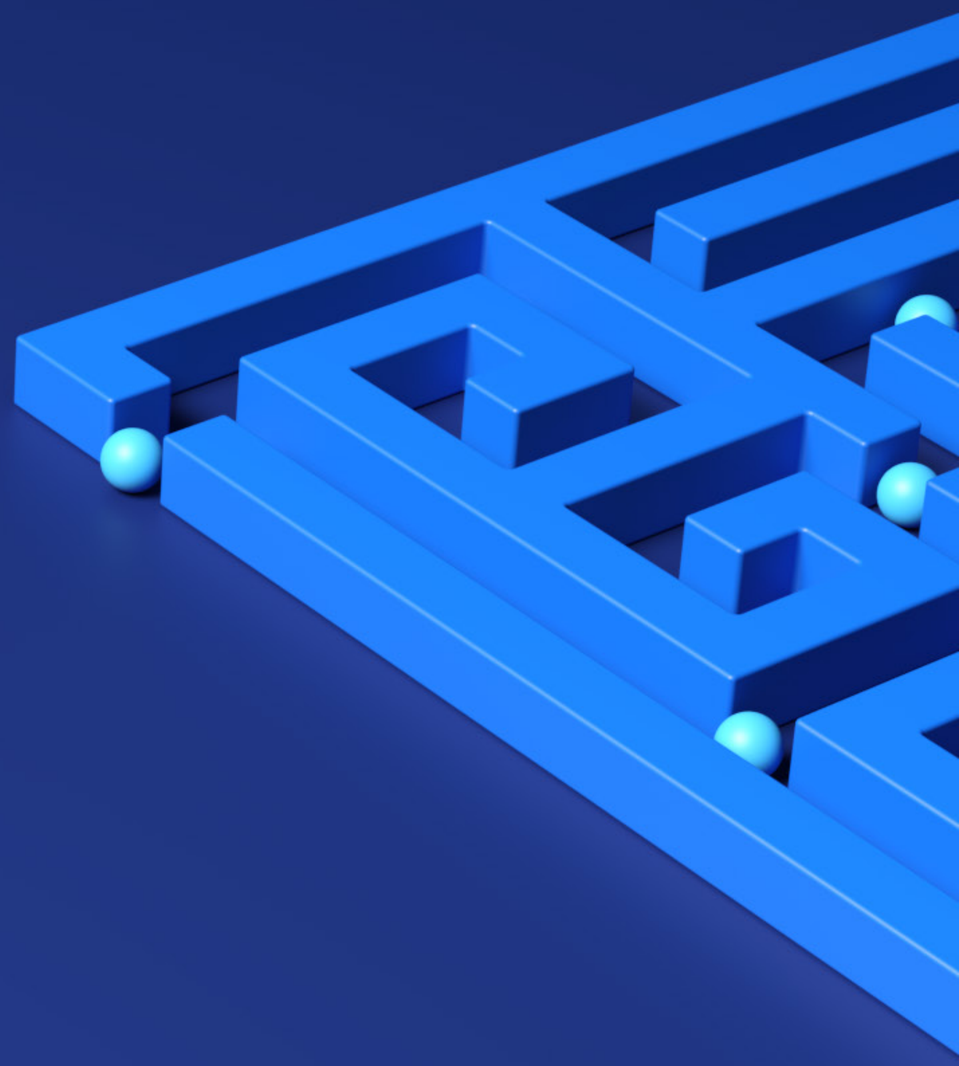
DELL Technologies
NVIDIA
From AI-possible to AI-proven
Start your journey with Dell Technologies
START

Leaders have many questions they need to answer

Generative AI (GenAI) has enormous potential for driving breakthrough transformation. But as with any emerging technology, tangible business value is gained only by leveraging GenAI in the right way for the unique demands of your business. While the value of GenAI is obvious, the path to achieving it is not, leaving business leaders struggling to find answers. Let us help you simplify your AI journey and swiftly drive innovation, by going from AI-possible to AI-proven.

- How do we quickly get started?
- How do we level up GenAI skills?
- How can we maintain operational efficiency?
- How do we gain consensus across the business?
- How can we minimize data security risks?
- How do we best leverage enterprise data to power AI projects?



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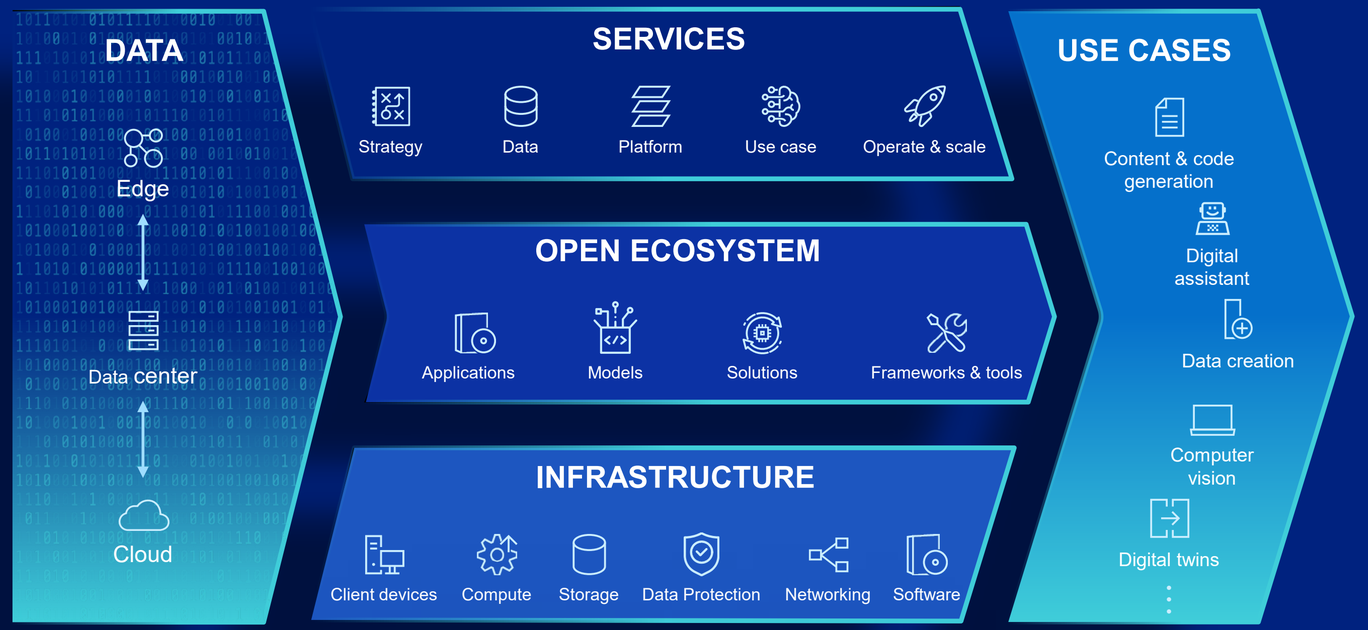
Accelerate outcomes with help at every stage

The Dell AI Factory is Dell's approach for embracing and implementing AI. It helps businesses accelerate their AI initiatives, bringing together the industry's only end-to-end AI-optimized infrastructure portfolio together with expert guidance and services to help you navigate this complex journey throughout the AI lifecycle.

We enable you to support a variety of use cases and budget plans, meeting you wherever you may be in your journey. And we strive to keep pace with shifting needs and help you overcome any potential obstacles through constant innovation.

THE DELL AI FACTORY



SUSTAINABILITY | SECURITY

Dell Services trusted experts provide guidance and assistance at every stage of your AI journey to accelerate outcomes and drive success into the future.

Establish strategy	Prepare data	Gen AI platform	Deploy & test model	Operate & scale
Build a strategy and roadmap, gaining consensus on high-priority use cases and aligning a plan to achieve them.	Prepare and align data sets for AI, accelerate a modern data management approach and ensure secure data practices to power AI.	Implement full-stack solutions aligned to Dell Validated Designs to quickly establish an operational AI platform, primed for innovation.	Apply deployed solutions to your priority use cases to accelerate time to value for your business to realize tangible GenAI benefits.	Improve AI operations and close AI skills gaps to drive value now and into the future.
• Accelerator Workshop • Advisory Services • Workforce Persona Services	• Services for data security and Dell Data Lakehouse	• Deployment Services • Platform Implementation Services • Red Hat OpenShift AI Services • Platform Implementation Services for Digital Assistant	• Use Case Implementation Services • Use Case Services for Digital Assistants • Accelerator Services for RAG + on Precision workstations • Accelerator Services for Dell Enterprise Hub • Services for Microsoft Copilot	• Residency Services • Managed Services for GenAI • Training and Certification • Support Services • Adoption & Change Management

Simplify you AI journey with the Dell AI factory

Power the Enterprise AI experience

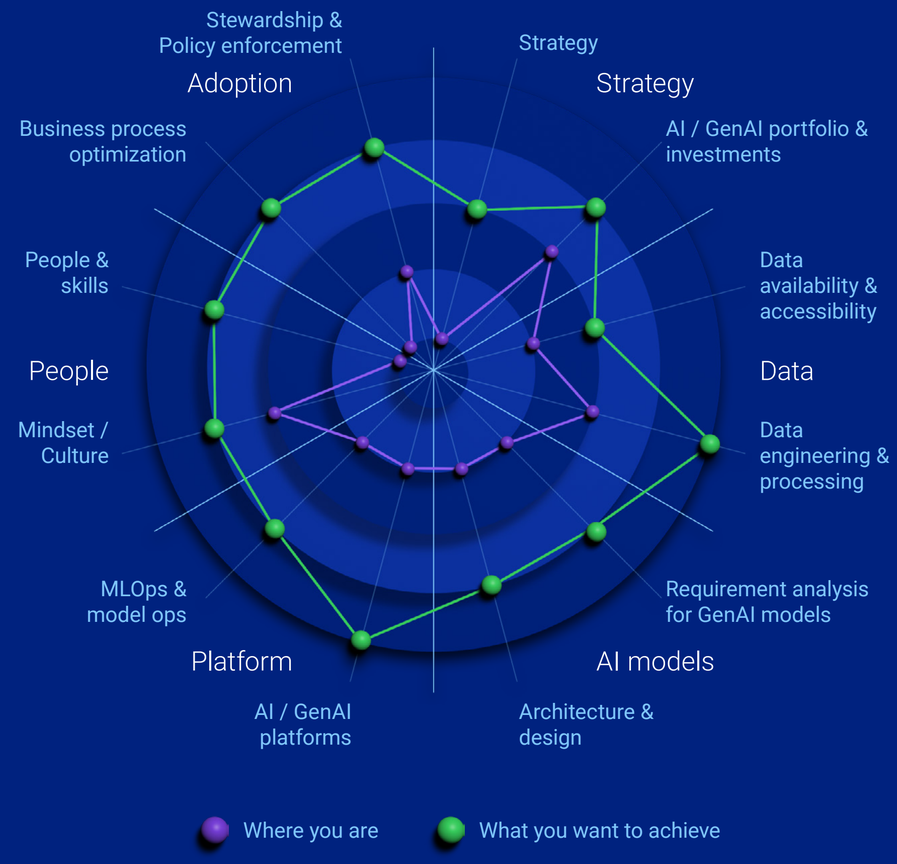
How ready is your organization for pursuing AI priorities? Our process will assess your readiness across 6 key dimensions.

Strategy	Data	AI Models	Platform	People	Adoption
How well articulated is your GenAI strategy?	How will you incorporate & protect data in GenAI models?	Have you identified priority use cases?	How will you build & run your GenAI platform?	Do you have the skills & resources needed for GenAI success?	Can you effectively adopt GenAI into your business?

Not sure how to get started?

A great first step in determining how your organization can maximize GenAI value is our **Accelerator Workshop for GenAI**. This half-day facilitated event offers collaborative and engaging sessions with key stakeholders, designed to identify key challenges and help you achieve clarity for your AI vision. With over 1,000 workshops delivered per year and decades of experience, we will help you drive success with GenAI.

By analyzing your "AS-IS / TO-BE" state, we'll identify key gaps and challenges you'll need to address and focus on in order to effectively bring AI into your business.



Rely on Dell's proven methodology

Achieving tangible business value from GenAI requires a well-defined strategy, with actions that need to be taken to achieve objectives. Furthermore, it requires that the needs of the business are aligned to the plans of the technology.

Rely on proven methodology from **ProConsult Advisory Services for GenAI**. We'll conduct an in-depth assessment to clearly define how you'll achieve GenAI success, while ensuring alignment from business and IT leaders. And with our proprietary use case prioritization tool, we analyze hundreds of potential use cases and recommend those that will be the most beneficial to focus on.

Prioritize use cases and get stakeholder alignment

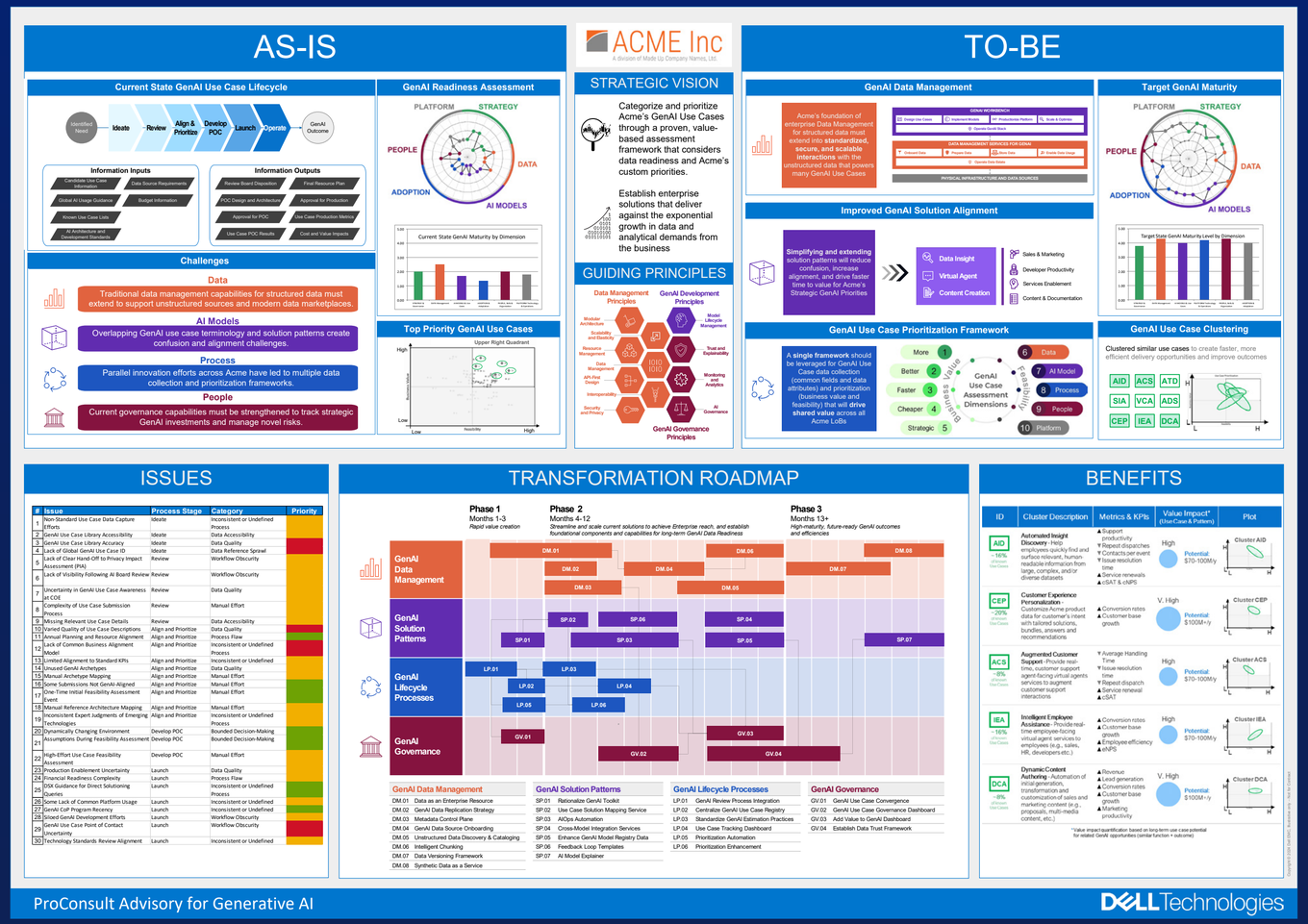
Define your desired GenAI future state with proven methodology

Develop an actionable roadmap with expected outcomes

6-week transformation canvas

As a result of a ProConsult Advisory engagement we deliver an actionable roadmap with aligned outcomes to move you forward, with varying levels of engagement to suit your needs. Explore our example of a six-week advisory engagement to see what type of activities and outputs you can expect.

EXAMPLE 6-WEEK TRANSFORMATION ROADMAP



We conduct structured interviews to identify your current state, identifying key challenges and use case opportunities.

We also uncover major gaps to achieving GenAI maturity goals and deliver a prioritized list of focus areas and use cases that will drive the most value.

AS-IS

Current State GenAI Use Case Lifecycle

Information Inputs

- Candidate Use Case Information
- Data Source Requirements
- Global AI Usage Guidance
- Budget Information
- Known Use Case Lists
- AI Architecture and Development Standards

Information Outputs

- Review Board Disposition
- Final Resource Plan
- POC Design and Architecture
- Approval for Production
- Approval for POC
- Use Case Production Metrics
- Use Case POC Results
- Cost and Value Impacts

Challenges

Data

Traditional data management capabilities for structured data must extend to support unstructured sources and modern data marketplaces.

AI Models

Overlapping GenAI use case terminology and solution patterns create confusion and alignment challenges.

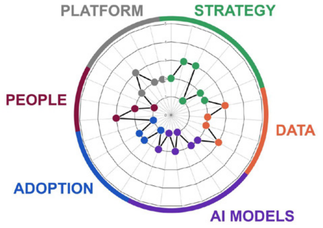
Process

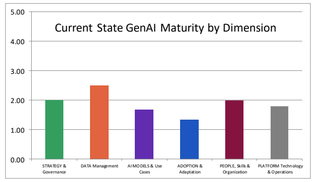
Parallel innovation efforts across Acme have led to multiple data collection and prioritization frameworks.

People

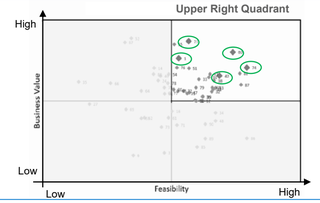
Current governance capabilities must be strengthened to track strategic GenAI investments and manage novel risks.

GenAI Readiness Assessment





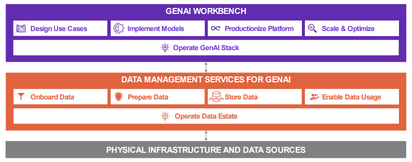
Top Priority GenAI Use Cases



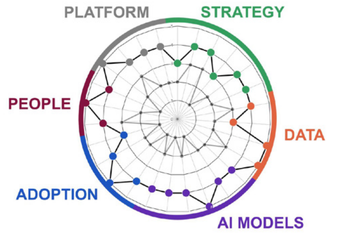
TO-BE

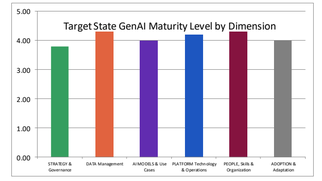
GenAI Data Management

Acme's foundation of enterprise Data Management for structured data must extend into **standardized, secure, and scalable interactions** with the unstructured data that powers many GenAI Use Cases



Target GenAI Maturity





Improved GenAI Solution Alignment

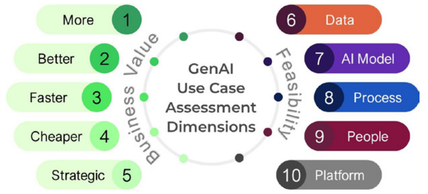
Simplifying and extending solution patterns will reduce confusion, increase alignment, and drive faster time to value for Acme's Strategic GenAI Priorities

- **Data Insight**
- **Virtual Agent**
- **Content Creation**

- Sales & Marketing
- Developer Productivity
- Services Enablement
- Content & Documentation

GenAI Use Case Prioritization Framework

A **single framework** should be leveraged for GenAI Use Case data collection (common fields and data attributes) and prioritization (business value and feasibility) that will **drive shared value** across all Acme LoBs



GenAI Use Case Clustering

Clustered similar use cases to create faster, more efficient delivery opportunities and improve outcomes

EXAMPLE AS-IS SECTION FOR 6-WEEK TRANSFORMATION ROADMAP

EXAMPLE TO-BE SECTION FOR 6-WEEK TRANSFORMATION ROADMAP

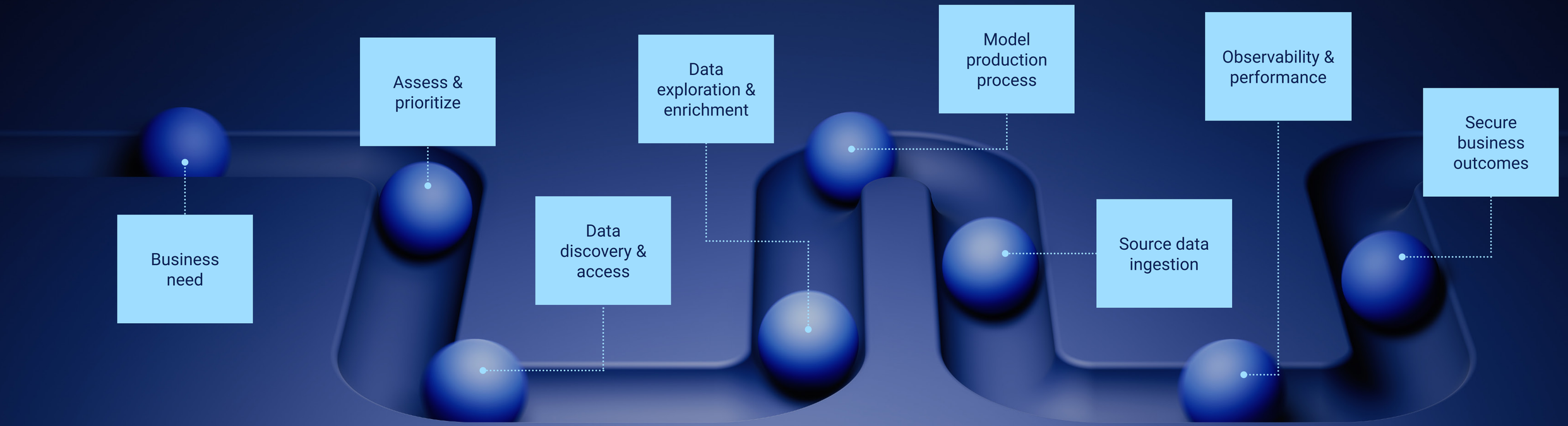
Unlock the value of GenAI investments

With the power of our **Digital Employee Experience Services**, we help you unlock the benefits of GenAI for your end users. **Workforce Persona Services for GenAI** help your organization understand its end user needs, guiding GenAI technology decisions and promoting individualized adoption of new tools.

Adoption and Change Management Services for GenAI help businesses realize greater value from GenAI investments, ensuring employee understanding and utilization is optimized from the start. We'll help make sure AI investments align with organizational goals to drive efficiencies.

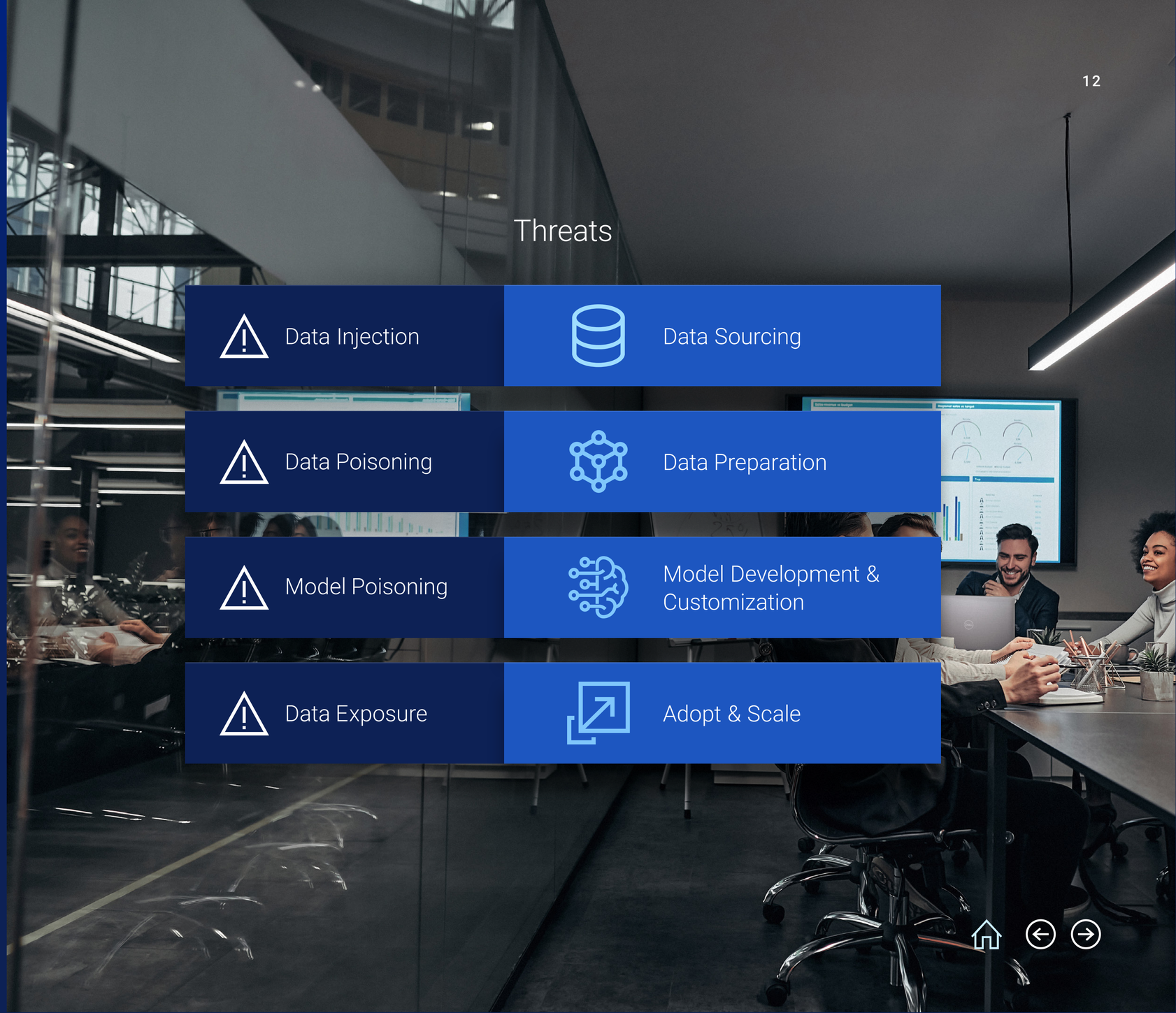
Effectively leverage enterprise data to power AI projects

The data management journey is complex and much of company data goes unused for analytics and decision-making. While data is the greatest differentiator and the most valuable asset to an organization, its value can only be realized when handled in the best way.



Secure your data

Let us help you advance cybersecurity maturity with **Advisory Services for GenAI Data Security,** identifying threats throughout the lifecycle to mitigate risk and improve resiliency.



Achieve validated data

Implementation Services for Data Preparation take your data through a rigorous process of identification requirements. Dell experts cleanse, label, and anonymize data sets to get data in the right format to enable AI projects.

Data preparation services

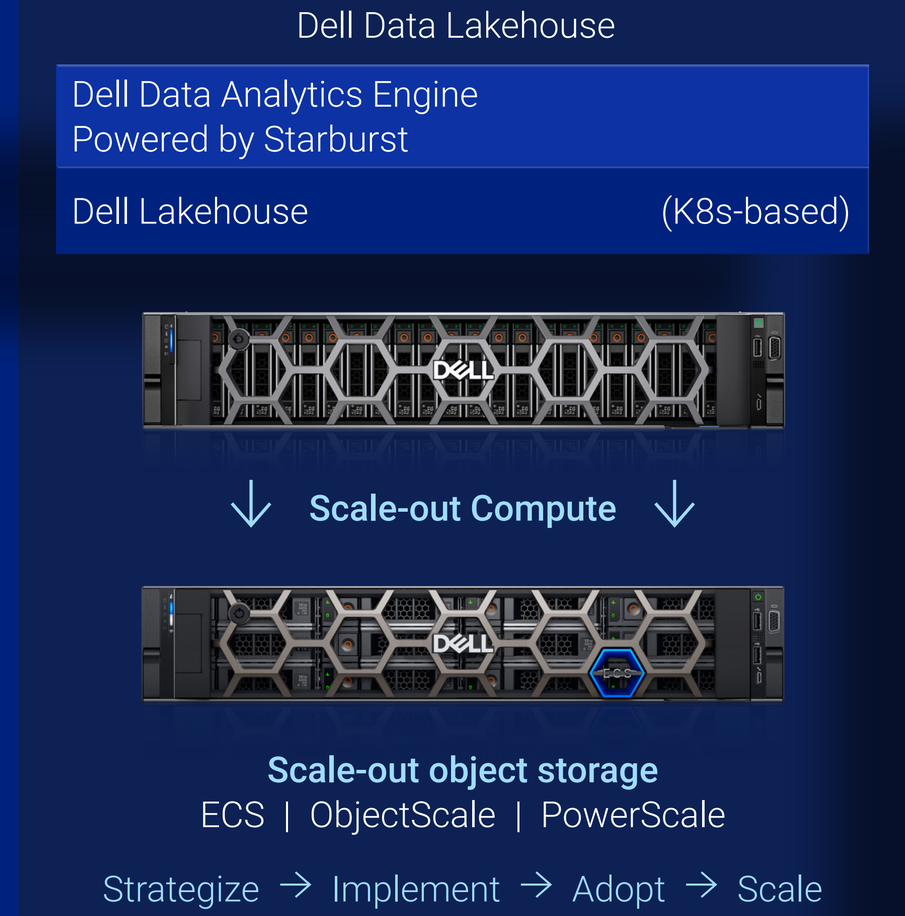
Data Management | Data Engineering

- Data discovery
- Data exploration and enrichment
- Data ingestion
- Observability and performance

Data quality matters for generating the right AI outcomes

Accelerate a modern approach to data that fuels AI

The Dell Data Lakehouse, with a single, federated query engine for all enterprise data, connects directly to the tools your organization prefers, without movement. **Accelerator Services for Dell Data Lakehouse** will help you maximize ROI by quickly building a fully operational and optimized lakehouse platform that supports data analytics and drives AI value. We can also extend your team's internal capabilities to help you fully leverage the data analytics engine within the Lakehouse. **Advisory Services Subscription for Data Analytics Engine** provides a dedicated expert to optimize operations, ensure AI use cases align to business objectives and increase speed of adoption – all while enhancing security and governance.



- Unified data ecosystem
- Unmatched scalability and performance
- AI-ready data without movement
- Improved security and governance
- Simplified operations and cost-savings

Overcome the complexity of AI Infrastructure Deployment

The deployment of AI infrastructure presents significant challenges, including managing the sheer scale of the deployment, accommodating the physical weight and dimensions of servers, devising unique networking solutions to handle an increased number of cables, and meeting the demanding power and cooling requirements, including specialized infrastructure needs such as liquid cooling. Our PowerEdge servers, paired with NVIDIA's Infiniband and Spectrum X networking, tackle these challenges to form a powerful foundation for AI workloads within the Dell AI Factory.

Per Rack	Typical Server	Gen AI XE9680
# of servers	15-20	**2-4**
# of compute GPUs	15-20	**16-32**
Cables	30	**104**
kW (peak)	5	**20-40**

Per Rack	Typical Server	Gen AI XE9680
Server size	1-2U	**6U**
Weight (lbs)	<25	**200+**
Compute nodes	1	**8**
kW (peak)	0.6	**10**
Interconnect	Ethernet	**Infiniband**

Considerations for getting your data center ready for AI

- Size and space
- Power and cooling
- Cable layout
- Packaging disposal

Dell experts deliver fully optimized AI infrastructure

Dell deployment experts have the skills and experience to navigate these complexities and quickly get infrastructure fully operational and optimized from day one. Our approach is rooted in understanding and meeting the unique needs of your data center and ensuring a scalable and secure environment suited for future expansion.

Once the infrastructure is in place, we complement hardware deployment with Implementation Services for GenAI platform. In alignment with Dell Validated Designs, our experts implement the tools and frameworks needed to establish a fully operational platform, primed for innovation.

Infrastructure Assessment

Ensure data center is ready to support the rigorous demands of GenAI solutions

Design and Architecture

Design a secure platform to support scalable AI solutions

Build and Configuration

Quickly and optimally get the environment racked, cabled and configured

Testing and Validation

Ensures all systems operate at peak efficiency and meet performance criteria

Deliver to Customer

Dedicated delivery and setup for immediate operation

Knowledge Transfer

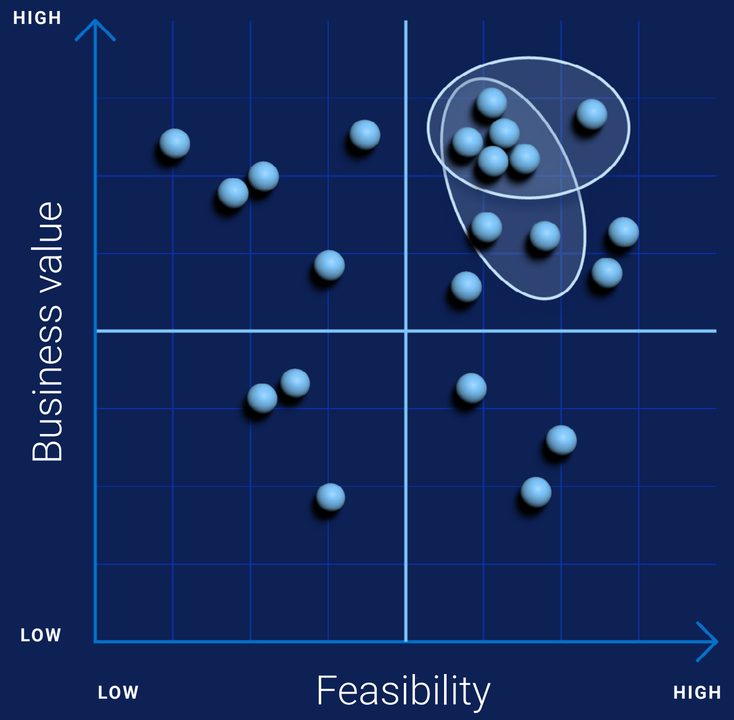
Skills transfer enable your teams to effectively manage the GenAI platform for long-term success

Prioritized GenAI use cases aligned to your platform

Use case prioritization is a critical step to determining which use cases will add the most value to your business. Our Advisory Services can guide you through this process. Once you've determined the best use cases to focus on, we'll accelerate them into your business. **Dell Implementation Services for GenAI use case** focus on applying the platform to your specific use cases. We will implement and configure a pre-trained NVIDIA model in NeMo framework format and integrate that model with your chosen application, all while ensuring stakeholder consensus across the business.

Common use case examples

- Customer operations
- Content Creation
- Software Development
- Sales & marketing

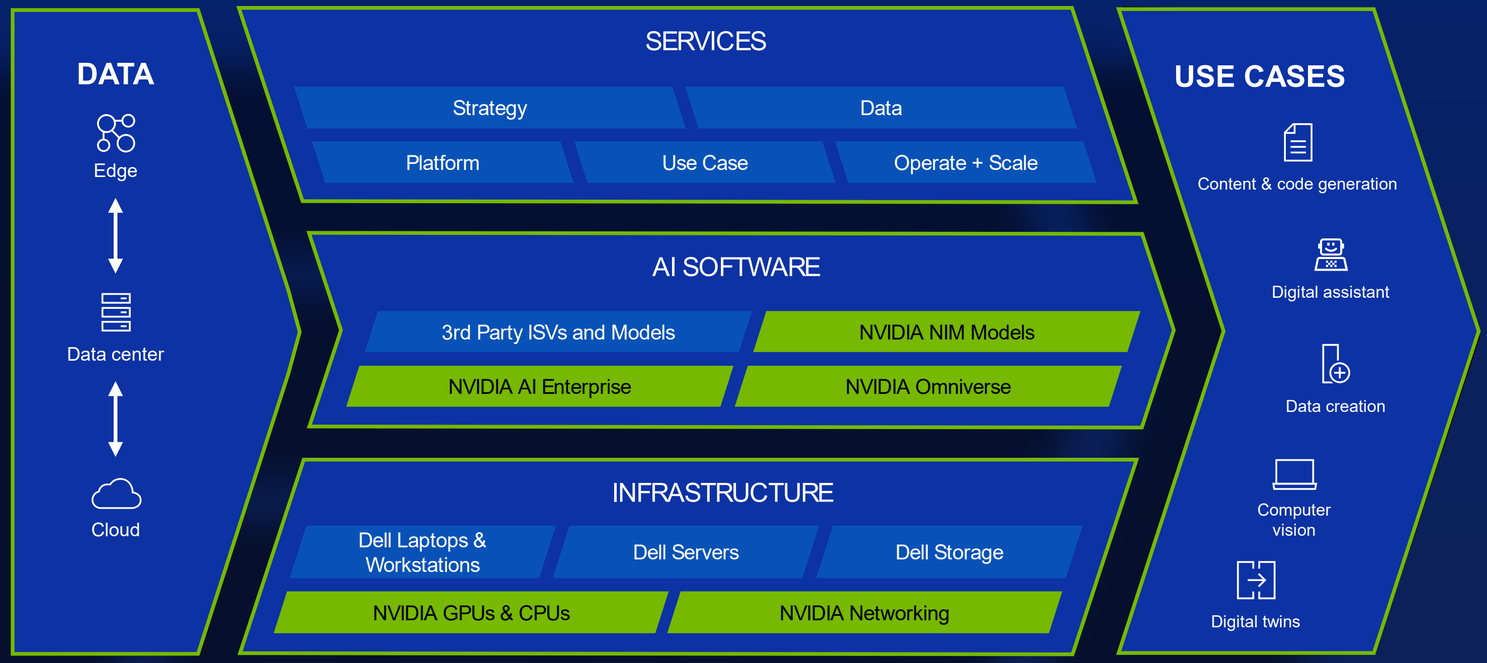


- Implement and configure a pre-trained NVIDIA model, integrated with your chosen application
- Alignment with stakeholders on the ideal model for your business and use cases
- Knowledge and best practice sharing of the software stack use and architecture

The Dell AI Factory with NVIDIA

The Dell AI Factory with NVIDIA helps organizations accelerate their AI initiatives and proof-of-concepts into production. Combining a collaborative approach with our portfolio of platforms, software and services, businesses can adopt AI at pace to transform insights into value faster.

INDUSTRY'S FIRST END-TO-END ENTERPRISE AI SOLUTION



Transform self-service and boost operational efficiency with Digital Assistants

The Dell GenAI Solution for Digital Assistants combines the power of Dell hardware and services with NVIDIA GPUs to rapidly introduce digital assistants tailored to your unique business needs.

- Elevate the end-to-end self-service experience with natural conversations
- Engage your customers in their language, 24/7
- Offload repetitive tasks and refocus employees on high-value activities

Digital assistants can be leveraged for practically any self-service need. Examples include:

- Customer service
- Information concierge
- Technical support
- Scheduling
- Training and education

Digital assistants have uses across many industries and operational needs:

- Smart cities (the City of Amarillo is a great example)
- Retail and online shopping assistants
- Healthcare check-in/out
- Hospitality

Dell Services for Microsoft Copilot

Microsoft Copilot solutions are one of the fastest ways to get GenAI tools into the hands of your teams, operating directly within the tools and workflows they already use every day. Implementation Services for Microsoft Copilot Solutions include:

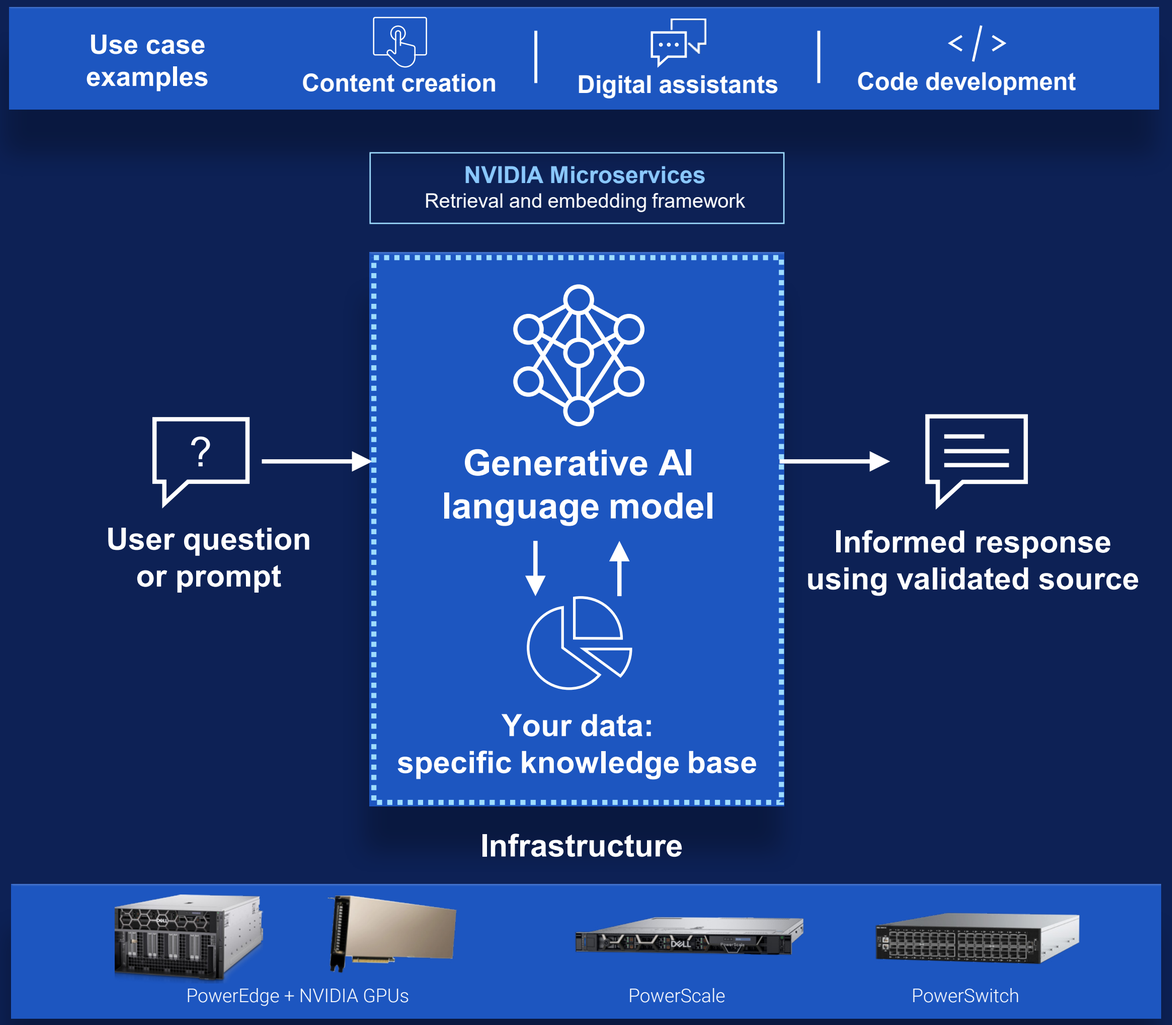
Microsoft Copilot for Microsoft 365	Microsoft Copilot in Windows	Microsoft Copilot for Sales	Microsoft Copilot for Security	GitHub Copilot
Unleash creativity & productivity	Unlock the full power of Windows 11	Access timely data & accelerate sales	Detect & respond to threats faster	Enable limitless innovation & possibility

Services aligned to these solutions help you rapidly enable more efficient ways of working, embrace GenAI with reduced risk and maximize adoption and success of AI initiatives.

Quickly deliver a more accurate and reliable GenAI application

Accelerator Services for RAG - aligned to RAG design with NVIDIA Microservices - allow you to:

- Assess and prepare data
- Deploy LLM & implement retrieval system
- Refine & optimize retrieval system for your specific use case
- Test and configure end-to-end system



Jumpstart your journey to GenAI success

Retrieval-Augmented Generation (RAG) is a technique for enhancing the accuracy and reliability of GenAI models with facts sourced from your own data, based on an information retrieval framework. RAG is like the "easy button" for entry into GenAI, as it requires no data science expertise. Accelerator Services for RAG help quickly design, develop, implement and test the Dell-NVIDIA RAG solution using sample data to drive better, richer data-driven decisions.

Taking that easy button approach even further, we introduce Accelerator Services for RAG on Precision AI-ready workstations. Leveraging the NVIDIA AI Workbench as part of the architecture, services experts build a ready-to-go mobile lab on a Precision workstation to enable rapid prototyping in a pre-validated environment. This provides a cost-effective, convenient mobile alternative for domain and enteprise-specific LLMs, offering a sandbox for developers to experiment with GenAI.

- Rapid prototyping in a pre-validated environment
- Cost-effective, low-risk exploration of GenAI use cases
- Convenient, portable GenAI testing and demonstration
- Closing GenAI skills gaps

Expert guidance to enhance your experience

When it comes to selecting the right AI models, there are thousands to choose from, and countless ways to configure a developer environment. Hugging Face has become the de-facto repository for open-source AI models, libraries and datasets. The new Dell Enterprise Hub on Hugging Face platform provides simplified on-premises deployment of customized large language models on Dell's top selling infrastructure. Accelerator Services for Dell Enterprise Hub enhance the developer experience, with guidance on tool and model selection and demonstration of a basic chatbot implementation using the validated model containers, all enabling rapid GenAI prototyping.

- Reduce time to value for rapid GenAI prototyping on a secure portal
- Drive developer and infrastructure efficiency with guidance on tool and model selection and use case alignment
- Augment capabilities and outcomes with knowledge and best practice sharing

Simplify operations with fully managed solutions for GenAI

Dell Managed Services for Generative AI allow your teams to focus their time on GenAI use cases and model customization, while Dell experts focus on managing the underlying GenAI infrastructure.

We manage the full solution stack, aligned with Dell Validated Designs, using the Dell Managed Services platform to manage the solution hardware and software, simplifying time to market and driving AI workloads.

- Deploy solution stack
- Monitor and manage infrastructure and GenAI Platform
- Optimize infrastructure continuously
- Monitor availability and track performance
- Manage day-to-day activities to maintain health of environment
- 24x7 delivery and support

Example Use Cases

- Marketing & Sales Content generation
- Chatbots and virtual assistants
- Software development

Lifecycle Management

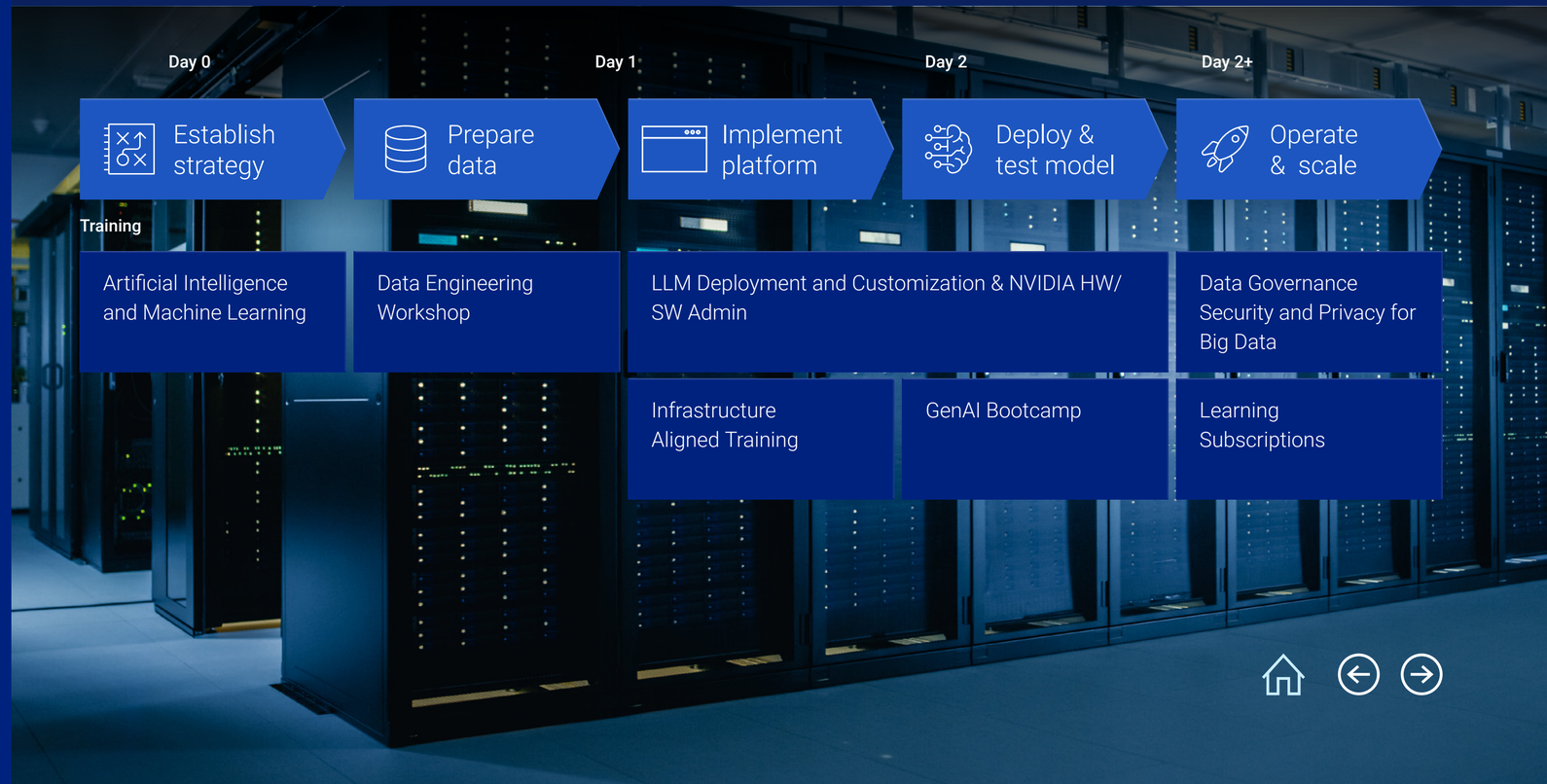
Deploy > Monitor > Operate > Optimize > Support > Decommission

Extend GenAI skills and capabilities

Residency Services for GenAI provide a certified technical expert to extend the internal capabilities of your IT team, helping speed new technology adoption and maximize ROI. Bringing deep skills and experience across vast AI technology areas and partners like NVIDIA, residents utilize best practices to simplify operations and processes and keep technology running at peak while engaging your IT teams to set them up for future success.

- Validated skills to extend internal IT capabilities and maximize the value of GenAI solutions
- Enable quick adoption of new technology and enhance utilization
- Simplify operations and enhance processes & procedures
- Technology running at peak performance, plus best practice sharing to enhance internal skills

You can further close skills gaps with hands-on training courses and certifications from Dell, even before equipment arrives. We provide extensive training options to build GenAI skills, including GenAI LLM certifications with NVIDIA, industry-leading certifications to empower your teams with validated data engineering, and LLM skills to accelerate time to value of your investment. More information about training and available courses and certifications can be found at **education.dell.com.**



DELL Technologies

Why is Dell the right partner for your journey into GenAI?

Dell provides the world's broadest portfolio of full-stack scalable GenAI solutions together with leading partners such as NVIDIA.

This unique approach leverages simplified, tailored and trusted solutions that combine customer data with the power of GenAI to drive innovation and tangible business value.

Recently recognized by Forbes as one of the "2024 World's Best Management Consulting Firms", Dell provides trusted expertise with decades of experience from strategy through adoption to drive AI value to your business faster.

Learn More

NVIDIA