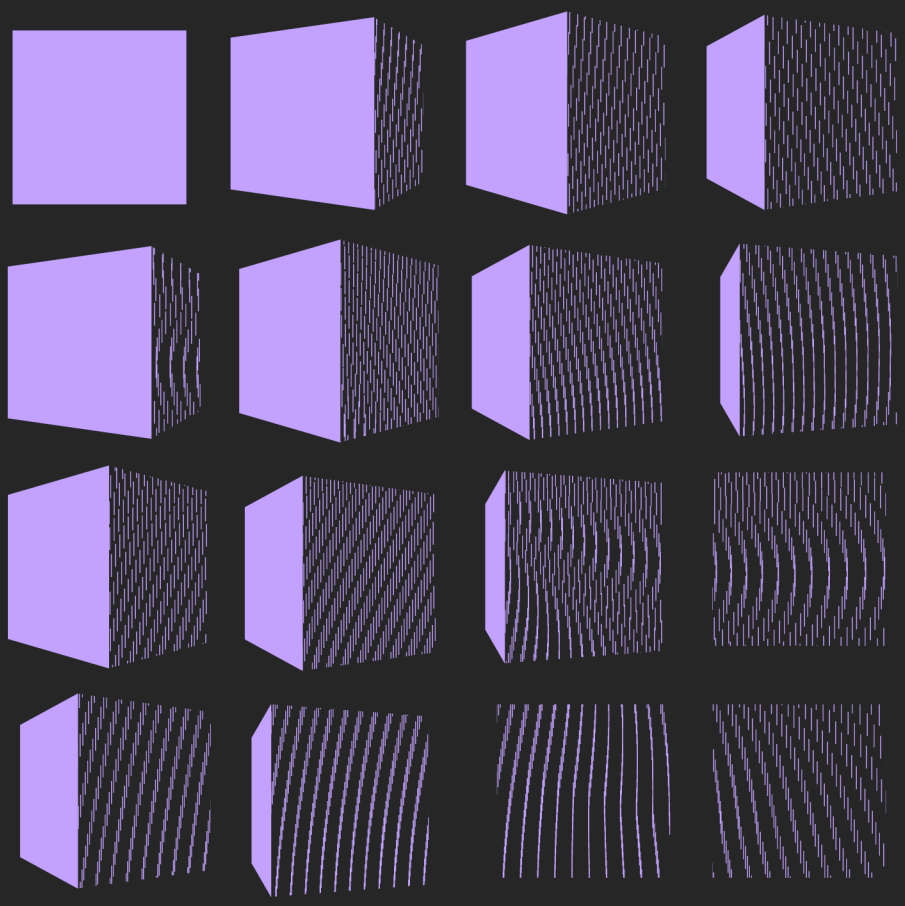
Accenture Research Report



AI-ready data

The new rules of data for the advanced AI era

November 2026

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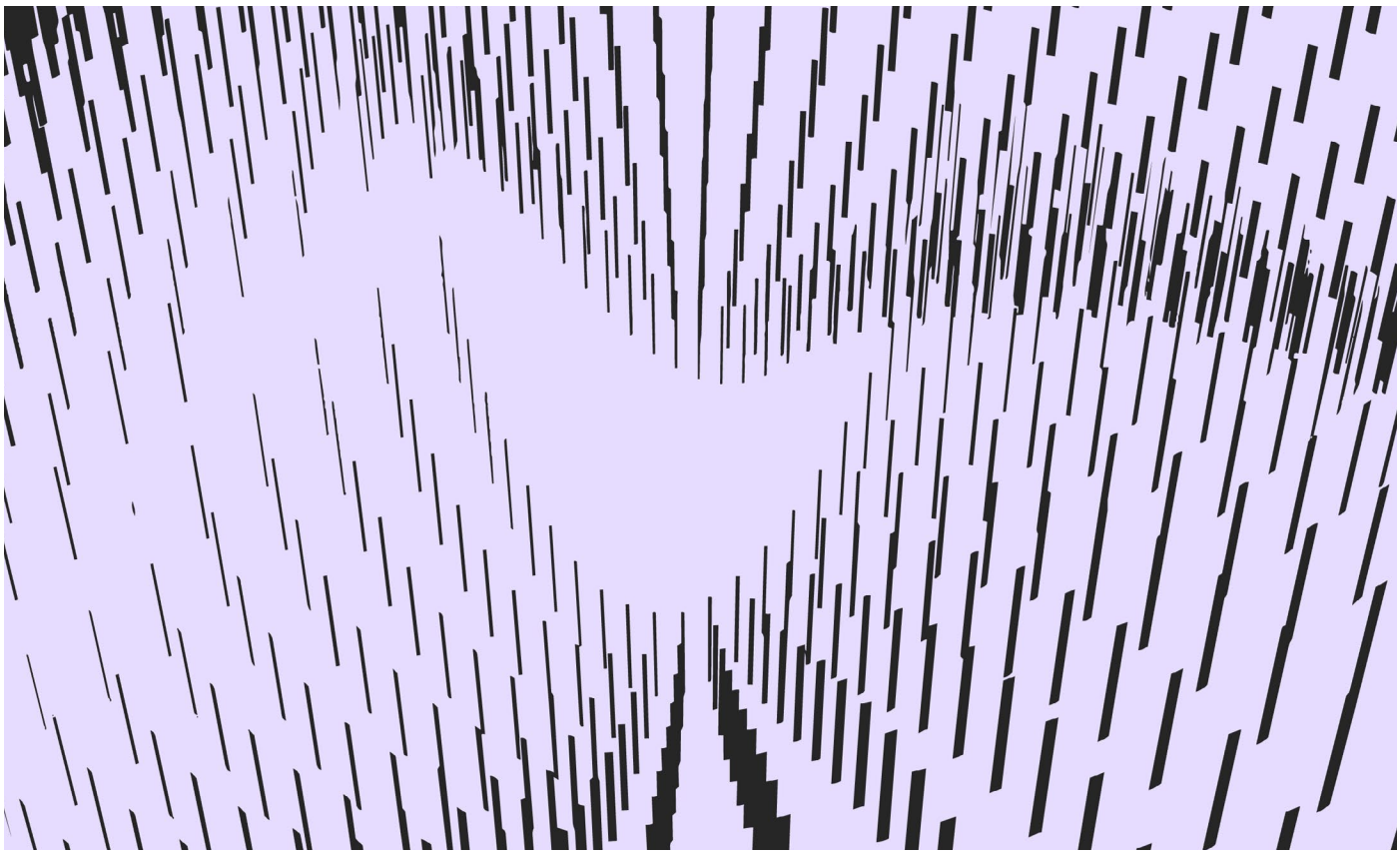
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AI is accelerating the race for data readiness

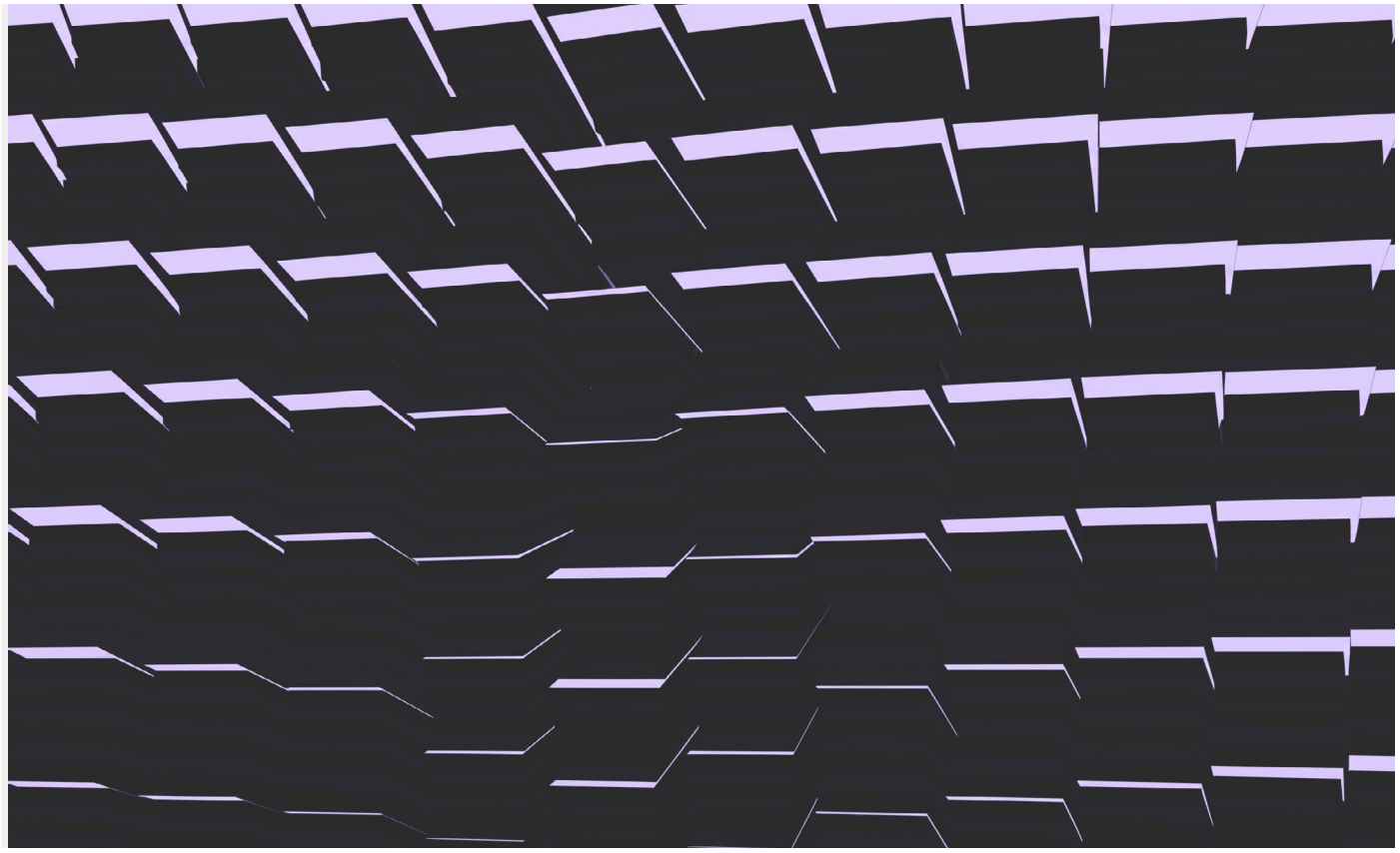
Demand for advanced AI is moving faster than enterprise data can support. In our global survey of 2,000 C-suite technology executives at 2,000 organizations across 15 countries and nine industries, only 7% of surveyed organizations, which we classify as Reinvention Ready, are leading in developing AI-ready data.

For CEOs, chief data and AI officers, CIOs and other leaders accountable for enterprise reinvention, that gap creates a practical mandate. They need to bring their data capabilities in line

with their AI ambitions.
The urgency comes from new requirements for what it means for data to be AI-ready. Just a few years ago, clean, governed, structured data represented leading practice. Today, that foundation is table stakes. Advanced AI also needs data from across the enterprise beyond the analytics platform, drawing directly from enterprise systems and previously untapped unstructured data like documents, videos, code and images. That data needs business context that helps agents as well as humans determine what data to use and how to use it. AI-ready data must also be embedded in agentic workflows, where it both informs agents' actions and captures what they learn through use and feedback.
Our research shows that more than 80% of executives delay, limit or alter AI and generative AI (gen AI) initiatives because of data.

The requirements for AI-ready data have changed in the era of advanced AI, from generative and agentic systems to emerging physical AI. Every company must now update its data foundation by building on the basics to make more data trusted and usable, curating the business context that helps people and AI interpret it and accelerating value through AI-powered data practices, ecosystem partnerships and focused investment. Together, these actions create a continuous path from stronger data foundations to greater value from AI.

> More than 80% of executives delay, limit or alter AI and gen AI initiatives because of data.



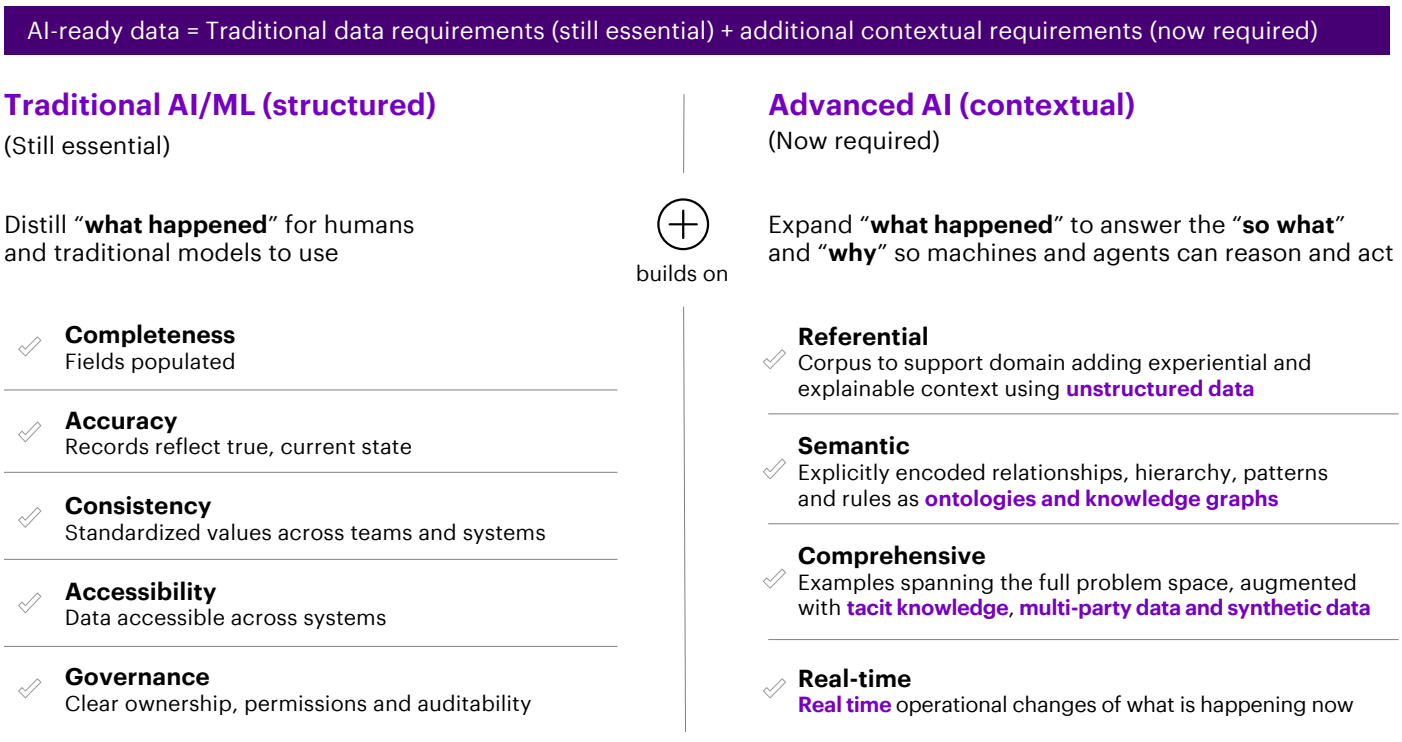
The expanding demands on enterprise data

Companies have made major investments in their AI ambitions, from accessing the right models to onboarding and upskilling talent. Yet many are still not getting the value they expect because their data readiness has not kept pace. Models, talent and platforms can only go so far without the underlying data that AI needs to reason, act and learn.

The good news is that most organizations are not starting from scratch. Companies that have built data foundations for reporting and machine learning use cases will continue to rely on them where accuracy, consistency and explainability are critical. Quality for structured tabular data remains essential. But advanced AI shifts the goalposts. Every company now needs to build new capabilities.

One of the biggest changes is the growing importance of context, as data is increasingly designed for agents as well as people to use (Figure 1). Traditional data best practices treated data as a product packaged for understanding and reuse by people like data scientists, business analysts or software engineers. A data point such as "10," accurately labeled as a price in US dollars, would often be enough for a person to make sense of it. People could draw on their own experience and understanding of the business to fill in the gaps.

Figure 1: New dimensions of AI-ready data
AI-ready data, designed for action, moves beyond reporting



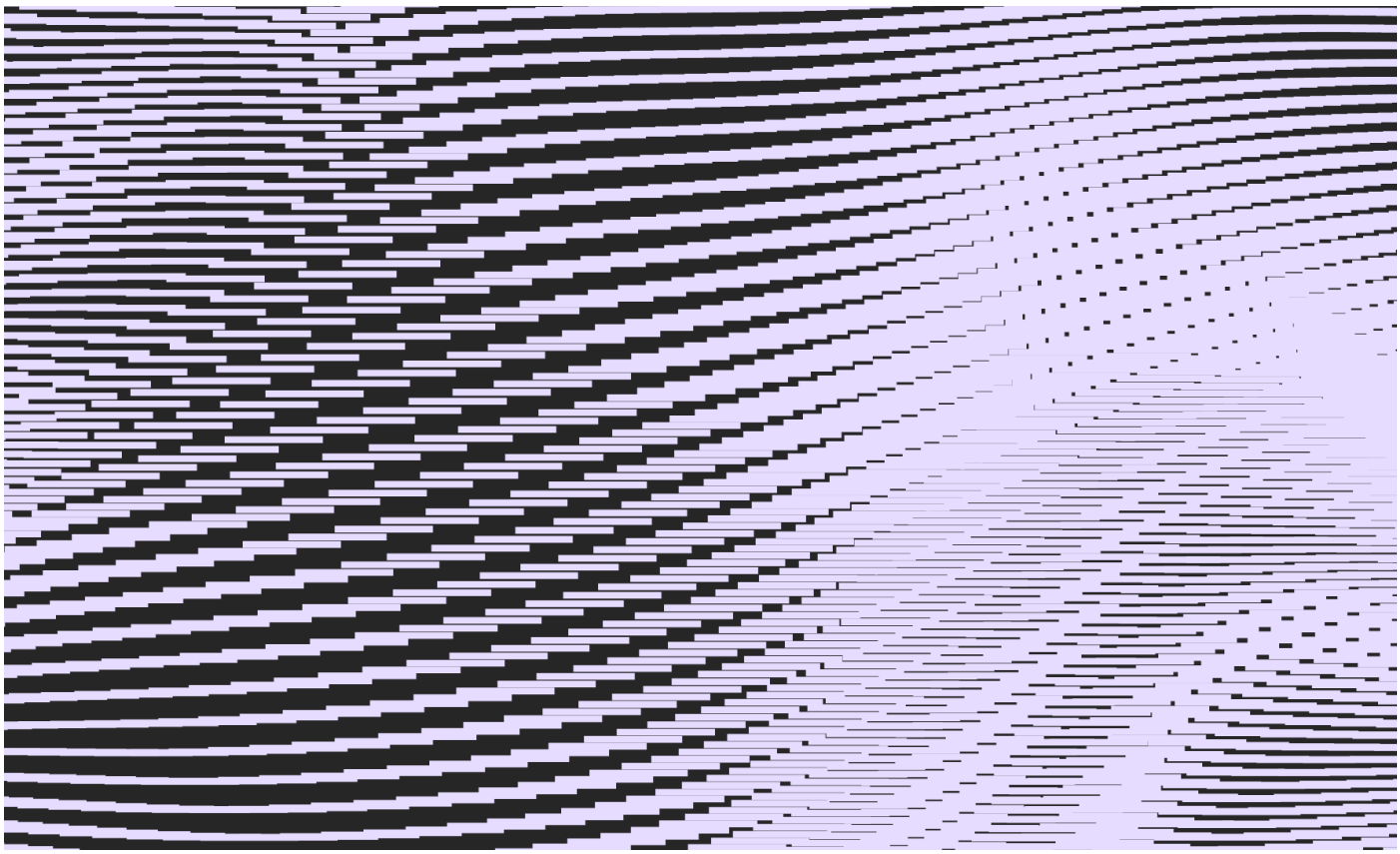
Source: Accenture Research

AI systems that reason and act on data cannot make those assumptions. They need more business context. Is the value a unit price or a list price? Does it include discounts? Is it governed by a customer contract? How often does it change? Exchange rates, inventory levels and market conditions could all affect the next action AI should take. Context provides the information needed to answer questions like "so what" and "why," allowing machines and agents to reason and act. For advanced AI, previous data practices are not enough. Best practice means capturing the data itself as well as the context that determines how it should be used.

Advanced AI shifts the goalposts. Every company now needs to build new capabilities.

Faced with these new requirements for context, some leaders may wonder whether AI itself can provide a shortcut to compensate for gaps in data readiness. And yes, it can help. This generation of AI excels at unearthing new insights from previously untapped data sources. AI can also accelerate many aspects of data management, helping teams map data, generate pipelines, test quality and automate parts of the data development lifecycle in ways that were not possible before.

But it does not eliminate the need for data discipline. Leaders still need to define the governance framework and standards first: which data matters, how to classify and protect it, how to label relevant context, how to test it and how to measure its value. This focus keeps governance anchored in the data that matters most to the business and the value it can create. Once those standards are clear, AI can help teams build toward them more quickly. Without that discipline, AI may make more data available faster, but it will not make that data ready for enterprise decisions.



Turning data readiness into value

The shift to advanced AI has created a new baseline for data readiness. Just 7 % of surveyed organizations are leading in developing AI-ready data.

We call these organizations Reinvention Ready, and they show what focused action can make possible. Reinvention Ready organizations apply advanced AI more widely in strategic areas of the business and report more value across financial and non-financial outcomes like productivity, decision quality, customer experience, risk reduction and margin improvement.

Schneider Electric shows how AI-ready data can become a competitive differentiator. The company connected and governed operational, engineering and IT data across buildings, factories, data centers and electrical grids, creating a trusted foundation for industrial operations.[1] That foundation made industrial data more connected and usable, helping Schneider improve its own products while giving customers better insight into how to run their operations more efficiently.

Those capabilities support AI-powered offerings such as the AVEVA CONNECT Industrial AI Assistant, which lets engineers and operators interact with complex industrial data using natural language.[2] Schneider is also embedding data intelligence directly into operational workflows through agentic AI-powered engineering tools, making industrial data usable in context for engineering, operations and decision-making.[3]

80%

reduction in the time it takes to create and launch new digital services.

The business impact extends well beyond operational efficiency. Schneider Electric's digital flywheel strategy, which encompasses connectable products, software and digital services, edge control and field services, generated approximately US$28.2 billion (€25 billion)* in its fiscal year 2025.[4] The company has also reduced the creation and launch time of new digital services by 80%.[5]

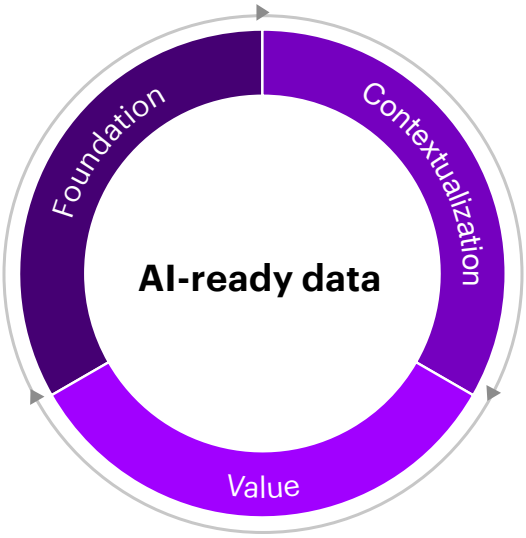
Through the Schneider Electric Exchange, the company created an ecosystem where partners can build and commercialize solutions on top of its industrial data platform.[6]

*Exchange rate: Year 2025 average EU to USD conversion rate is 1.13.

Companies in the Reinvention Ready category are building AI-ready data through a set of key actions (Figure 2). It may be frustrating for companies that advanced AI requires another wave of data investment when they have already done so much, but those with previous data investments can build upon their basics. Those starting earlier in their data journey can begin adding context as they build their foundations, creating opportunities for value along the way.

Figure 2: The practical path to build AI-ready data

A continuous loop across three interconnected stages, progressing iteratively through a minimum viable product mindset



Build on the basics
Trusted, comprehensive, operationally ready data

Unified logical data view:
One governed view of data, wherever it lives

Governed data of all types:
Auditable across every data type

Activated data products:
Built once as a product, reused by people and agents

Curate the context
Contextualized data with shared business meaning

Semantic layer:
Semantic relationships and business meaning, explicitly encoded

Reusable enterprise knowledge:
Tacit and reference knowledge, curated for reuse

Human + AI learning loop:
Learns from human feedback and real-time signals

Accelerate the value
Actionable data that delivers compounding value

AI-powered data practices:
AI powers the whole data life cycle

Activated partner ecosystem:
Reaches beyond the enterprise through partners

Two-speed value realization:
Proven fast, then reinvested to fund the next cycle

Source: Accenture Research

01 Build on the basics

AI needs trusted data to be relevant. Traditional best practice focused on governing and engineering structured, tabular data in data platforms. As a result, most companies have developed strong data practices in core functions like sales, finance, HR, supply chain and IT. AI-ready data requires companies to extend those practices beyond traditional domains, systems and data types.

They now need to reach the knowledge embedded in their most differentiated areas of business, including process know-how, customer interactions and industry or functional expertise. Much of that data remains dark, hidden within documents, emails, code, videos or schematics, if it is captured at all. To unlock that hidden value, companies must expand the data they capture, govern and use beyond traditional data platforms.

There are three key actions at this stage.

Action 1

Gain a unified logical view of data across the enterprise and beyond

Gaining visibility across the entire enterprise landscape means broadening the view. Some data will continue to flow into existing data platforms and warehouses. Other data will remain in operational transactional systems, applications, edge environments and partner ecosystems, where it may never move into a centralized data platform. The goal is to create a unified logical view that makes data visible, governed and usable wherever it resides.

NatWest offers one example of how better visibility can create business value. As part of a five-year collaboration with Accenture and AWS, the bank is using AI first to simplify technology and data operations, including efforts to bring data streams into a more unified bank-wide platform. Those improvements create the foundation for use cases with clearer value measures, such as better risk management and faster customer onboarding.[7]

> The goal is to create a unified logical view that makes data visible, governed and usable wherever it resides.

This approach reflects broader progress toward a unified logical view of data. Our research shows that many companies are moving beyond centralized data architectures, a pre-AI best practice, toward more federated and distributed models that generate insight without requiring physical centralization. Across all organizations surveyed, 41% are advancing in this capability. That progress suggests federated, metadata-driven architectures are gaining ground.

Action 2

Govern all data types

Governance is essential to scaling AI and leaders should integrate governance into the broader data strategy from the outset. As a C-suite executive of an insurance company explained, “The first step for me to be AI-ready is setting up good processes and organization, meaning data governance and a data quality program. Whenever you want to scale your AI use cases, if your data governance is not in place, you will always fail when you want to move from a proof of concept to industrialization.”

28%

of organizations have the right data, of the right quality, to support their business objectives and AI needs.

Leading companies extend governance beyond structured data to all data types. Governance now must cover unstructured documents, multimodal content, real-time data, streaming data, synthetic data and emerging physical-world data alongside traditional structured datasets. Trust, provenance and accountability need to travel with the data regardless of format. Companies need to apply the same discipline to the documents, emails, calls and other knowledge sources that power day-to-day work across the business.

Across all organizations surveyed, 45% demonstrate advanced practices in governing data. Yet only 28% say they have the right data, of the right quality, to support their business objectives and AI needs. That gap shows that governance alone does not make data AI-ready. Effective governance helps teams prioritize the data that matters most, identify gaps and quality issues and direct investment where it will have the greatest impact.

Action 3

Treat data as a product with shared business and technical ownership

Business and technical teams need to treat data as a product that people and AI systems can confidently reuse across multiple use cases. Doing so requires clear ownership, shared accountability and a common vision for how data creates business value. Product owners can then establish consistent standards for capturing, documenting and managing enterprise data, regardless of source or domain. Companies with data-sharing frameworks already in place can extend them to new data types; those without them need to establish the rules first. With that foundation in place, business and application teams can scale AI initiatives more repeatably and at lower cost than if they rebuild data for each use case.

Reusable, enterprise-ready data products implementation stands at 34% among surveyed organizations. Virtually no organizations have scaled automated data products with versioning and quality scoring across the enterprise. At this advanced stage, companies can use trusted data across the business without requiring each team or AI agent to revalidate its quality.

02 Curate the context

Traditional data systems capture the "what" of the business. Advanced AI also needs the context behind it: why the business takes certain actions, how work gets done, which rules apply and what it all means. Much of that context sits outside traditional data systems in documents, policies, workflows, communications and expert judgment.

More than

60%

of Repsol's digital products are supported by ARiA, described as Repsol's digital brain, which acts as an intelligence engine for decision-making.[10]

Companies must also make that knowledge reusable by both people and AI. Doing so requires governed reference materials, industry ontologies, semantic models, memory, permissions and decision logic that help AI systems interpret data consistently, act within trusted boundaries and learn from continuous feedback loops.

In the energy sector, Repsol shows how contextualized data can move AI from isolated tools into repeatable operational intelligence. Through ARiA, described as Repsol's digital brain, the company democratizes access to operational, IoT, transaction and customer data, supporting consistent data access and standardized reporting across domains.[8,9] ARiA supports more than 60% of Repsol's digital products and acts as an intelligence engine for decision-making.[10] Repsol also uses knowledge graphs to structure and connect large volumes of operational data, supporting use cases such as incident analysis, environmental monitoring and operational efficiency.[11]

Repsol has also built reusable AI capability through Repsol Artificial Intelligence Products (RAIP), a catalog of modular AI products embedded into ARiA. Its five components—Repsolver for optimization, Reptil for time series, Repsens for inference, Replan for natural language processing and Repcom for computer vision—give teams domain coverage they can apply across use cases instead of rebuilding capabilities each time.[12]

That foundation is now being extended through an Intelligent Multi-Agent Platform, developed with Accenture, with more than 34 agents working alongside people in requirements gathering, solution development and incident management.[13] Together, ARiA, knowledge graphs, RAIP and multi-agent workflows make enterprise context reusable in daily operations, helping people and AI reason across drilling, compliance and enterprise processes with greater continuity.

There are three key actions at this stage.

Action 1

Build a semantic layer to determine what data to use and how to use it

A semantic layer connects data to its business meaning. It defines what data represents, how teams should use it and how it relates to specific business questions. The context matters because AI does not need every piece of data associated with a broad concept like "sales." It needs the right sales data and guidance on how to apply it. Commercial teams may use sales data to forecast demand, while finance teams use it for accounting and revenue recognition. A semantic layer identifies the relevant attributes and defines how to use them for each purpose.

The same technologies that help internet search engines understand relationships and return relevant results can give enterprise data business context. Domain ontologies define relationships among key business concepts such as customers, accounts, assets, products, risks and transactions.

These relationships help teams and agents interpret data consistently across systems and workflows. Knowledge graphs populate those concepts with real data. For example, a search for "Accenture" may return the nearest office on a map because the search engine understands that companies have locations, locations can appear on maps and proximity makes the nearest location relevant. Applied within the enterprise, that same logic helps people and AI systems identify the right data for the task at hand.

When decisions must be accurate, repeatable and explainable, a semantic layer can guide a foundation model's interpretation. Knowledge graphs provide the relevant data and reasoning logic, helping the model choose the right information and draw conclusions within defined business rules.

SaaS and data-platform vendors recognize that these capabilities are critical for advanced AI and have already embedded semantic layers and knowledge graphs in their solutions. Examples include SAP Knowledge Graph, Salesforce's semantic layer for agents and ServiceNow's knowledge graph.[14, 15, 16] These capabilities help people and AI agents interpret data consistently, reason with business context and act within trusted boundaries.

20%

of organizations have semantic layer capabilities in production across multiple business functions.

Companies also recognize the importance of the semantic layer and are investing in it. Our research found active governance of semantic models among most organizations surveyed. But just 20% have reached an advanced stage, defined here as having semantic layer capabilities in production across multiple business functions. That limited progress may reflect a skills gap. Because this remains a relatively new area, companies will likely need to invest in talent to sustain and evolve their semantic architecture.

Action 2

Operationalize reusable enterprise knowledge including tacit and implicit knowledge

Once shared meaning is established, organizations need to continually curate the knowledge that connects data to that meaning and makes it usable in day-to-day decisions and workflows. Organizations can think of this as an expansion of the governance role: identifying gaps, updating or retiring outdated information and formalizing knowledge that sits in documents, systems or people's heads. The result is reusable intelligence that humans and AI can apply across approvals, risk checks, customer decisions, operations and compliance.

This requires connecting data to governed, up-to-date reference materials such as standard operating procedures, business processes, rules, policies, digital twins and domain-specific knowledge. Where appropriate, both real examples and synthetic data can help AI systems make decisions and actions more comprehensive, balanced and less biased. This allows AI to work with continuity rather than treating every task as a one-off interaction.

Our research indicates that all organizations have significant work to do in this area. Only 24% of companies have progressed in deploying reusable enterprise knowledge capabilities, and the gap between formalizing some knowledge and actively reusing it at scale remains wide. While some are encoding tacit business knowledge into ontologies, rules or knowledge graphs in parts of the business, far fewer actively maintain and reuse that context as a shared source of enterprise intelligence. Active reuse allows expertise to scale beyond individual employees, making decisions repeatable, explainable and resilient.[17]

> The gap between formalizing some knowledge and actively reusing it at scale remains wide.

Action 3
Industrialize the human and AI feedback loop

Leaders are laying the groundwork for AI systems that learn systematically from both human feedback and real-time signals. Advanced AI needs a feedback loop in which people check AI recommendations, correct mistakes and build those lessons back into the business through the semantic layer, decision logic and enterprise memory. This is where both explicit feedback and implicit signals from end-user actions come into play, allowing AI systems to learn and improve over time, even as humans remain accountable for judgment, exceptions, sensitive decisions and oversight.

For example, with conversational AI, users can ask questions about data. The system provides answers, but it can also learn from which questions users ask and how they respond to those answers. Such a feedback loop also helps companies capture tacit knowledge. By recording corrections and the reasons behind them, companies can turn expert know-how into scaled, reusable guidance. Alongside those inputs, real-time signals are a key element of an intelligent learning loop.

11%

of companies make real-time data a top priority.

Just 24% of companies are deploying human and AI learning loops. About a third have standardized decision logic embedded and actively used across several critical business decisions and processes, but enterprise-wide decision intelligence that continuously improves through feedback remains rare. Real-time data, a critical input to that continuous learning, is a top priority for just 11% of companies. So far, the “loop” is more of a one-way batch feed for most organizations, and a key barrier to getting the most from AI at scale.

03 Accelerate the value

As organizations mature, the return on AI-ready data grows beyond individual use cases, whether companies are building on data basics or addressing new requirements for context. This accumulated value both funds and sharpens the next cycle of data maturity, turning AI-ready data from a one-time investment into a self-reinforcing capability.

Visa's data efforts illustrate this. After building a foundation that supports more than 500 gen AI applications and hundreds of models across more than 100 products and services including real-time fraud and authorization systems, Visa turned its data and AI capabilities into tools others can use.[18,19,20] Through Visa Intelligent Commerce and its developer platform, banks, merchants, fintechs and technology partners can plug into Visa's payments infrastructure using thousands of ready-made digital connections.[21,22] These connections operate on a massive scale, with more than 40 billion calls each month.[23]

As more transactions, partners and use cases flow through this ecosystem, Visa can use aggregated transaction patterns and synthetic data to keep improving fraud detection, risk scoring and analytics.

This is the compounding loop of AI-ready data. As data quality improves and more contextual signals become available, AI systems can respond to business-critical questions with greater precision, speed and confidence. In payments, for example, the core question remains whether this transaction should be approved, challenged or declined. Trusted and contextualized data around customer behavior, merchant history, device signals, location patterns, authentication rules, prior fraud outcomes and real-time transaction context can facilitate richer responses and more accurate actions. Each action and underlying decision then generates new signals that refine the data, improve risk scoring and make future decisions more reliable.

There are three actions at this stage.

Action 1

Use AI-powered data practices to accelerate and improve data quality

Improved data readiness helps companies advance their AI ambitions. In turn, AI can accelerate the data-readiness journey. Companies can use AI as the operating layer for managing, governing and activating data end to end. Gen AI and agents can automate repetitive tasks such as metadata tagging, lineage mapping, pipeline generation, quality monitoring, policy checks, documentation and other similar tasks, while shifting human roles toward judgment, validation, exception handling and decision oversight.

19%

of organizations are deploying AI-powered data practices overall.

AI-powered data operations is still one of the least mature practices supporting AI-ready data. Only 19% of organizations are deploying AI-powered data practices overall. Across all organizations we surveyed, many are using AI to support specific data-related practices, including the 41% using gen AI for monitoring data quality and suggesting remediations enterprise-wide, and about 27% applying it for business intelligence reporting. But those individual efforts have not yet translated into an end-to-end capability.

Organizations have a clear opportunity to strengthen AI readiness by using AI to improve how they manage, govern and activate data end to end.

Action 2

Activate the partner ecosystem through co-investment and scalable value creation

Data sharing is a way to create new value. By themselves, companies will not have enough data to see across an entire process; they will need data from their suppliers, customers and other partners to form a more complete picture for AI to act.

At minimum, companies need to understand how information flows across their ecosystems so they can protect intellectual property, manage usage rights and identify opportunities beyond the boundaries of the enterprise. They also need to understand how they can use partner data for insights. For example, a customer contract may permit data to answer questions for that account but not for related accounts. Scaling data sharing requires clear, enforceable rights that govern how partners can use data across systems and use cases. Getting the right data may lead to more active engagement in external data sharing and even monetization opportunities.

16%

of companies are activating their partner ecosystem.

Leading companies use ecosystem partners to extend their capabilities, especially as capability shifts come every few months. They work with academic institutions to anticipate emerging solutions, with vendors to gain early access to new features and priority support and with industry peers to pool enough data to address shared challenges. The strongest relationships create opportunities to co-invest in capabilities that improve interoperability, reusable data assets and support AI at scale. The goal is to benefit from external innovation while retaining ownership of the company's data strategy.

Based on our survey, just 16% of companies are activating their partner ecosystem, the lowest maturity level in the value stage. About 29% actively participate in broader ecosystems or data marketplaces with multiple partners, shared standards and reuse across cases. But less than 1% are actively shaping or operating an ecosystem. The data suggests that some companies recognize the value of participating, but only a small minority are ready to set shared standards, orchestrate ecosystems and capture outsized value.

Action 3

Establish a two-speed value realization model for AI-ready data initiatives

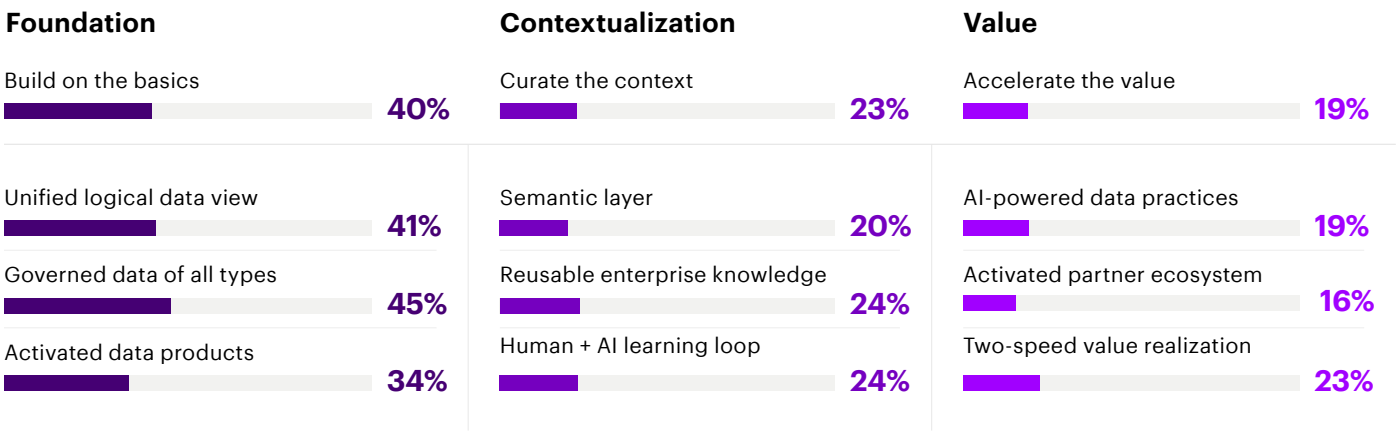
Leading companies are adopting a two-speed value realization model. They deliver value in weeks while continuing to invest in the data capabilities needed for their long-term future state. Leaders capture value as they go and use the results to guide deeper investment in data. In this way, they connect quick wins to long-term progress.

23%

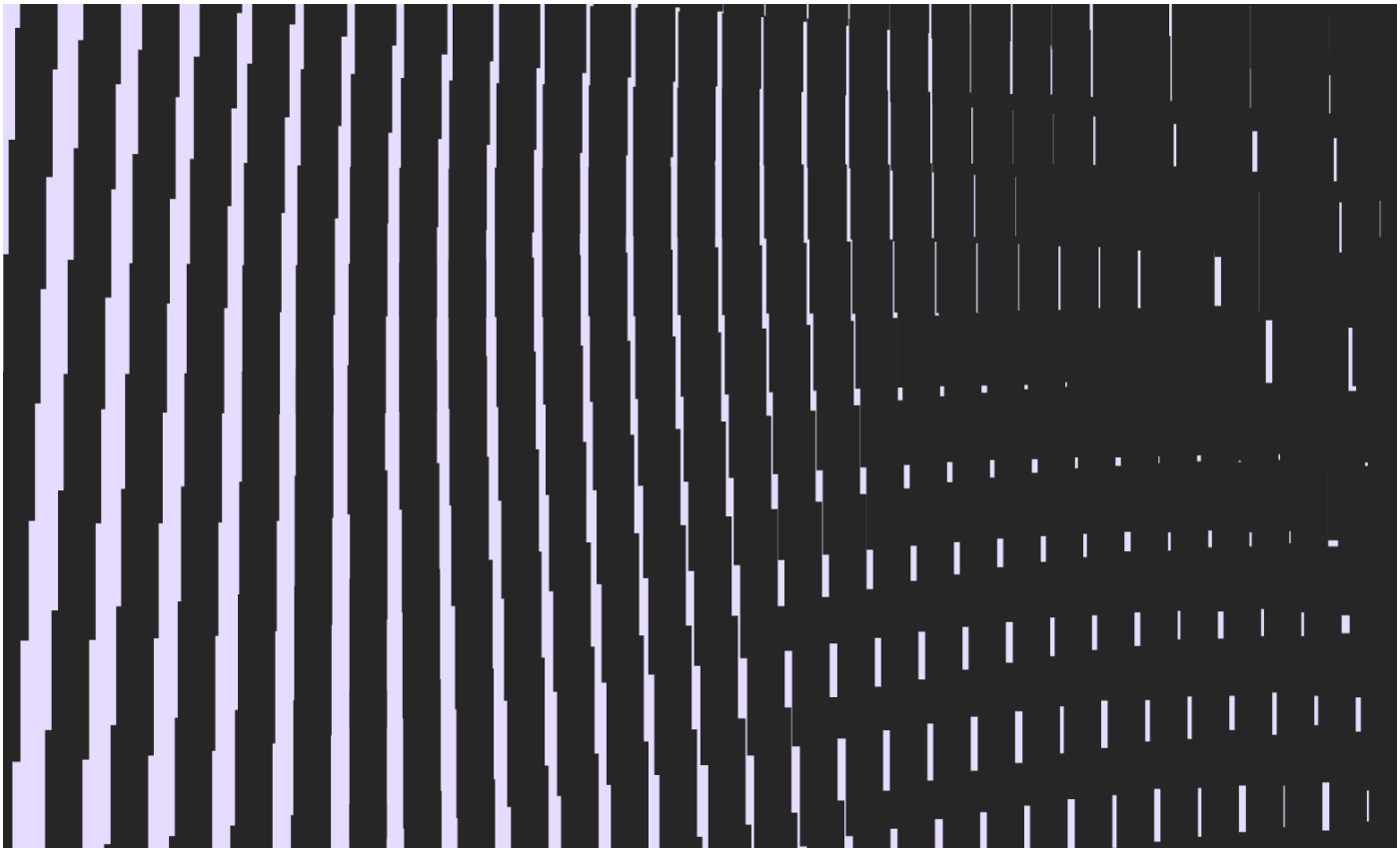
of companies are prioritizing strategic AI use cases to focus their data investment.

The ambition is there: More than half of companies intend to increase their investment in data. But intent alone does not produce compounding returns. Only 23% are prioritizing strategic AI use cases to focus that investment. Organizations that accumulate advantage connect spending to a staged use-case logic. They start with focused bets that strengthen the foundation, then reinvest gains as confidence, governance and data readiness improve. Others risk continuing to fund infrastructure without unlocking value. Our survey shows how sharply progress declines as organizations move from foundational data capabilities to contextualization and value realization (Figure 3).

Figure 3: Progress declines sharply across the three stages of AI-ready data
Average share of companies at the highest maturity level across each capability



Source: Accenture Research, N=2,000



Make data a compounding advantage

AI-ready data is fast becoming a decisive enterprise advantage. Competitive edge will depend less on having more of the same data and more on capturing overlooked signals such as tacit knowledge, then making that data trusted and understood by humans and AI systems.

Our research shows that three in four organizations we classify as Reinvention Ready report measurable value from their AI-ready data, compared to just one in four of all other companies. They get there by following a continuous path that makes data trusted, meaningful and reusable, with the value created in each cycle sharpening the next. Across all three stages, they lead on the capabilities that make data AI-ready. Most organizations, however, show uneven progress. Foundation-level capabilities are more developed, while contextualization and value realization remain harder to scale.

> Three in four organizations we classify as Reinvention Ready report measurable value from their AI-ready data, compared to just one in four of all other companies.

About the research

This report draws on Accenture's proprietary research into how large organizations are preparing their data foundations for advanced AI, including generative, agentic and physical AI.

The research combines a global survey of 2,000 C-suite executives and their direct reports at 2,000 large organizations with annual revenue of at least US$1 billion across 15 countries and nine industries, fifteen expert interviews, proprietary modeling and case studies. Survey respondents included C-suite members such as chief data officers, chief data and AI officers, chief AI officers, chief information officers, chief technology officers, heads of data science and other senior data, analytics and AI leaders.

We analyzed organizations across three interconnected stages of AI-ready data maturity: build the basics (foundation), curate the context (contextualization) and accelerate the value (value). The foundation stage assesses whether organizations have trusted, reusable and operationally ready data. The contextualization stage assesses whether organizations give data shared business meaning and decision logic. The value stage assesses how organizations convert AI-ready data into measurable outcomes and use those outcomes to strengthen the next cycle.

Using this framework, we identified four maturity groups based on data capabilities and practices rather than business outcomes: Starting, Experimenting, Advanced and Reinvention Ready. We then analyzed the relationship between these capabilities and self-reported value realization.

Research methodology

This report is based on a mixed-method research program combining a large-scale primary survey of C-suite executives, quantitative modeling, expert input, thought exchange, case studies and external signals through market intelligence.

Primary survey

We conducted a global survey between February and March 2026 of C-suite executives and their direct reports at 2,000 large organizations with annual revenue of at least US$1 billion across 15 countries and nine industries. Respondents included C-suite members such as chief data officers, chief data and AI officers, chief AI officers, chief information officers, chief technology officers, heads of data science and other senior data, analytics and AI leaders. All respondents are involved in the decision-making around their organizations' data and AI strategy.

Quantitative modeling

We measured AI-ready data maturity across three stages: foundation, contextualization and value, using survey responses from 2,000 companies. Each stage rests on three capabilities, and each capability is measured by multiple survey questions. A company counts as mature on a capability when it gives a top answer on most of the capability's questions.

The same questions, standardized and averaged, form a composite index for each stage. We define Reinvention Ready organizations as the one that rank in the top quartile on all three stages. We then linked those indices to self-reported value realized from AI-ready data, a measure spanning productivity, decision quality, customer experience, risk reduction, growth, profitability and monetization, using a logistic regression and a propensity-score-matched comparison of high-maturity firms against peers matched on size, industry, region and governance. All three stages predicted value independently, and matched high-maturity firms were significantly more likely than their peers to report substantial value realized.



Expert interviews

Fifteen interviews with senior data and AI leaders across global markets, diverse industries and varied leadership roles, including chief data officers, chief data and analytics officers, chief AI officers, and chief data and AI officers enrich the survey and modeling data. These conversations helped deepen our understanding of building data capabilities for advanced AI, the challenges organizations face and the pathways to value realization.

Thought exchange

A virtual "thought exchange" allowed previously interviewed executives to rate and refine each other's ideas. Using AI, we synthesized these insights into key themes and actionable takeaways that highlight areas of common ground and difference across the group.

Case studies

To bring the research findings to life, we included select case studies of organizations that are using data as a strategic capability to scale advanced AI. Each story illustrates how companies move through the continuous loop of foundation, contextualization and value: building trusted and reusable data foundations, giving data shared business meaning and converting AI-ready data into measurable outcomes.

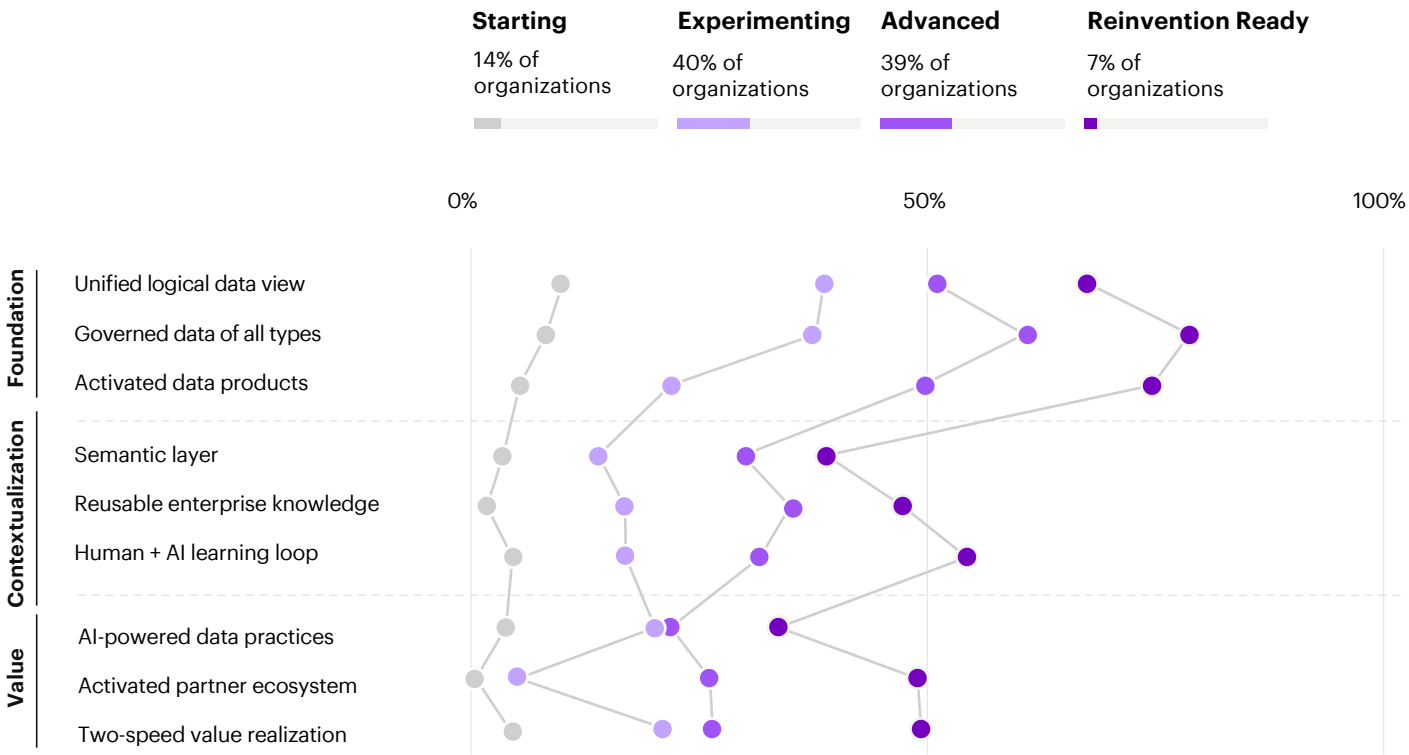
All case studies featured in this report are based on Accenture client engagements, unless cited.

We use generative AI in our research production process. Our research experts review and validate the generative AI outputs with traditional research methods where possible, applying Accenture's Responsible AI standards.

How companies progress toward AI-ready data

Beneath the averages are distinct groups of companies that reflect an important reality: Companies do not progress evenly across the three stages of AI-ready data. To understand these different patterns, we grouped survey respondents based on their maturity across foundation, contextualization and value and their progress across the nine key actions (Figure 4). The three stages define the capabilities companies need to build, while the four maturity groups show how evenly and extensively companies have developed those capabilities. A company's group reflects its performance across all three stages rather than its position in any single stage.

Figure 4: Four groups mark distinct levels of progress
Average share of companies at the highest maturity level across each capability by group



Source: Accenture Research, N=2,000

Group 1:
Starting

Companies in the Starting group fall into the bottom quartile in all three stages. They have made the most progress in Foundation, although their maturity remains limited across the nine actions. This pattern suggests that most companies begin by establishing trusted, governed and accessible data before advancing to the capabilities required to contextualize data and realize value.

The pattern across all the more mature groups points to governance as the essential next step. Starting companies should standardize how they determine what data to use and how to use it across business units, systems, data types and partners.

Group 2:
Experimenting

Companies in the Experimenting group have no stage in the top quartile though they aren't in the bottom quartile across all three. The largest maturity increase between the Starting and Experimenting groups is in governing data of all types. Governance is the action where we see the biggest gaps between groups, suggesting that companies continue to extend it across more data types, domains and parts of the enterprise as they mature.

The early surge in AI-powered data practices suggests that Experimenting companies are adopting the capabilities available today. Sustaining that momentum as new capabilities emerge could help them keep pace with more mature peers and build an early lead.

Group 3:
Advanced

Advanced companies reach the top quartile in one or two stages, but not all three. The shift from Experimenting to Advanced includes a significant increase in activating partner ecosystems. Advanced companies draw on vendor investment and early product access, and work with peers and partners to develop capabilities they may not build alone. These ecosystem relationships can amplify the value of other AI-ready data investments.

Group 4:
Reinvention Ready

These companies reach the top quartile across foundation, contextualization and value. One of the clearest shifts from Advanced companies to Reinvention Ready is in the human and AI learning loop. Reinvention Ready organizations are more likely to connect AI, data, human feedback and real-time signals in a continuous learning process.

The largest differences between Reinvention Ready organizations and the Advanced ones appear in activated data products, partner ecosystems and two-speed value realization. The common thread is strategic investment. Leading companies qualified as Reinvention Ready support these capabilities with the funding, partnerships and operating models needed to turn AI-ready data into scaled value.

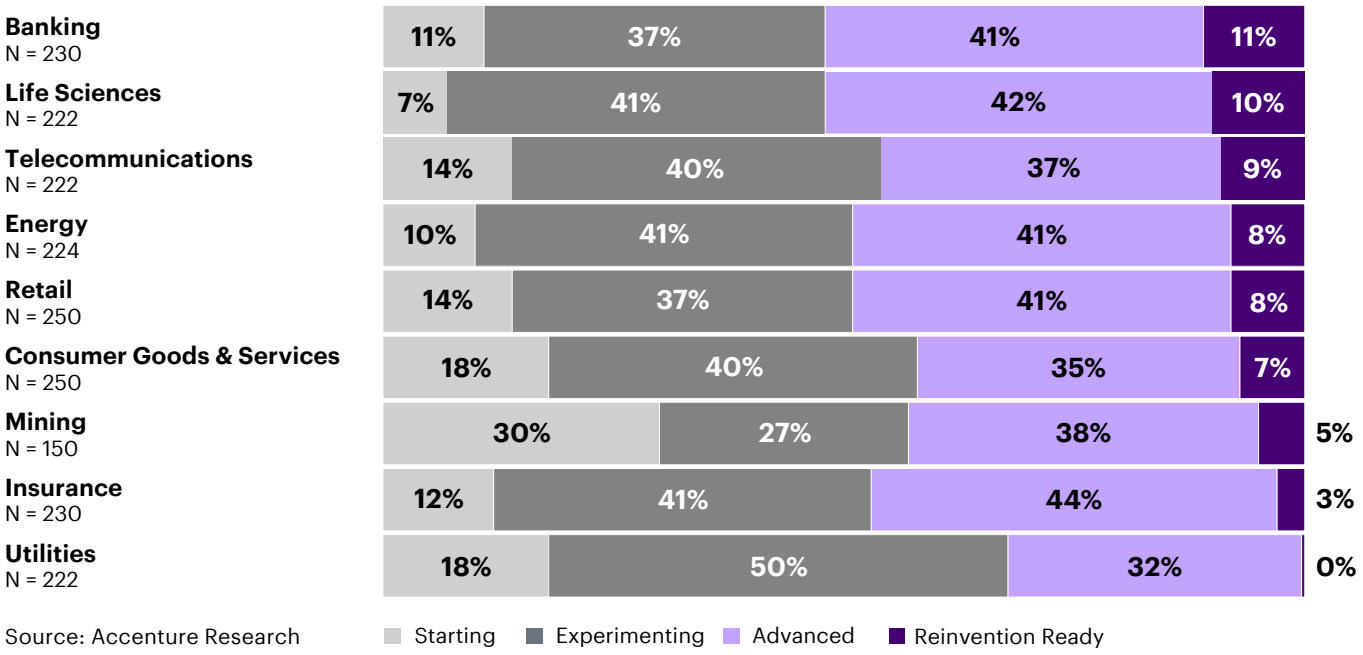
Reinvention Ready companies across industries

Industry differences suggest that data readiness follows distinct paths shaped by business context rather than a single hierarchy of maturity (Figure 5). Regulated industries such as banking and life sciences account for the largest share of Reinvention Ready organizations, reflecting years of investment in governance, quality and compliance that have enabled them to embed AI-ready data practices more deeply across the enterprise. Energy, retail and insurance, meanwhile, have built significant momentum at the Advanced stage, extending data capabilities across customers, suppliers and ecosystem partners while continuing the transition toward fully integrated AI-enabled operations. Industries with larger concentrations of Experimenting and Starting organizations remain focused on establishing the standardized governance, interoperability and ways of working needed to scale.

Taken together, these findings reinforce that data readiness is not a generic modernization exercise but an industry-specific business capability, with each sector advancing through the maturity curve according to its unique data challenges, operating models and opportunities for value creation.

Figure 5: AI data readiness is an industry specific challenge

Share of organizations in each industry by data maturity profile



Source: Accenture Research

References

1 Schneider Electric, **EcoStruxure™: Platform**, accessed October 14, 2026.

2 AVEVA CONNECT, **AI Assistant for industrial data**, accessed October 14, 2026.

3 Thomas H. Davenport and Randy Bean, **How Schneider Electric scales AI in both products and processes**, MIT Sloan Management Review, March 16, 2026.

4 Schneider Electric, **Full Year 2025 Schneider Electric SE Earnings Call**, February 26, 2026.

5 Schneider Electric, **Co-innovation: Accenture and Schneider Electric**, accessed October 14, 2026.

6 Schneider Electric, **EcoStruxure™ APIs for efficiency and sustainability**, accessed October 14, 2026.

7 NatWest, **NatWest Group to accelerate bank-wide data and AI transformation through 5-year collaboration with Accenture and AWS**, Accenture Newsroom, July 23, 2025.

8 Repsol, **Repsol to commercialize ARiA, its big data and AI platform**, Repsol press release, June 29, 2021.

9 Repsol, **Digital Trends Radar**, April 2026.

10 Repsol, **An industrial-scale artificial intelligence model**, accessed November 9, 2026.

11 Repsol, **Digital Trends Radar**, April 2026.

12 Repsol, **RAIP develops Repsol's own AI solutions**, accessed November 9, 2026.

13 Repsol, **A people-centric technological transformation**, February 12, 2026.

14 SAP SE, **SAP Knowledge Graph**, accessed November 9, 2026.

15 Southard Jones, **The agentic future demands an open semantic layer**, Salesforce, September 23, 2025.

16 ServiceNow, **Knowledge Graph**, accessed November 9, 2026.

17 Teresa Tung and Philippe Roussiere, **Tacit knowledge is your next competitive moat**, California Management Review, March 16, 2026.

18 Isabelle Bousquette, **Visa has deployed hundreds of AI use cases. It's not stopping**, The Wall Street Journal, November 1, 2024.

19 Visa, **Visa prevents more than $700 million in fraud from disrupting Australian businesses**, Visa press release, December 2, 2024.

20 Visa, **Visa and partners complete secure AI transactions, setting the stage for mainstream adoption in 2026**, Visa press release, December 18, 2025.

21 Ibid.

22 Visa, **Visa, Inc. Investor Day**, February 20, 2025.

23 Ibid.

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We help organizations create the conditions for advanced AI to operate with context, governance and trust. As AI systems become more capable, they will need to draw on the full intelligence of the enterprise, including structured data, process knowledge, decision histories, human expertise, operating constraints and the signals that usually sit below the surface of formal reporting.

Companies that manage data as a continuous source of intelligence will be better placed to scale advanced AI, solve higher-value problems and turn reinvention from a series of projects into a repeatable source of advantage.

> We help organizations create the conditions for advanced AI to operate with context, governance and trust.

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