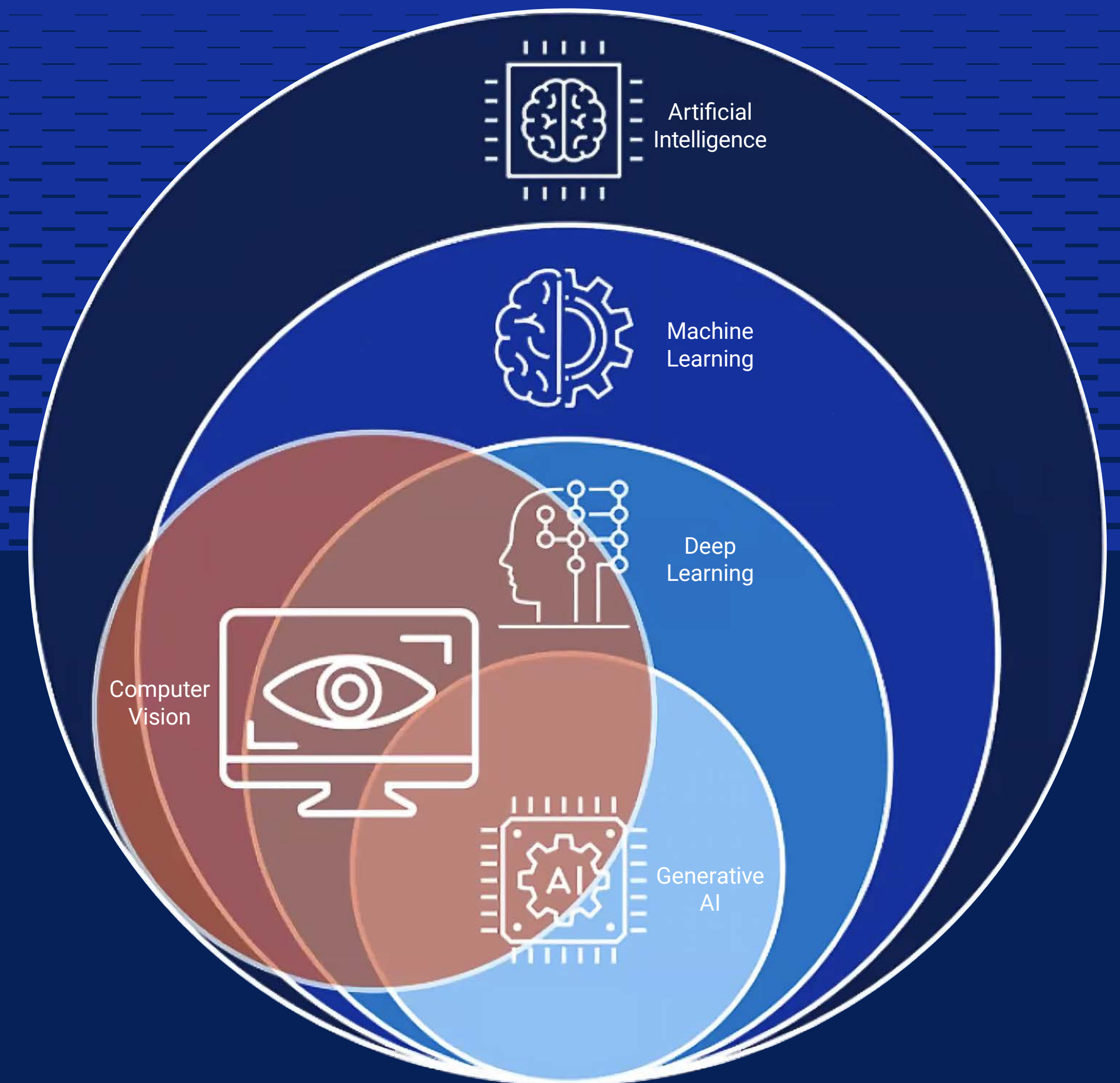


Computer Vision AI Defined

What is Computer Vision AI?

Computer vision technology has evolved well beyond security. Today, applying AI to recorded and live video, as well as image data, unlocks real-time, actionable insights that improve personnel safety, enhance customer experience, and boost profitability while improving operational efficiency and sustainability.

What used to require massive human resources to sort through video and image data is now automated. AI allows computer vision to “see,” observe and understand the surrounding world, deriving meaningful information from video, images, LiDAR and other unstructured data in real-time. Computer vision models utilize deep learning, neural networks and generative AI to train IT systems to recognize objects, identify patterns, uncover defects and make recommendations based on visual information.



See what makes Dell different →

The Dell Technologies Difference

Bring AI to your data to gain actionable insights in real-time

Dell Technologies and NVIDIA, along with key industry technology alliances and an extensive partner network, have developed and refined a differentiated process that takes customers from ideation to full-scale implementation faster and with less risk.

Simplified data workflows with a federated analytics platform allow you to ingest data once and then distribute analysis and insights across locations, enabling your organization to deliver transformational business outcomes.

What makes this offer unique? →



Reimagine the speed of business with AI

Dell AI Factory with NVIDIA is the industry’s first and only end-to-end enterprise AI solution¹. It integrates Dell's compute, storage, client devices, software, and services capabilities with NVIDIA's advanced AI infrastructure and software suite and NVIDIA AI blueprint for video search and

summarization, all underpinned by a high-speed networking fabric. These building blocks let enterprises integrate AI models and frameworks into their operations so they can quickly go from ideation to outcomes.

Best in Class Computer Vision AI Solutions

SIMPLIFIED



Ingest data once and gain multiple insights



Modern platform architecture to scale up and out

TAILORED



Industry-specific workflows



Validated and vetted partner eco-system

TRUSTED



Proven validation process



Innovative and secure solutions for the essential infrastructure of the digital era

¹Based on Dell analysis, July 2024. Dell offers solutions with NVIDIA hardware and software engineered to support AI workloads from PCs with AI-powered features and workstations to Servers for High-performance Computing, Data Storage, Cloud Native Software-Defined Infrastructure, Networking Switches, Data Protection, HCI and Services. Veeva claim ID: CLM-011525

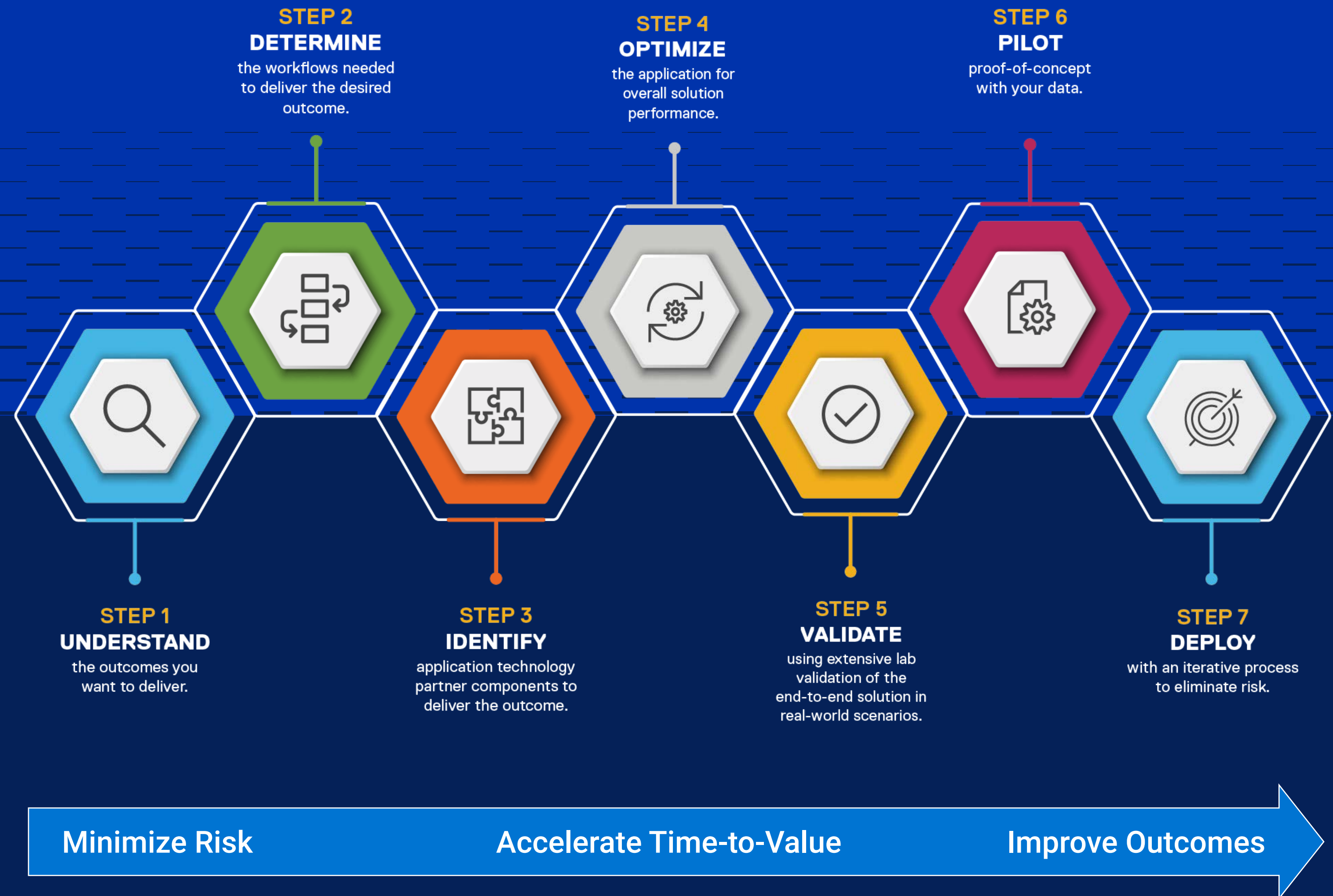
Accelerate your AI Blueprint from Ideas to Innovation

Validation Process

Dell's validation process takes an extremely detailed, prescriptive and integrated approach. Along with testing and validating the third-party ISV solutions on Dell infrastructure, Dell also builds complete solutions that may include multiple third-party vendor technologies to deliver desired workflows and outcomes.

Optimized Data Journey

Dell works with its customers to optimize their data journey and build a healthy data pipeline that drives business insights. It's far more efficient and effective to bring AI to the data, and AI models need to access data where it lives and where it is created. On the contrary, moving datasets creates risk, complexity and potential for added costs. At its core, this is the concept of Bringing AI to Your Data come to life.



5 Business Outcome Categories from Computer Vision AI

Organizations from every industry are in a digital race to turn data into business outcomes faster. Computer vision plays a central role in that effort with its ability to connect video and other data at disparate Edge and centralized locations to derive actionable insights.

	Personnel & Facility Safety Provide a safer, more real-time aware environment	For example, within airports, derive real-time situational awareness and historical data that shortens response times and improves overall facility safety.
	Personal Experience Provide more positive, personalized and engaging experience for both customers and employees	For example, in stadiums, enhance wayfinding so fans can minimize time from parking lot or transport hub to seat by incorporating frictionless spectator solutions and analyzing how your customers move through the facility.
	Operational Efficiency Leverage all the data you're capturing to deliver high-quality services and improve resource allocation	For example, with public transit, get rolling stock predictive maintenance that automatically inspects the external condition of trains to reliably identify any malfunctions before they lead to failures.
	Sustainability Measure and lower your environmental impact	For example, in transportation, route forecasting can reduce a ship's fuel consumption, thereby reducing its carbon footprint.
	Revenue Enhancement Unlock more monetization opportunities from your data	For example, in retail, identify key shopper in-store behavior to advise product placement, store layout, and push targeted advertising to the consumer, maximizing revenue per customer per visit.

Top Industries Use Computer Vision AI

**Industry-specific workflows
tailored to your use case**

Computer vision AI is helping to reshape a multitude of industries, from smart city implementations to airport and transportation safety to manufacturing automation and retail fraud prevention.

Customer Spotlight →

Key industries



Dive into our interactive industry map



Customer Spotlight: Northwestern Medicine

Unlocking the promise of technology in healthcare through computer vision AI

Working with Dell Technologies and NVIDIA, Northwestern Medicine is applying computer vision AI to healthcare, enabled through the Dell AI Factory with NVIDIA.

“ People use the term ‘AI Factory.’ I want every hospital system worldwide to have it’s own AI factory, which ultimately is going to save thousands, if not millions, of lives.

Dr. Mozziyar Etemadi,
Clinical Director of Advanced Technologies,
Northwestern Medicine

Next →

How Northwestern Medicine is using computer vision AI to advance healthcare:



Radiology image analysis

By speeding up the process of analyzing images and delivering a diagnosis, radiologists are gaining 40% efficiency

A shift to proactive care

Providing better, more comprehensive patient outcomes through predictive models that turn care from reactive to proactive

On-premises AI deployment

Deploying AI tools directly on on-prem PowerEdge servers, finding it easier, faster, cheaper, and better than in the cloud

Operations efficiency

An AI tool can now predict all aspects of Northwestern Medicine’s operations, opening new avenues and opportunities for efficiency and cost reduction

→ [Read the full Northwestern Medicine case study](#)

Customer Spotlight: Subaru Corporation

Reimagining drivers' experiences with AI

Subaru enhanced its AI-powered EyeSight® Driver Assist Technology by using Dell PowerScale for scalable, high-performance storage, enabling faster analysis and streamlined data management across multiple locations.

“**Dell Technologies is helping us harness the power of AI right now to improve the automotive experience of the future.**

Mr. Takashi Kanai,
Deputy Chief of SUBARU Lab,
Subaru Corporation

Next →



Business results achieved by Subaru through its Dell Technologies partnership:



Accelerates AI innovation by storing and managing 1,000x more files than before.



Increases ADAS accuracy and speeds up AI model training, AI inferencing and operational efficiency.



Enhances development productivity by simplifying data access, data sharing and collaboration.



Improves scalability and cost savings by ensuring workloads run on rightsized resources.

Computer Vision AI Resources

- [Learn more about the Dell AI Factory with NVIDIA](#)
- [Watch how Dell Technologies brings AI to your data](#)
- [See the big picture of computer vision AI](#)
- [Read how data-driven insights deliver actionable business outcomes](#)
- [Watch the Northwestern Medicine case study video](#)
- [See how Dell Technologies is helping Subaru reimagine drivers' experiences with AI](#)
- [Solutions Catalogue](#)