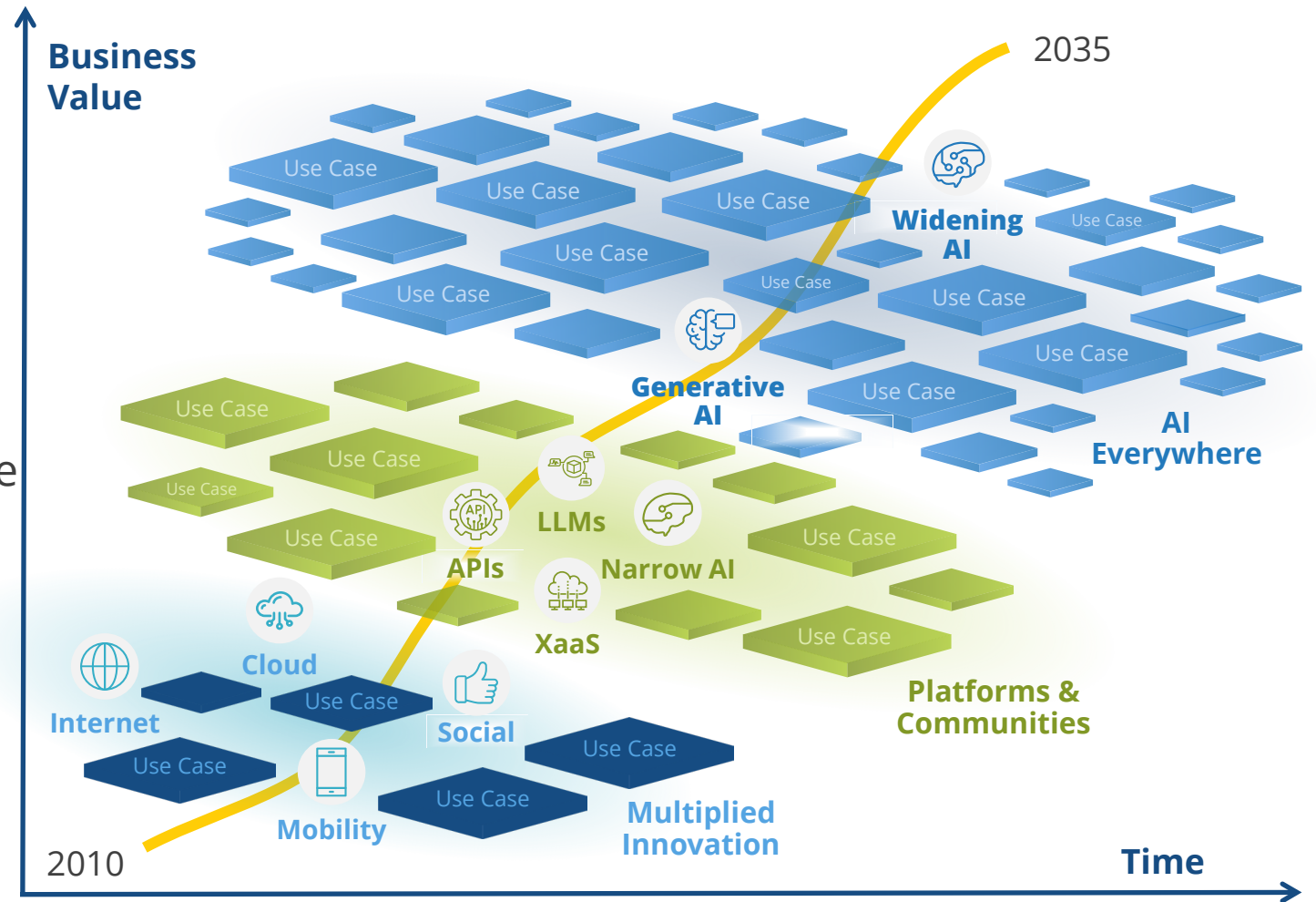# Multiplied Innovation to AI Everywhere

AI Journey. From narrow to widening AI

Intelligence Architecture. A data-centric platform underpinning the enterprise

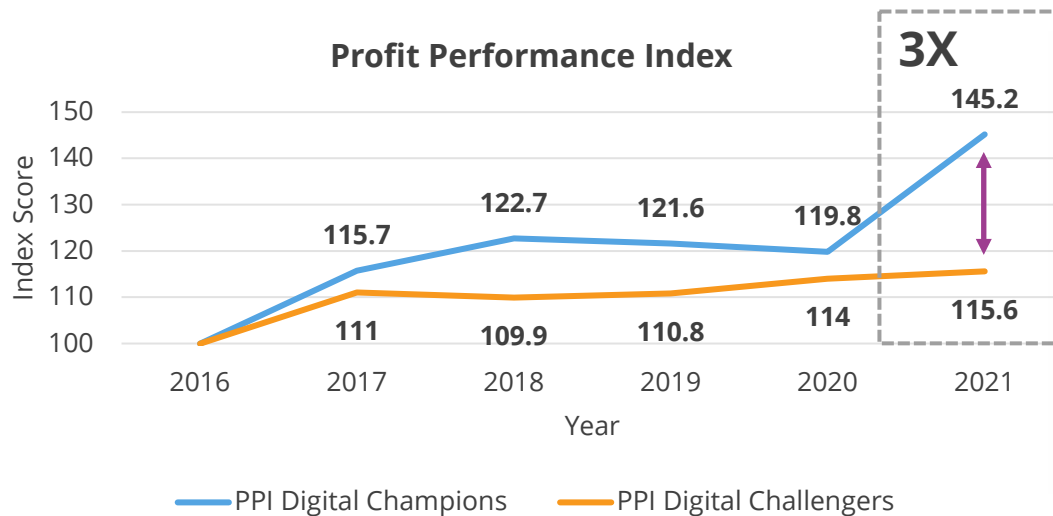**Digital Operations At Scale**. Cost-effective digital infrastructure for AI workloads
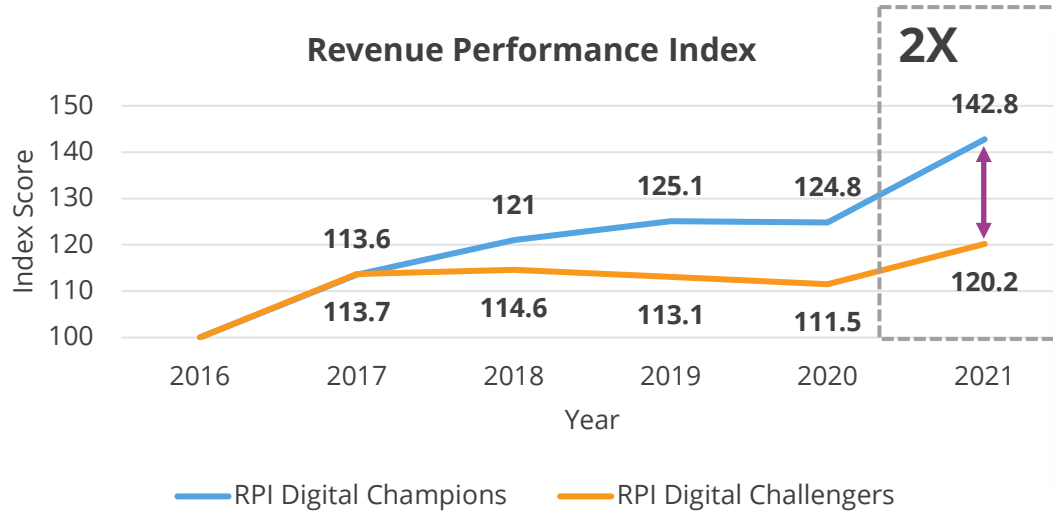
Skills. Attracting and reskilling talent for transformed work models

Trust. An upfront focus on trust

IDC believes that the transition to AI Everywhere will see the emergence of a range of new Generative AI-driven use cases at an individual level (productivity-basis), at a business function level as well as in an industry-specific context.

The Digital Advantage

Revenue Performance Index

2X

Index Score

- 150
- 140
- 130
- 120
- 110
- 100

142.8

125.1   124.8
121
113.6

113.7   114.6   113.1   111.5   120.2

Year: 2016 2017 2018 2019 2020 2021

— RPI Digital Champions   — RPI Digital Challengers

Profit Performance Index

3X

Index Score

- 150
- 140
- 130
- 120
- 110
- 100

145.2

122.7   121.6   119.8
115.7

111   109.9   110.8   114   115.6

Year: 2016 2017 2018 2019 2020 2021

— PPI Digital Champions   — PPI Digital Challengers

> "We don't have a digital strategy for our business. We have a business strategy for a digital world."
>
> — Lidia Fonseca, Chief Digital and Technology Officer
>
> Pfizer

> "There is nothing artificial about our customer experience. I like to think of it as data intelligence, not artificial intelligence."
>
> — Laura J. Alber, Chief Executive Officer
>
> WILLIAMS SONOMA

Global manufacturers n = 3,129; Digital Champions n = 614 (~20%); Digital Challengers n = 2,515 (~80%)

What is Your Business Strategy: Productivity? Revenue? Both?

IDC> Prediction **2024**

Productivity

Enterprises will leverage GenAI and automation technologies to drive **$1T in productivity gains** by 2026.

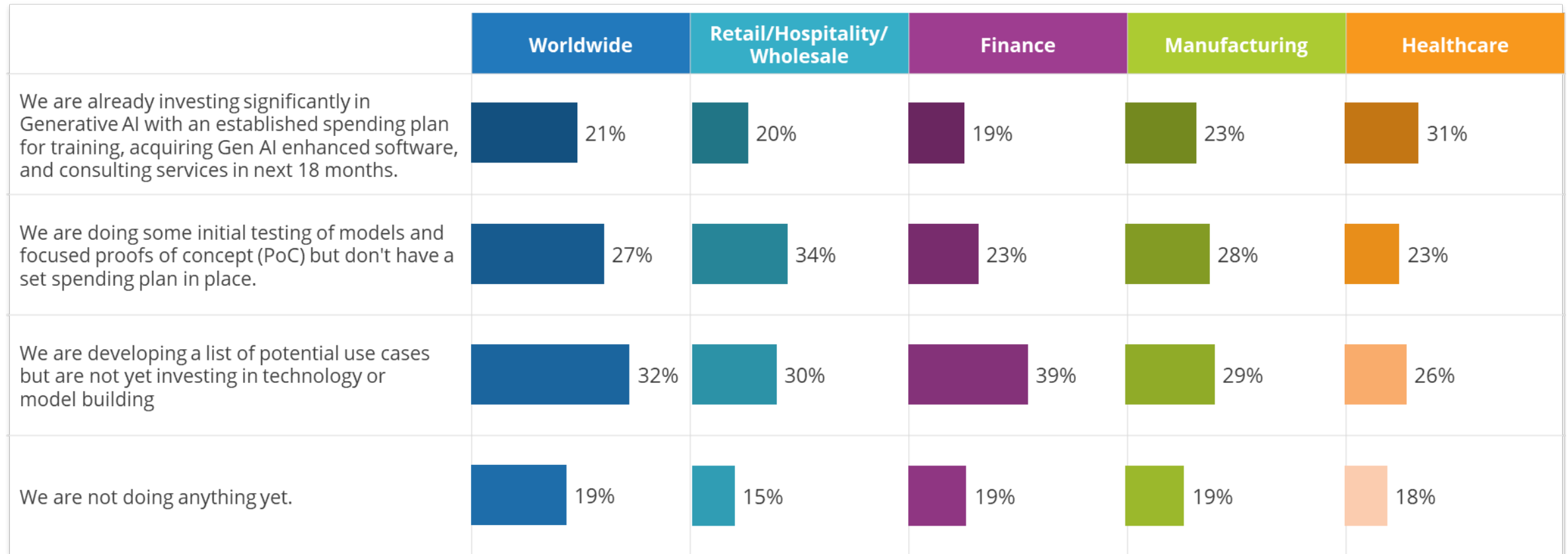IDC FoW FutureScape, 2024

IDC> Prediction **2024**

Revenue

By 2025, 35% of enterprises will have mastered the use of GenAI to co-develop digital products and services leading to **double the revenue growth** compared to their competitors.

IDC Digital Business FutureScape, 2024

Source: Preview of IDC's 2024 FutureScape Predictions, Fall, 2023.

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IDC

Current State of Generative AI Adoption by Industry

What is your organization's current state of evaluating or using Generative AI (GenAI)?

	Worldwide	Retail/Hospitality/ Wholesale	Finance	Manufacturing	Healthcare
We are already investing significantly in Generative AI with an established spending plan for training, acquiring Gen AI enhanced software, and consulting services in next 18 months.	21%	20%	19%	23%	31%
We are doing some initial testing of models and focused proofs of concept (PoC) but don't have a set spending plan in place.	27%	34%	23%	28%	23%
We are developing a list of potential use cases but are not yet investing in technology or model building	32%	30%	39%	29%	26%
We are not doing anything yet.	19%	15%	19%	19%	18%

Industries Most At Risk for Disruption

To what extent do you believe Generative AI and technologies like ChatGPT or GitHub Copilot will disrupt your organization's competitive position or business operating model in the next 18 months?

Life Sciences
44%

Healthcare
42%

Professional Services
41%

Media & Entertainment
40%

Industry Disruption: Life Sciences

By 2026, the adoption of generative AI-based drug design, intelligent supply chain for cell and gene therapies, and digital therapeutics will **scale the growth of precision therapies by 60%.**

IDC Health Insights FutureScape, 2024

Insilico Medicine

Biotech company focused on using GenAI to shorten the time to bring new drugs to market.

Case Study Examples:

- 18 months from scratch to pre-clinical (compared to 4.5 years)
- 30-42 months from 0 to phase 1 based (compared to 5.5 years)

Source: Preview of IDC's 2024 FutureScape Predictions, Fall, 2023.

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Industry Disruption: Media and Entertainment

By 2026, the automated assembly of suggested scenes compiling camera views, audio, graphics, replays, and other sources for director selection will be implemented by **25% of all live productions**

IDC Media and Entertainment FutureScape, 2024

GenAI to help FOX staffers rapidly search footage from more than 1.9 million videos and produce new content "in near real-time" for TV, social and marketing content.

Automated audio commentary for the Masters, Wimbledon.

Industry Disruption: Professional Services

By 2025, **40% of services engagements will include GenAI-enabled delivery**, triggering a shift in human-delivered services to strategy, change, and training to prepare organizations for AI Everywhere.

IDC Services FutureScape, 2024

3 Transformed Services Offerings

Customer Care BPO
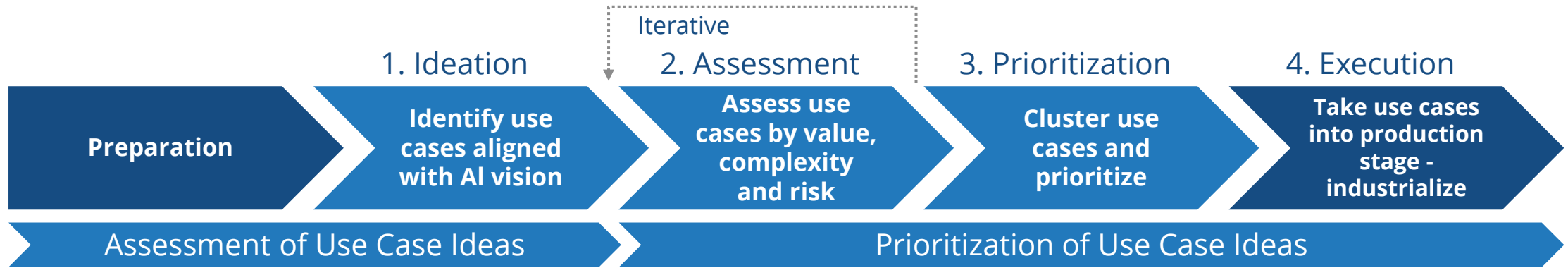40% of organizations will re-skill their customer care agents to take up different roles by 2026.

Application Modernization
By 2027, use of AI to support and execute application modernization services work will grow by 75%.

IT Support
By 2027, 95% of G2000 organizations will leverage generative AI in hardware and software lifecycle services.

Professional Services Organizations lack use cases to drive business needs!   **22.4%**

Plenty of Use Cases. Prioritize the Ones that Move the Needle

Iterative

1. Ideation → 2. Assessment → 3. Prioritization → 4. Execution

| Preparation | Identify use cases aligned with AI vision | Assess use cases by value, complexity and risk | Cluster use cases and prioritize | Take use cases into production stage - industrialize |

Assessment of Use Case Ideas | Prioritization of Use Case Ideas

Dimension	Specification
Value	Economic value
	Strategic alignment
Complexity	Data
	Algorithm
	Process systems
	Require know-how

High

Value

Low

Low — Complexity — High

🔴 High-risk use cases

IDC
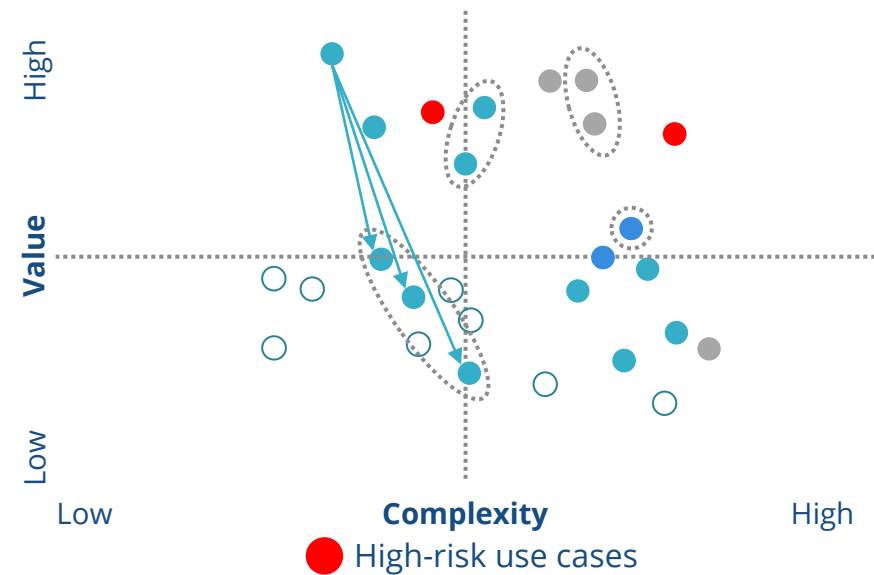
GenAI Use Cases Must Link to Prioritized Business Outcomes

What are the KPIs needed to Link to Generative AI Industry Use Cases?

GenAI Energy Use Case
Predictive Meter to Cash

Client Service KPIs
Automated Customer Service & Higher CSAT

GenAI Financial Services Use Case
Fraud Forensics

Client Service KPIs
Fewer Fraud issues & Higher CSAT

GenAI Government Use Case
Call center, help desk and constituent services support

Government KPIs
Employee and public satisfaction scores & reduced call times

GenAI Manufacturing Use Case
Voice-based Data/Report Query

Manufacturing KPIs
Factory productivity, Time-to-Expertise & Higher CSAT

GenAI Retail Use Case
Virtual Shopping Assistant/ Chatbot Automation

Retail KPIs
NPS/CSAT, improved Handle Times & Routing/Escalation metrics

GenAI Health & Life Sciences Use Case
Patient/Customer Experience

Health & Life Sciences KPIs
Improved CSAT, Patient Experience & Improved Clinical Outcomes

Industry AI Use Cases

Identifying GenAI Use Cases Across 6 Industries

IDC Energy Insights

IDC Financial Insights

IDC Government Insights

IDC Health Insights
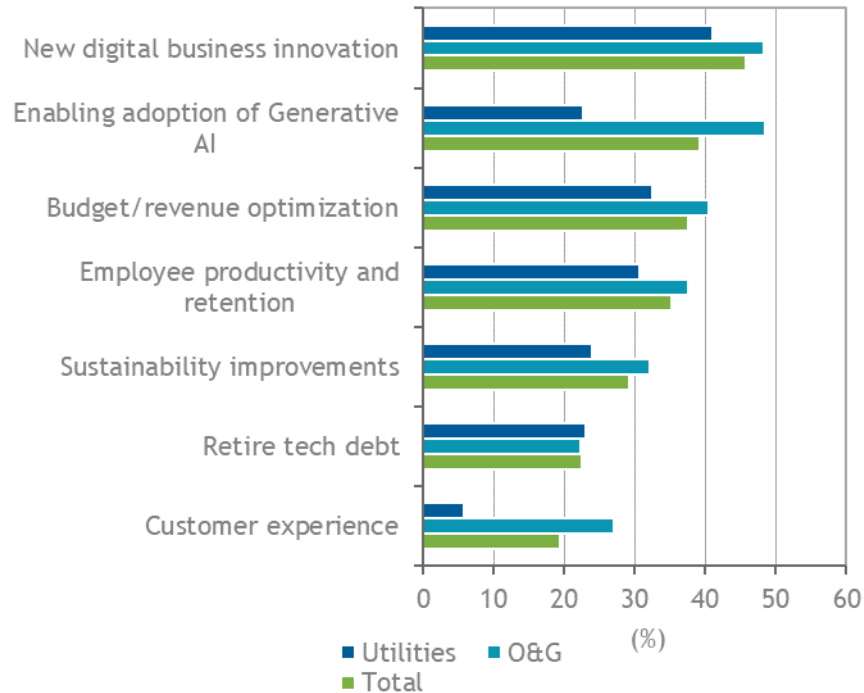
IDC Manufacturing Insights

IDC Retail Insights

Industry use cases will generally require more custom work (and, in some cases, may even require building your own generative AI model).

Examples include generative drug discovery in life sciences and generative material design for manufacturing. These are likely to be a source of real business value creation for larger enterprises that are able to put together a sufficiently large set of training data or work with other parties in their ecosystem to share data for training the model.

These specialized use cases tend to be built around very specific choices of models and model providers, with custom integration architectures designed for individual clients and significant custom implementation work required.

The Energy Industry

Broader Key IT Priorities in the Energy Industry moving into 2024:

Horizontal bar chart showing IT priorities (Utilities, O&G, Total) with x-axis (%) from 0 to 60:

- New digital business innovation
- Enabling adoption of Generative AI
- Budget/revenue optimization
- Employee productivity and retention
- Sustainability improvements
- Retire tech debt
- Customer experience

Legend: ■ Utilities ■ O&G ■ Total

Source: 2023 FERS Wave 7

Focus Areas for Generative AI in Energy

Energy organizations are focused on enhancing decision making within operations and field services and supporting digital customer engagement applications. Specific initiatives where GenAI can add value include:

- Field Service & Maintenance
- Asset Performance Management
- Customer Experience
- Knowledge Augmentation
- Environmental Sustainability

Increasing efficiencies within operations and field services using GenAI can reduce cost, improve safety, and increase productivity. As for customer engagement, GenAI can help predict customer needs and energy usage patterns as well as increase customer satisfaction and retention rates, while lowering call center volume costs.

Emerging Generative AI Use Cases in the Energy Industry

Use Case	Description	Business Impact	Metrics	Risk Level
Augmented maintenance & knowledge management	Arming field technicians with all the data and information needed to complete a job while in the field, complemented by GenAI options for next steps & best practices.	The objectives are less time and cost to repair, longer mean time between failure (MTBF) and higher first-time fix (FTF) rates, and lower factory downtime. Easier training of new technicians is also enabled.	• MTBF, and FTF • Rapid onboarding of new technicians	Medium
Closed-loop outage management	As outages occur, control room engineers must recognize, isolate, and diagnose the issues. They then need to dispatch crews to address issues. This can take hours to sort through data and coordinate crews, unless GenAI is present to speed decision making.	Grid assets, crew dispatch, and customer service are all interconnected, and the outage management system can automatically diagnose and dispatch crews without human intervention. This can save hundreds of hours a year in downtime and improve customer service scores.	• Reduction of field technician transportation • Higher CSAT	Medium
Cognitive Asset Performance Management	Assets are monitored and inspected on a set schedule based on limited performance data in conjunction with historical inputs. This leads to maintenance being at risk of unplanned events, without constant, automated monitoring.	There is no lag between issues occurring, their detection, and action being taken, which improves productivity and reduces asset downtime.	• Improvement in productivity • Reduction of asset down time	High
Predictive Meter to Cash	AI models designed to detect anomalies in customer payment or energy consumption behavior can ensure that billing and energy usage data are accurate before being shared with customers.	Improves customer satisfaction and automates customer service functions when AI models can predict specific customer complaints or customer preferences and energy usage behavior.	• Higher CSAT • Automated customer service	High
360-degree connected customer management	Digital, AI-enhanced customer engagement can break down siloed customer loyalty by providing a holistic view into customer experience and individualized needs.	Improve customer experience, engagement, and lifetime value with a 360-degree, omni-channel view of customers through engagement tools that suggest next best action.	• Higher CSAT • Lower call center volume	Medium

GenAI in Energy: Case Study

Creation of a GenAI-Powered Knowledge Management Platform for Field Technicians
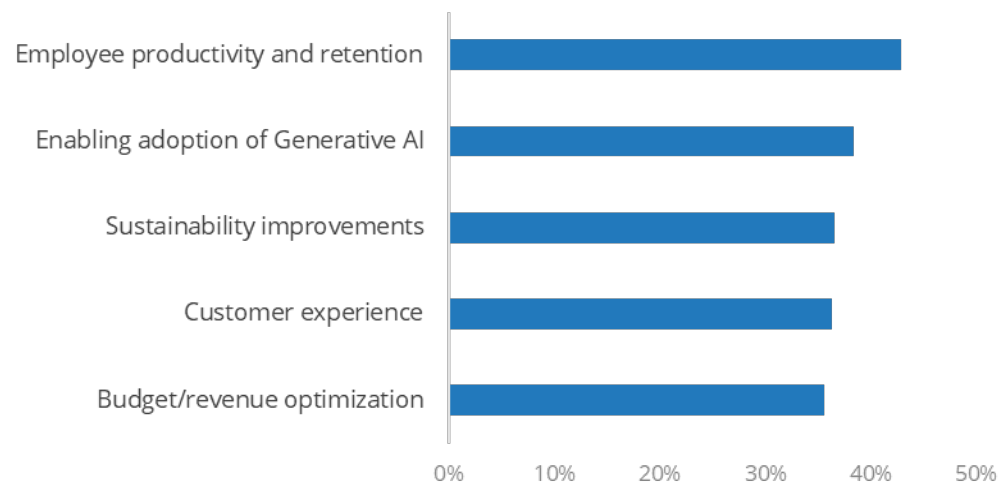
Problem: The energy industry has been anticipating and struggling with a large portion of its workforce going into retirement, as well as the loss of knowledge from these seasoned workers. The industry also faces a major talent attraction issue resulting in understaffed teams and new field technicians coming on board with limited work experience.

Solution: Building cloud-based knowledge management platforms leveraging GenAI will provide utility as well as oil & gas companies the capability to capture the knowledge of their experienced SMEs, while supporting the new workforce in a way that is faster and more efficient than in the past.

Outcomes: A knowledge management platform with GenAI can provide new technicians with everything they need to complete tasks on a job without losing time. Productivity and efficiency of technicians delivering field services will improve, and new hires will on-board more quickly. Key metrics include improved and optimized training of new hires, improved labor productivity, increased ROI of training investments, improved customer experience, and lower incident rates/improved safety.

The Financial Services Industry

Broader Key IT Priorities for Financial Services moving into 2024:

Bar chart showing (from top to bottom):
- Employee productivity and retention — ~43%
- Enabling adoption of Generative AI — ~38%
- Sustainability improvements — ~37%
- Customer experience — ~37%
- Budget/revenue optimization — ~35%

(X-axis: 0%, 10%, 20%, 30%, 40%, 50%)

Employee productivity leads the transformation priority list for financial institutions

Source: Future Enterprise Resiliency & Spending Survey Wave 7, IDC August 2023
Q: "What are your organization's top priority business goals driving digital infrastructure investments over the next 18 months?

Focus Areas for Generative AI in Financial Services

Financial institutions will look to develop a GenAI strategy based on:

- Data sensitivity
- Operational risk
- New governance requirements
- Regulatory guidance
- Proof of concepts across multiple lines of business, IT, and operations.
- Existing internal skillsets
- Partnerships

Emerging Generative AI Use Cases for Financial Services

Use Case	Description	Business Impact	Metrics	Risk Level
Customer service	Use GenAI as a "copilot" alongside the contact center and/or branch staff to provide faster and potentially more accurate advice and service to the customer.	• Improved customer satisfaction • Improved employee productivity and retention • Potential to train staff on the job	• Customer satisfaction scores • Customer attrition • Reduced call times • Staff productivity	Low
Fraud forensics	Use GenAI models to hunt for patterns in fraud behavior in order to fine-tune real-time fraud detection & prevention models.	• Improved accuracy of fraud models • Fewer "false positives" that negatively affect good customers	• Fewer fraud losses • Improved customer satisfaction scores	Medium
Wealth management advisory	Provide high net worth customers with more personalized financial and investment advice and service.	• Increases high net worth customer base • Improved revenues from competitive differentiation	• Number of wealth management customers • Assets under management • Financial performance of GenAI-associated portfolios	High
Regulatory compliance	Apply GenAI to regulatory publications to determine the best approach to compliance. Also apply to financial documentation to look for KYC and AML anomalies.	• Faster response to new regulations • Faster preparation for audits • Improved productivity for compliance staff	• Reduced non-compliance events • Reduced non-compliance fines • Staff required to respond to auditors	Medium

GenAI in Financial Services : Case Study

ABN AMRO Contact Center

Problem: Improving contact center staff performance is only done after the calls are completed, introducing a lag in feedback and improvement.

Solution: The bank uses the ChatGPT platform to listen in to customer calls and monitor contact center performance in real time to improve staff proficiency and customer satisfaction.

Outcomes: An initial pilot of 20 contact center agents was expanded to 200 in August, 2023. Agents reported that the assistance of the GenAI platform allows them to spend more time focusing on what the customer is saying, and less time writing down notes during the conversation. Agents now look forward to expanded capabilities of the system.

The Government Sector

Broader Key IT Priorities Government moving into 2024:
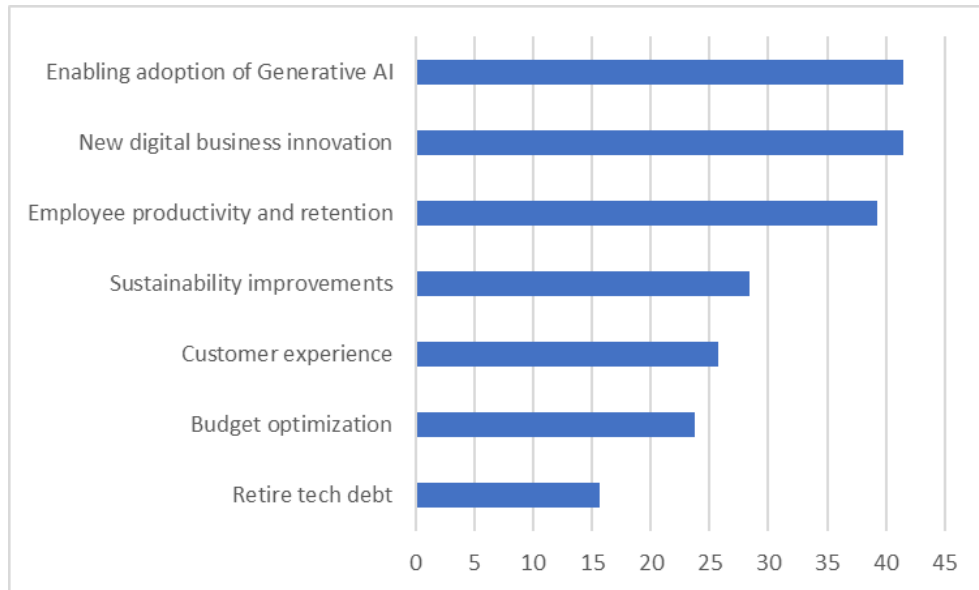
Horizontal bar chart showing values approximately:
- Enabling adoption of Generative AI: ~41
- New digital business innovation: ~41
- Employee productivity and retention: ~39
- Sustainability improvements: ~28
- Customer experience: ~26
- Budget optimization: ~24
- Retire tech debt: ~16

(X-axis: 0 5 10 15 20 25 30 35 40 45)

Source: Future Enterprise Resiliency & Spending Survey Wave 7, IDC August 2023
Q: "What are your organization's top priority business goals driving digital infrastructure investments over the next 18 months?

Focus Areas for Generative AI in Government

- Content management, aggregation and analysis

- More effective and faster content creation

- Assisting call center and constituent services support workers with intelligent services

- Scenario and simulation planning for national security, sustainability and resiliency

- Generating, testing, auditing and translating code

- Staff recruitment and training

Emerging Generative AI Use Cases for Government

Use Case	Description	Impact	Metrics	Risk Level
Content management aggregation and analysis	Summarize, synthesize and analyze large amounts of information across and within government applications, for example, council notes, 311 data, police complaint records, case records (e.g., criminal investigations, social care eligibility, tax fraud)	• Proactive and preemptive decision-making • Faster time to insights • New insights • Improved employee productivity • More personalized government services	• Employee productivity • Time to produce analysis and reports • New hypotheses • Policy and service delivery impact	Low/ Medium
Call center, help desk and constituent services support	Use GenAI as a "copilot" alongside the contact and call center and help desk staff to provide faster and potentially more accurate advice and service to employees and the public .	• Faster resolution of tickets/ issues • Improved employee productivity and retention • Higher constituent satisfaction	• Employee and public satisfaction scores • Reduced call times • Faster issue resolution • Employee productivity	Low
Scenario and simulation planning	Use of simulation in various scenarios such as war gaming, and urban planning for sustainability and resiliency	• Deep understanding of impact of various complex scenarios • Improved data-driven decision-making • Better decisions for long-term resiliency, such as location of datacenters, real estate development, etc	• Employee productivity • Time to produce analysis and reports • New hypotheses • Policy and service delivery impact	Medium/ High
Content creation	Creating more effective content faster such as writing RFIs/RFPs documents for public tenders, completing grant and local applications, having more compelling job descriptions and advertisements	• Improved employee productivity • More personalized government services • Faster and more effective content creation • Improved outcomes	• Improved employee productivity • Improved outcomes (higher % of grants awards/ RFP responses, increase in job applications)	Low

GenAI in Government: Case Study

The City of Boston Tests GenAI for Non-Emergency Services (311) Data Analysis

Problem: In the broadest sense, the City of Boston and the Bloomberg Center for Cities were testing the use of generative AI to support operational transformation. More specifically the problem is the lack of access employees have to data to make preemptive rather than reactive decisions. Government is currently hampered by bureaucracy and the resulting outdated, siloed, manual and paper-based workflows which effectively deny employees access to massive amounts of data across government systems.

Solution: The City of Boston participated in a pilot with 20 other municipalities overseen by the Data Smart Cities Solutions program, located at the Bloomberg Center for Cities at Harvard University. The City asked OpenAI to "suggest interesting analyses" of uploaded 311 data. In response, it suggested two things: time series analysis by case time, and a comparative analysis by neighborhood.

Outcomes: The result was that city officials spent less time navigating the mechanics of computing an analysis, and had more time to dive into the patterns of discrepancy in service. They were able to make graphs, maps, and other visualizations with a simple prompt. This removal of barriers to accessing and analyzing data enabled city officials to take a truly data-driven approach to understanding the needs of the public. The data allow them to "formulate more hypotheses and challenge assumptions, resulting in better decisions". The experiment was also useful in that in demonstrated that employees without STEM background could effectively use GenAI to support their work if provided some training.

The Health and Life Sciences Industry

Broader Key IT Priorities for Health and Life Sciences moving into 2024:

Staffing shortages are a major concern, leading HLS organizations to turn to GenAI to improve staff productivity and efficiency, and reduce workflow frictions to improve staff and patient experience.
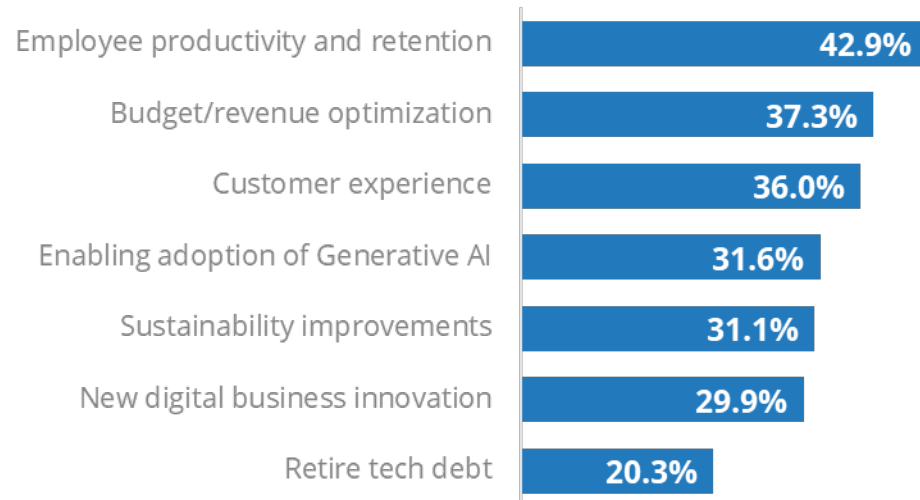
Priority	Percentage
Employee productivity and retention	42.9%
Budget/revenue optimization	37.3%
Customer experience	36.0%
Enabling adoption of Generative AI	31.6%
Sustainability improvements	31.1%
New digital business innovation	29.9%
Retire tech debt	20.3%

Q. What are your organization's top priority business goals driving digital infrastructure investments over the next 18 months?
Source: Future Enterprise Resiliency & Spending Survey, Wave 7, IDC, August, 2023

Focus Areas for Generative AI in the Health and Life Sciences Vertical

- Private large language models to ensure patient data privacy and security
- Accelerated decision making
- Employee productivity
- Consumer/patient/member experience
- Workflow automation
- Ethical use of AI
- Content management
- Quality, risk, and compliance

Emerging Generative AI Use Cases for Health & Life Sciences

Use Case	Description	Business Impact	Metrics	Risk Level
Clinical Documentation Summarization	Automatically summarize and refine patient records for clear and concise documentation	• Increased efficiency • Enhanced accuracy • Cost reduction • Improved compliance • Improved clinical decision making	• Documentation Time • Error Rate in Documentation • Patient Throughput • User Satisfaction • Data Retrieval Time	Medium
Discharge Information Documentation	Discharge letters, patient education material; summaries for referrals	• Improved care coordination • Improved care outcomes • Reduced duplicate testing/workups • Improved utilization management • Cost savings	• Care plan adherence • Patient engagement • Quality outcomes • Total cost of care • ED utilization and readmission rates	Medium
Automated Diagnosis Assistance	Enhancing medical image analysis aiding in early and accurate disease diagnosis	• Improved diagnostic accuracy • Increased efficiency • Cost savings • Enhanced patient outcomes • Healthcare professional support	• Diagnostic Accuracy Rate • Time-to-Diagnosis • Workload Reduction • False Positive/Negative Rates • User Satisfaction	High
Drug Discovery	Target discovery, candidate identification, lead optimization	• Significant time and cost savings	Time to target, candidate identification / lead optimization, Cost saved	High
Patient / customer Experience	Conversational chatbots to answer customer / patient queries	• Higher patient retention rate • Fewer drop-outs from trials leading to faster time to Market • Cost savings owing to improved retention rate • Brand loyalty owing to improved customer experience	Improved CSat Improved Patient Experience Improved Clinical Outcomes	Low

GenAI in Health & Life Sciences: Case Study

Problem:

- Clinicians at a comprehensive cancer center in the US are often bogged down in the minutia of administrative tasks and overwhelmed with data.

- Highly fragmented patient data often prohibits effective and efficient data-driven decision making that supports highly personalized and collaborative care, clinical trials coordination and treatment planning.

Solution:

- Transform the clinician experience by reducing repetitive and time-consuming tasks while creating efficiencies that allow for greater focus on the patient and top-of-license work.

- Leverage GenAI to create intelligent patient 360 summaries and enhanced search capabilities that allow both clinical researchers and providers to find value data quicker while supporting more accurate and effective treatment plans sooner.

Outcomes:

- Faster and more accurate identification of Oncology clinical trial candidates.

- Synthesis of data that supports precision medicine, clinical decision support, predictive modeling, and more accurate treatment plans that drive better outcomes and utilization of resources.

The Manufacturing Industry

Manufacturing organizations lacks use cases to drive organizational needs!

27.4%

IDC Manufacturing Insights

Key Business Priorities For Manufacturing moving into 2024

Horizontal bar chart showing percentages:
- Enabling adoption of Generative AI: ~47%
- Employee productivity and retention: ~44%
- New digital business innovation: ~42%
- Budget/revenue optimization: ~40%
- Sustainability improvements: ~38%
- Customer experience: ~28%
- Retire tech debt: ~6%

X-axis: 0, 10, 20, 30, 40, 50 (%)
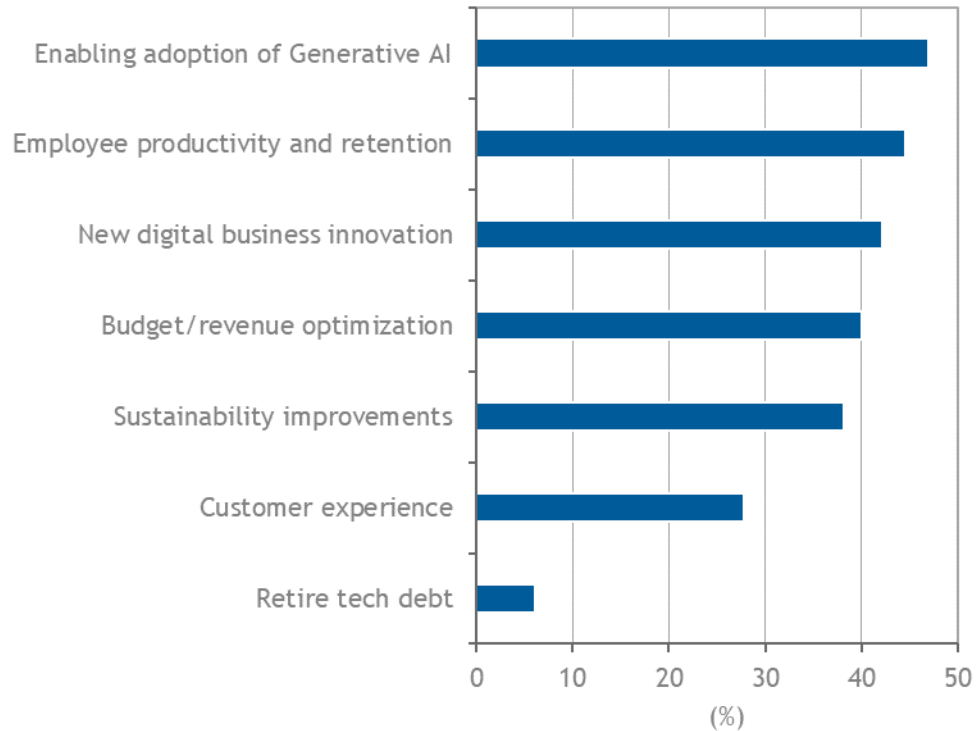
Source: 2023 FERS Wave 7

Focus for GenAI in Manufacturing:

Manufacturing organizations are focused on enhancing decision making within operations, driving higher operational efficiency levels, and supporting digital customer engagement applications. Specific initiatives where GenAI can add value include:

- Factory floor Automation
- Asset Performance Management
- Cybersecurity
- Accelerating employee time-to-expertise
- Operationalization of Sustainability

Increasing efficiencies within manufacturing operations can reduce cost, improve service levels, enhance safety, and improve worker productivity. GenAI can help predict customer needs and increase customer satisfaction and retention rates.

Emerging Generative AI Use Cases in the Manufacturing Industry

Use Case	Description	Business Impact	Metrics	Risk Level
Augmented maintenance & knowledge management	Arming factory technicians with all the data and information needed to complete a job the first time, complemented by GenAI options for next steps/follow up and best practices.	The objectives are less time and cost to repair, longer mean time between failure (MTBF) and higher first-time fix (FTF) rates, and lower factory downtime. Easier training of new technicians is also enabled.	• MTBF, and FTF • Rapid onboarding of new technicians	Medium
Voice-based Data/Report Query	GenAI can allow users to ask natural questions of their data to quickly ingest data, identify issues, and provide real-time context. It can also allow users to compile reports.	Enable factory employees to interact with enterprise data in more natural ways. Including both finding information and compiling it. Allows people to focus more of finding/solving issues rather than chasing data.	• Factory productivity • Time-to-Expertise • Higher CSAT	Medium
Cognitive Asset Performance Management	Assets are monitored and inspected on a set schedule based on limited performance data in conjunction with historical inputs. This leads to maintenance being at risk of unplanned events, without constant, automated monitoring.	There is no lag between issues occurring, their detection, and action being taken, which improves productivity and reduces asset downtime.	• Improvement in productivity • Reduction of asset down time	High
Carbon Tracking and Footprint Management	Operations are looking for better, more modern GenAI tools to allow them to better track, assess, and ultimately operationalize carbon and sustainability data. Regulatory requirements will also put a sizable burden onto companies that cannot easily access and assess this data.	Provide a 'single pane of glass' for carbon/sustainability data so that organizations can more easily operationalize insights and both anticipate and meet/exceed regulatory requirements and customer expectations.	• Scope 1-3 reporting	High
Document Automation and Management	GenAI can learn standard contractual language to the point it could create and edit routine documents.	Improve productivity and employee satisfaction with an intuitive, query-able, tools that complete rote tasks and suggest next best action.	• Improvement in productivity • Employee satisfaction	Medium

GenAI In Manufacturing Case Study: Query-able Tool for SLA Automation

Problem: Manufacturers typically have hundreds, perhaps even thousands, of supplier contracts, each with its own unique set of service level agreements (SLA). Operations personnel are routinely burdened with these documents; worse they are often oblivious of key provisions. The industry also faces a major talent attraction issue resulting in understaffed teams and tedious tasks.

Solution: GenAI tool that ingests contract data in an easy to access natural language interface. GenAI can learn standard contractual language to the point it can create and edit routine documents for both structured and unstructured data (eg an ETA showing a late delivery could trigger a mode change on a PO or an email aligning on contractual terms could feed a contract update).

Outcomes: A contract management platform with GenAI can provide operations personnel with quick, relevant insights and relieve them of tractional time-consuming rote and routine tasks. Key metrics include improved and optimized training of new hires, improved operator productivity, better adherence to contracts and contacted capacities.

The Retail Industry

Broader Key IT Priorities moving into 2024:

- Employee productivity leads the transformation priority list for retail institutions.
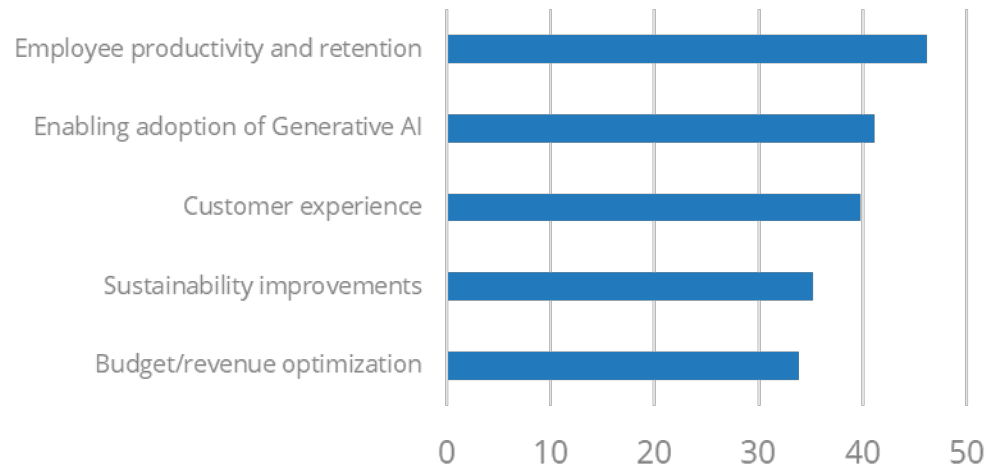
Source: Future Enterprise Resiliency & Spending Survey Wave 7, IDC August 2023
Q: "What are your organization's top priority business goals driving digital infrastructure investments over the next 18 months?

Focus Areas for Generative AI in the Retail Vertical

- Search and Knowledge Management Applications
- Customer Service Interfaces and Automation
- Automated Marketing content and insights tools and capabilities
- Workforce back office and frontline productivity initiatives
- IT operations efficiency

Emerging Generative AI Use Cases for Retail

Use Case	Description	Business Impact	Metrics	Risk Level
Virtual Shopping Assistant/ Chatbot Automation	Virtual agents for personalized assistance across geographies, natural language understanding of issues and optimization.	• Rapid response capabilities • Better customer experience • Enable self-service • Lower support costs	• NPS/CSAT • Handle Times • Routing/Escalation metrics	Medium
Contract Management, Optimized Procurement	Legal documents and sales contracts repository, review and regulatory compliance for cross-border commerce.	• Optimized contract details • Faster access to contract data • Insight availability across supplier networks	• Time to completion • Overhead Expenses • Payment term compliance metrics	High
Automated Marketing Content	Development of hyper-personalized marketing campaigns, promotions, marketing copy, and image content with optimized distribution.	• Lower marketing campaign costs • Faster time to delivery • Personalized marketing capability	• Marketing Expenses • Campaign Count • Profitability metrics	Low
Consolidated User Generated Content	Consolidation of ratings and reviews, consolidated and automated product information.	• Real time update and sentiment analytics • Product insights • Improved Customer experience	• Conversion rates • Assortment performance • NPS/CSAT	Low
Data Grounded Search – Knowledge Management	Internal knowledge base search capabilities using natural language engagement for accessing entire data sets.	• Employee-customer engagement • Improved customer experience • Faster knowledge sharing • Improved collaboration • Faster, relevant search	• Employee productivity metrics • NPS/CSAT • Collaboration metrics	Medium

GenAI in Retail: Case Study

Carmax

Problem:

Product description pre-purchase research content generation for over 45,000 used cars at any time, combined with copious amounts of user generated content reviewing vehicle selection. Content challenges include search engine optimization (SEO) to optimize vehicle marketing.

Solution:

Application of GenAI tools to automate detailed product generation including SEO and consolidate user generated content including sorting and classification by vehicle details – make, model, year and type. Automate product detail generation.

Outcomes:

Conversion of years of product content generation work into hours, reduction in overall staff requirements for ongoing vehicle content. Est. multi-million dollars in cost savings and cost avoidance.

"We would have had to have hired tens or maybe hundreds of content writers and taken years to generate this content We were able to do this literally in a matter of hours."

Shamim Mohammad,
EVP & CITO Carmax

Source: CIO.com, Microsoft

Build the Generative AI Roadmap

IDC has found that the "three horizons" framework is an excellent model to guide organizations when transforming their business models. The framework drives alignment across all business domains, helps prioritize key initiatives, and creates a basis to execute on that framework. IDC believes this framework can be adapted for GenAI to reverse engineer strategic objectives to create a journey of use cases. The use cases will then need to be mapped to the horizons along the following lines:

- Horizon 1 use cases constitute the foundation focusing on the next 12 months. These use cases tend to focus on incremental innovation — and the initial business case to launch horizon 1 use cases should be easier to justify. Use cases in horizon 1 represent initial capabilities that provide a foundation for the strategic priorities of an organization. In addition, the underlying technologies required for these use cases are generally mature. It is important to assess and prioritize horizon 1 use cases with "scale" in mind (i.e., how this will continue forward to the horizon 2 and horizon 3 time frames).

- Horizon 2 use cases focus more on disruptive innovation. By extending and augmenting use cases with advanced capabilities, organizations prepare themselves for horizon 3 use case requirements while searching for radical improvements to existing operations. Organizations committed to the road map would be able to start incubating horizon 2 use cases while completing the horizon 1 phase. However, the full deployment of horizon 2 use cases would usually require 24–48 months.

- Horizon 3 use cases imagine the possibilities over a three- to five-year period for the future business model. The strategic priorities of an organization need to be translated into one or more "future" use cases that underpin its competitiveness. Starting from this point, an organization may place big bets on the underlying capabilities supporting these use cases. Accordingly, this helps prioritize which use cases to focus on in horizon 2 and thus horizon 1.
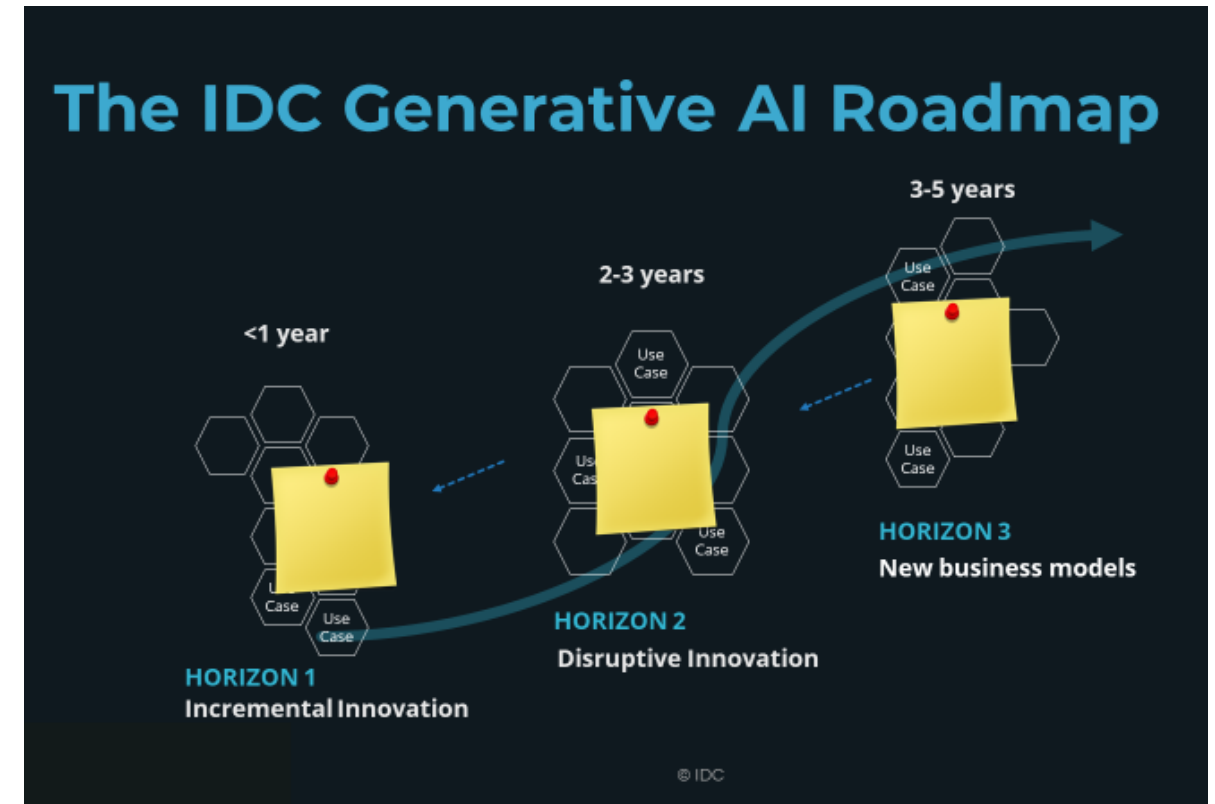
Essential Guidance: Think Digital!!

Prioritize

Prioritize GenAI use cases according to **business value, cost and potential business risk.** Think through the industry specific use cases as part of a holistic strategy for your organization.. **Build the GenAI Business Use Case Roadmap.**

Experiment

Identify and enlist the GenAI champions within your organization. **Leave room for experimentation in early stages and avoid the urge to stifle innovation**.

Groundwork

Lay the GenAI technology foundations:
- **A data-centric platform** underpinning the enterprise
- Cost-effective **digital infrastructure for AI workloads**
- **An API-centric integration framework to drive interoperability**

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