Unlocking Value in the TMT Industry with Data Products

How executives can invest with confidence and create a competitive advantage

KPMG

Introduction

Companies spend billions on data ecosystems, assets, and services every year[1] to shorten time to insights, increase productivity, and increase margins. Even when data investments underperform expectations, leaders remain convinced the road to growth begins with data—and often, data products.

The Technology, Media, and Telecommunications (TMT) industry leads in innovation and digital transformation, with significant investments in data ecosystems to drive insights, productivity, and margins. However, optimizing data products is challenging due to the proliferation of unsynchronized platforms. The industry's rapid technological advancement and high data intensity require leveraging vast amounts of data for strategic decisions, customer engagement, and operational efficiencies, but the complex ecosystem of numerous platforms and data sources often results in fragmented and unsynchronized data environments.

Our KPMG survey of executives revealed that the TMT industry is among the most advanced in terms of data product readiness, with a significant number reporting advanced progress in development and utilization. They also report a high return on investment (ROI) from their data product investments, with 70 percent indicating a high ROI. Senior leadership is mostly sold on the value of data products, with 62 percent recognizing their importance.

However, the TMT industry faces its share of challenges, such as a lack of resources and limited funding. Despite these obstacles, TMT respondents acknowledge the importance of securing resources to leverage data products and new tools for driving operational excellence and optimizing cash flow.

Attracting new talent, such as data scientists, and setting clear performance goals can significantly accelerate progress. Data provides valuable insights into customer behavior, competitor actions, and business performance, which in turn enables organizations to make faster and more strategic decisions. Given the recent economic challenges brought on by tariffs, it's increasingly important for companies to have the right data products and access to the right information at the right time in order to help mitigate any risks brought about by disruptions and economic uncertainty.

Many TMT companies rely on components manufactured abroad, particularly in countries like China. When tariffs are imposed on these imports, the added costs can lead to price hikes for consumers, potentially reducing demand. Companies may also face slimmer profit margins as they struggle to absorb the added expenses, which could, in turn, slow down the growth of data-driven technologies. The strategic deployment of data products offers a robust mechanism to mitigate these impacts.

To build high-value, high-utility data product executives should be thinking about these key factors:

1 **Inventory your data assets and experts**

2 **Quantify the data value chain**

3 **Confirm data portfolio utility and prune where necessary**

4 **Shape behavior, self-service, and a marketplace mindset**

5 **Prioritize value measurement**

By harnessing data-driven insights and fostering a collaborative approach to data management, technology firms can ensure resilience, drive innovation, and maintain a competitive advantage. Embracing data as an evolving value driver will be pivotal for the TMT industry's sustained growth and success.

[1] "Big Data Technology Market Size, Share & Industry Analysis," Fortune Business Insights, December 30, 2024.

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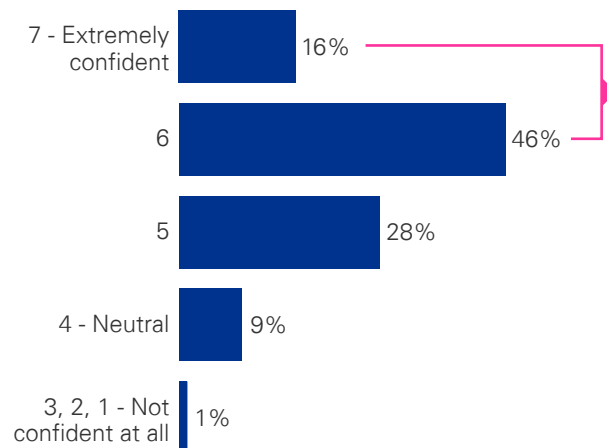05
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Key survey findings

Companies across all sectors believe in data products' potential: 92 percent of executives surveyed say well-constructed data products are critical to their organizations' success over the next three years. Another 90 percent believe their data product investments will generate significant value; the same percentage plan to increase their data product budgets by at least 10 percent. Across industries, respondents from C&R, energy, and financial services are the most confident their data product investments will create value (92 percent), followed closely by HCLS and TMT (90 percent). Manufacturing executives are mostly confident (80 percent).

Operational excellence, data-driven decision support, and shortened time to insights are the main areas in which most sectors anticipate unlocking the most value. Leaders across all industries shared these opinions—even if their own organization hasn't yet achieved the ROI they want and expect. Across the industries we surveyed, we found that respondents from C&R, followed by financial services and HCLS, are the most likely to report realizing value from their data product initiatives. TMT and energy respondents report realizing moderate value, with manufacturing respondents being least likely to realize significant value.
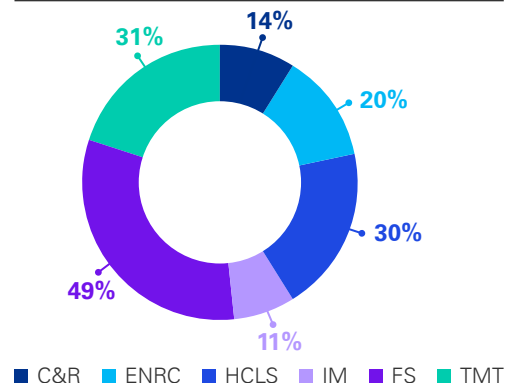
92% of respondents across all sectors say well-constructed data products are critical to their organizations' success.
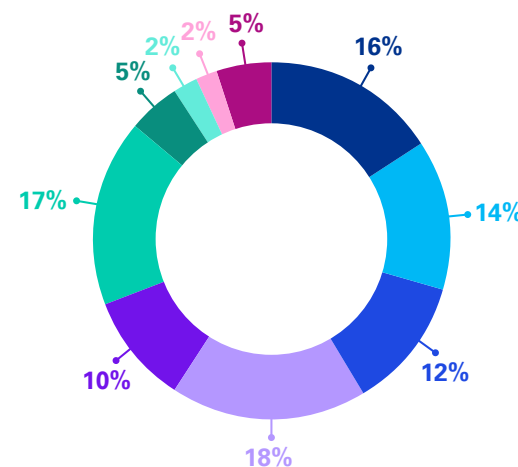
Respondents who say management/senior leadership is confident that data product investments will create value

- 7 - Extremely confident: 16%
- 6: 46%
- 5: 28%
- 4 - Neutral: 9%
- 3, 2, 1 - Not confident at all: 1%

Confident respondents by sector

- C&R: 14%
- ENRC: 20%
- HCLS: 30%
- IM: 11%
- FS: 49%
- TMT: 31%

Legend: ■ C&R ■ ENRC ■ HCLS ■ IM ■ FS ■ TMT

Levers where respondents anticipate unlocking value from data products

- 16%
- 14%
- 12%
- 18%
- 10%
- 17%
- 5%
- 2%
- 2%
- 5%

Value levers:
- ■ Operational excellence
- ■ Speed to market
- ■ Competitive advantage
- ■ Shortened time to insights
- ■ New revenue generation
- ■ Data-driven decision Support
- ■ Technology simplification
- ■ Support regulatory compliance
- ■ Workforce refactoring
- ■ Cost reduction

Regardless of industry, clear trends emerged when we compared the priorities and data management practices of respondents:

Operational excellence and data-driven decision support remain priorities for all respondents

Key differences emerged around value lever prioritization, with data product leaders citing operational excellence as their primary value lever. Data product laggards, on the other hand, were more likely to select data-driven decision support as their top value lever. C&R, energy, HCLS, and TMT are more likely to cite operational excellence as their premier value lever; financial services and manufacturing are more likely to prioritize data-driven decision support—despite financial services' categorization as a leader on data products.

Leaders are prioritizing revenue growth

Leaders are considering the ways their data products can increase revenue over the next 12 to 18 months. Growth is a more important key performance indicator for leaders (53 percent) to measure value as compared to intermediates (45 percent) and laggards (41 percent). Whether they have accomplished this goal is another matter: Only one in three data product leaders self-report revenue growth as a competitive edge provided by data products; intermediates (23 percent) and laggards (14 percent) are far less likely to report revenue increases from their use of data products.

From an industry perspective, C&R respondents appear most likely to already use data products to create new revenue paths. However, other leader industries are catching up quickly: New revenue generation is the second-most desired value lever for financial services over the next 12 to 18 months, for example. Energy and manufacturing, two industries that are more likely to lag in terms of data product readiness and value capture, are less likely to cite revenue growth as a value lever. Manufacturing respondents are particularly skeptical that data products will create high ROI: Only 44 percent of senior leaders in manufacturing express confidence that data products will create value.

We asked respondents to self-assess data product readiness:

⦿ Crawl

The organization is in the initial phase of exploring data products. They are deliberating on the possibilities, scoping requirements, and planning the strategic roadmap for integrating data products into their processes, but have not yet started the practical implementation.
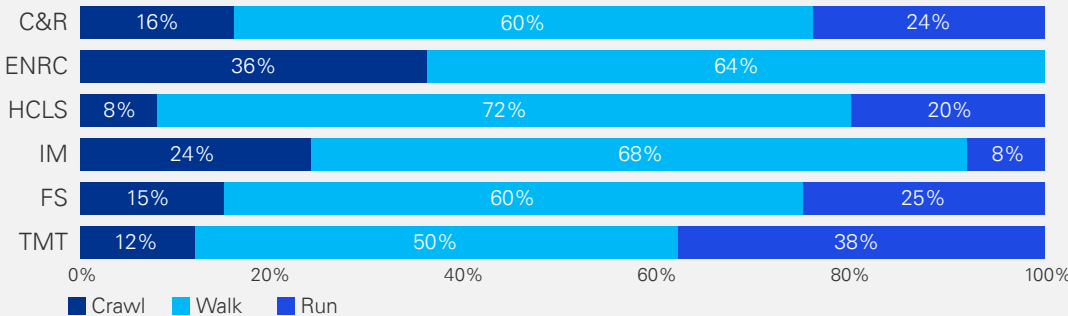
⦿ Walk

The organization actively pursuing data product development and integration. They have moved past planning and are in the process of prioritizing which data products to pursue.

⦿ Run

The organization has implemented data products, conducted proof-of-concept tests, and established successful use cases. They are fully operational with data products and looking forward to reaping the benefits of their investment.

Respondent self-assessments of data product readiness by industry

Industry	Crawl	Walk	Run
C&R	16%	60%	24%
ENRC	36%	64%	
HCLS	8%	72%	20%
IM	24%	68%	8%
FS	15%	60%	25%
TMT	12%	50%	38%

Legend: ■ Crawl ■ Walk ■ Run

Leaders feel more confident about data readiness

Leaders show a significantly higher level of data readiness at 75 percent, compared to only 32 percent of intermediates and 11 percent of laggards. The leaders are prioritizing data operations, financial resources, and tech infrastructure, along with training and development. HCLS, C&R and financial services are more likely to report being fully ready in preparing their data and infrastructure for the use of data products.

Laggards, including nearly one-third of energy and manufacturing respondents, are more likely to cite concerns around data quality, accessibility, and data understanding. However, there are also cases where high readiness still pairs with ongoing concerns on data quality and literacy, as noted in financial services respondents.

TMT responses are outliers

TMT executives are the most ready of all industry respondents to build high-impact data products: 38 percent reported advanced progress in development and utilization. They are also likely to report a high ROI on their data product investments (70 percent) and senior leadership is mostly sold on their value (62 percent). Despite these positive signs, TMT lags C&R, HCLS, and financial services when it comes to scaling data product initiatives. Lack of resources appears to be the source of the problem: TMT executives are the only respondents who reported limited funding as hindering successful use of data products. This is likely because TMT companies are prioritizing investments in products, research, and development. However, TMT respondents also indicated they are aware of the importance of data products and indicated that securing funding is a key next step.

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Barriers to success

The goal of a high-value data product is to enable organizations to make smarter decisions faster, drive innovation, increase efficiency, and win in the market. However, organizations should not automatically equate data product quality solely with technology renovation. The target operating model for data products should instead inspire thoughtful collaboration while helping ensure those who are closest to the data are empowered to own and act. Our survey dug further into the most common people, process, and technology obstacles to realizing value from data product investments.
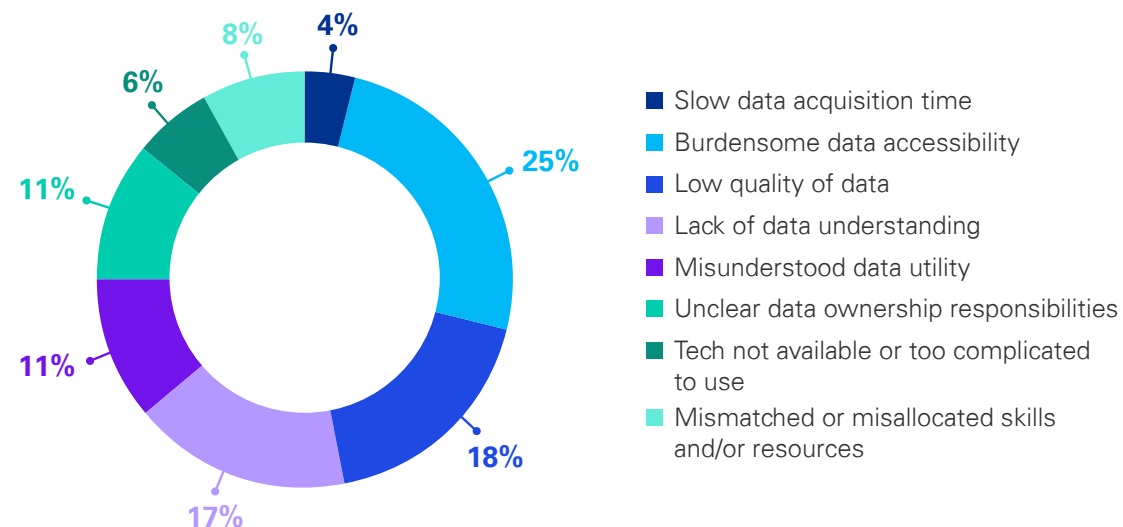
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Data modernization and governance challenge all sectors

Data modernization is defined as the strategic approach for innovative use, accessibility, governance, operations, and value delivery of data in a modern cloud architecture. Across industries and maturities, our survey found that poor accessibility, data quality, and understanding data context challenge many respondent organizations. To address these issues, all respondents are prioritizing development of a data product strategy in near-equal measure.

However, a closer look reveals differences between leaders, intermediates, and laggards when it comes to governance, employee skills, and consensus-building. Leaders and intermediates are most likely to prioritize data governance (53 percent and 52 percent, respectively), while laggards trail behind (42 percent). A similar gap between leaders and laggards also emerged in talent acquisition (44 percent versus 32 percent). Consensus building appears to be less of an issue for leaders when compared to intermediates and laggards, indicating executives at leader organizations are largely in agreement about data product policies and standards.

The top three challenges respondents face with data assets

- Slow data acquisition time — 4%
- Burdensome data accessibility — 25%
- Low quality of data — 18%
- Lack of data understanding — 17%
- Misunderstood data utility — 11%
- Unclear data ownership responsibilities — 11%
- Tech not available or too complicated to use — 6%
- Mismatched or misallocated skills and/or resources — 8%
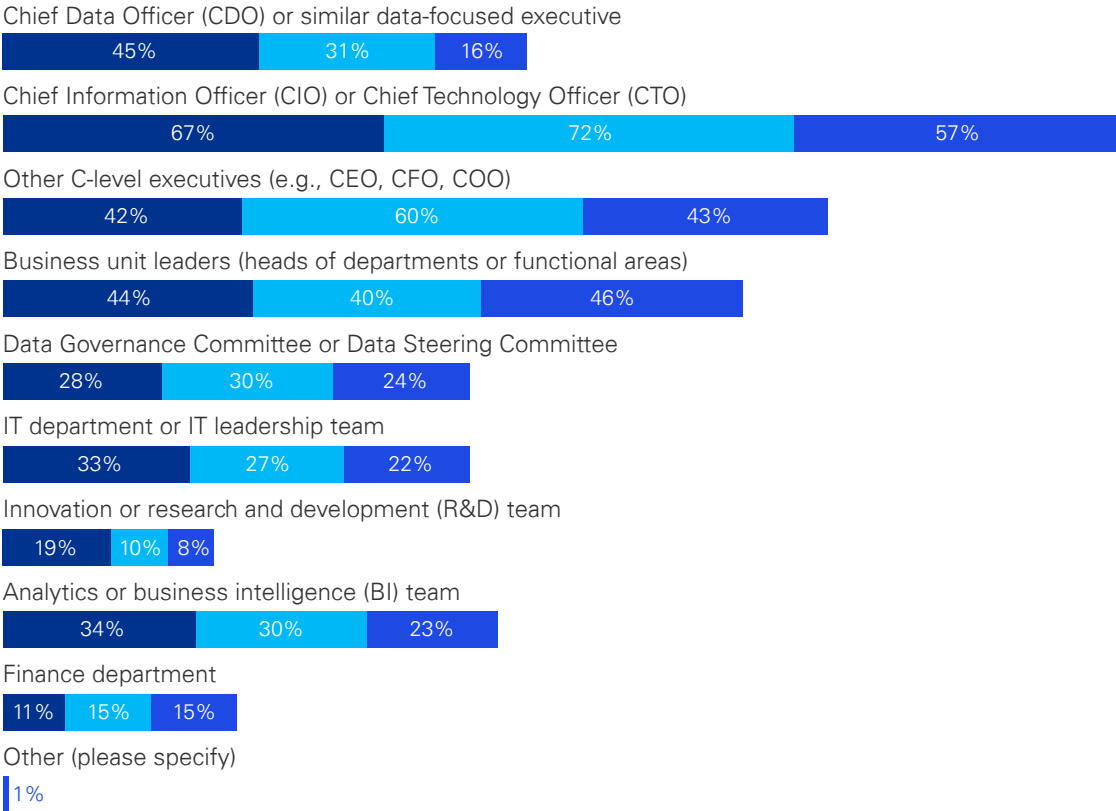
Ambiguous data ownership

Ambiguous data ownership is a particularly thorny challenge for organizations in every industry: 60 percent of respondents centralize data product ownership within IT, reflecting the interaction gap between the employees who source and manage data and the people who use it to make decisions. CIOs, for example, are far more likely than their business unit counterparts to sponsor data product initiatives, despite all business units relying on data products to make decisions and generate value. This is true even in leader organizations.

What functions within your organization use data products?

IT/Tech
Leaders	Intermediates	Laggards
91%	85%	82%

HR
Leaders	Intermediates	Laggards
56%	36%	27%

Finance/accounting
Leaders	Intermediates	Laggards
75%	68%	72%

Operations
Leaders	Intermediates	Laggards
82%	78%	68%

Product development/R&D
Leaders	Intermediates	Laggards
75%	61%	50%

Marketing & Sales
Leaders	Intermediates	Laggards
81%	61%	55%

Risk & Legal
Leaders	Intermediates	Laggards
48%	34%	35%

Corporate development/M&A
Leaders	Intermediates	Laggards
50%	28%	32%

Who typically sponsors the data product initiatives within your organization?

Chief Data Officer (CDO) or similar data-focused executive
Leaders	Intermediates	Laggards
45%	31%	16%

Chief Information Officer (CIO) or Chief Technology Officer (CTO)
Leaders	Intermediates	Laggards
67%	72%	57%

Other C-level executives (e.g., CEO, CFO, COO)
Leaders	Intermediates	Laggards
42%	60%	43%

Business unit leaders (heads of departments or functional areas)
Leaders	Intermediates	Laggards
44%	40%	46%

Data Governance Committee or Data Steering Committee
Leaders	Intermediates	Laggards
28%	30%	24%

IT department or IT leadership team
Leaders	Intermediates	Laggards
33%	27%	22%

Innovation or research and development (R&D) team
Leaders	Intermediates	Laggards
19%	10%	8%

Analytics or business intelligence (BI) team
Leaders	Intermediates	Laggards
34%	30%	23%

Finance department
Leaders	Intermediates	Laggards
11%	15%	15%

Other (please specify)
Laggards
1%

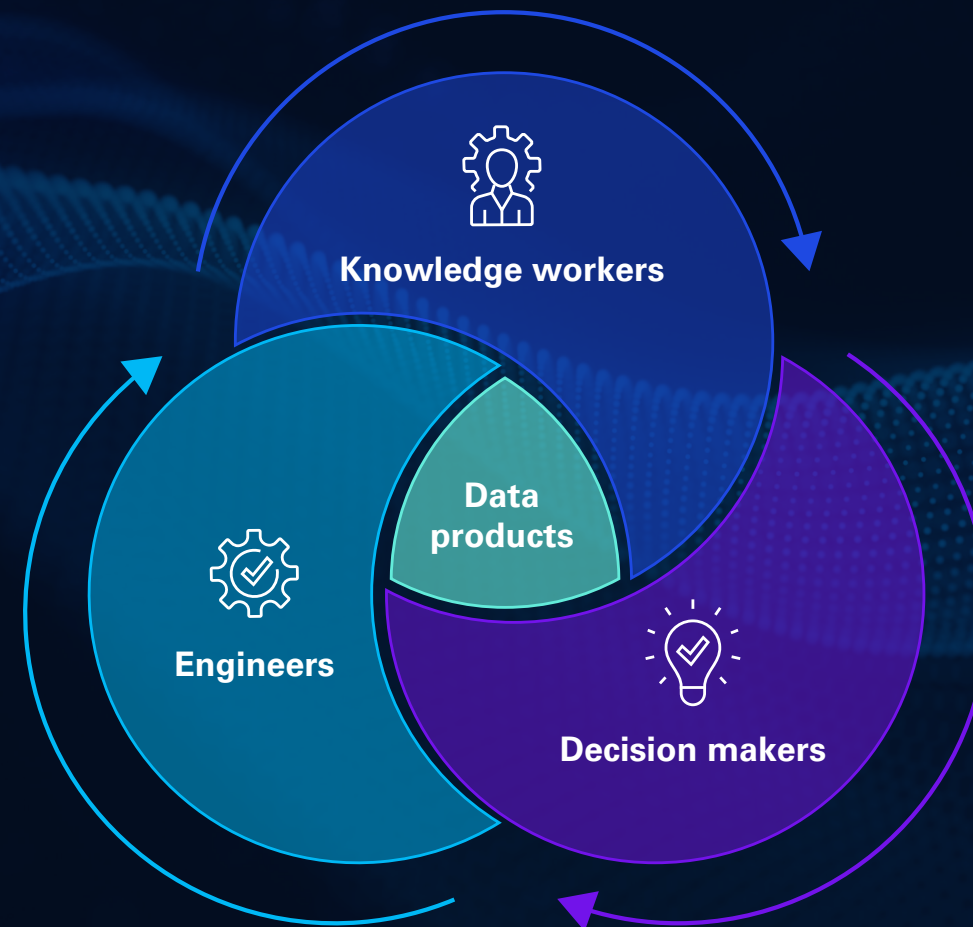■ Leaders ■ Intermediates ■ Laggards

Closing the collaboration gap

All parties want high fidelity, expedited access to trusted data sources, but as companies progress with their data transformation journey, systemic gaps between fulfilling business needs and swift data acquisition resurface. Operational and interaction challenges for business and IT often trace back to a lack of shared understanding, project cost concerns, and over-correction on governance measures that inhibit innovation.

Our study found that only 55 percent of executives believe that data management is a collaborative effort co-owned and managed by IT and the business. Identifying the ideal RACI and distribution of activities is key to data modernization, yet most companies we surveyed remain stuck in a data product operating model of the past, with ownership centralized in IT. This disconnect between IT and other business functions is reflected in our findings. Whereas 56 percent of IT respondents reported mature data product operations, only 34 percent of finance respondents agreed. Risk and corporate development executives were even less likely to report mature data product capabilities, at 24 percent and 28 percent, respectively.

55% — 55% of executives surveyed believe data management is a collaborative effort co-owned and managed by IT and the business.

Knowledge workers

Data products

Engineers

Decision makers

How to build high-value, high-utility data products

Data product ownership can be the tipping point for value creation. Business functions take an elevated role, taking responsibility for critical data elements, context, usage, and value within their domain. Like any good product manager, whose role is to design, manage, and champion their assets, the data product owner's goal is to define and elevate the value of their data, the utility of their data products, and partner with others to help ensure easy availability for the good of the entire organization. To build a high-value, high-utility data product:

> The data product owner's goal is to define and elevate the value of their data, the utility of their data products, and partner with others to help ensure easy availability for the good of the entire organization.

1 Inventory your data assets and experts

Use generative artificial intelligence (GenAI) and machine learning (ML) to gather, consolidate, and analyze information about your data assets at the portfolio level. A comprehensive data portfolio can surface important insights on utility, business context, trust indicators, and technical information. Examples can range from consumer histories to business rules to data lineage. This inventorying effort includes identifying duplication, complexity, risk, and the solutions and use cases fed by the data assets.

This inventory yields insights into the organization's data preparedness; gaps in information, skills, and knowledge; and areas and people that have specific strength in data development and management. From these foundations, organizations can begin to target priority data product candidates and champions for the data modernization mission.

2 Quantify the data value chain

Many organizations grossly underestimate the operational cost of data products or fail to properly quantify data product value against clear outcomes. Organizations shouldn't create a data product simply because it's possible. If the data products don't deliver enough business value, or if they fail to be embraced by the business stakeholders they were designed for, they are not worth the expense to develop and sustain.

A clear, repeatable, and well-understood rubric can guide more informed decision-making on data investment priorities while solidifying business and IT understanding of the impact radius. AI uses knowledge graphs to quickly and accurately quantify value, and based on these criteria and calculations, organizations can estimate gains and costs. That creates transparency around development time, resource needs, and priorities, helping retain the original value proposition.

The utility, viability, and value of data products should be weighed against "good enough" traditional data pipelines and sourcing. With a comprehensive understanding of your data portfolio, scored for complexity and value, a clear understanding will emerge on the resources required to develop those targets into data products. Companies can then estimate whether a proposed data product will give them the return on investment needed to proceed.

The data value chain is the quantitative measurement of value across these steps. This structured approach helps organizations systematically derive value from their data assets, helping ensure that data is collected and processed, analyzed, and utilized effectively to drive business decisions and economic benefits.

Step 1 Discovery

Establish clear objectives, identify relevant data sources, and profile the data to confirm it is fit for purpose.

Step 2 Acquisition and ingestion

Collect and integrate data from various sources, which includes data modeling and quality assessments, to prioritize data extraction.

Step 3 Processing

Cleanse and consolidate data to make it usable for analysis.

Step 4 Analytics and application

Extract actionable insights and create data visualizations, using advanced analytics like AI and machine learning, to help ensure insights are accessible and understandable.

Step 5 Monetization

Determine the pricing, manage the demand for data products, and help ensure insights are distributed internally and externally to create economic value.

Step 6 Operations and governance

Maintain high data quality, manage metadata, and implement privacy controls to help ensure compliance and data security.

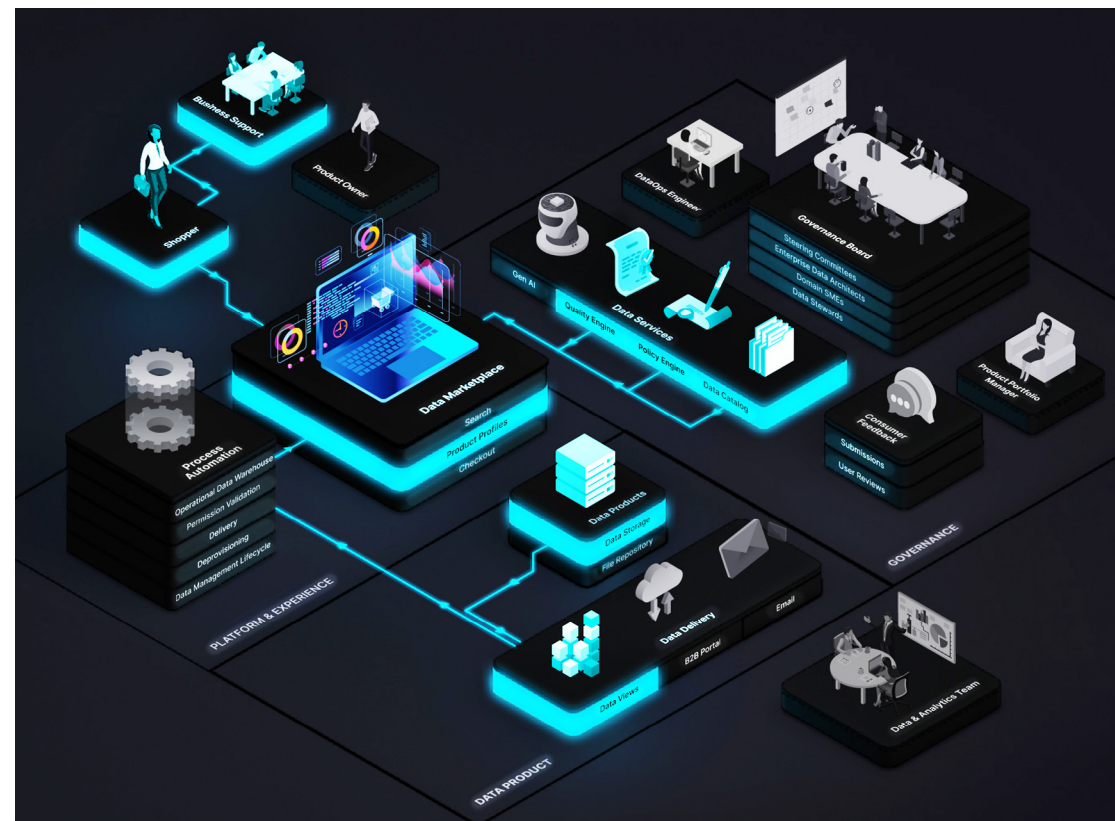### 3 Confirm data portfolio utility and prune where necessary

Help ensure you funnel data consumers to the highest fidelity assets and products. Once you've assembled your data portfolio, creating metadata in an AI-enabled catalog helps re-confirm data utility. Weigh your data assets' performance against a value threshold that will help your organization decide whether they need maintenance or retirement, using data minimization best practices to help ensure you only collect, store, and maintain what is absolutely necessary. This is also an opportunity for learning and development because it enables you to reinforce guidance around data literacy, context, and appropriate use.

4 Shape behavior, self-service, and a marketplace mindset

As new data assets are curated and the portfolio is optimized, advance and elevate the data product owners and stewards during reporting and analytics cycles. Center business and IT personas on a collaboration hub where they can 'shop' for the data products they need to assemble new solutions—imagine a virtual marketplace where users can instantly discover, understand, and evaluate the utility of an organization's data products. Then, encourage rating, idea sharing, and discussion via social share to surface high-impact use cases and value creation. Use AI to automate social data gathering and to further understand and confirm utility.

5 Prioritize value measurement

Data products can be expensive to build and maintain, and are only as worthwhile as the value they create. Evaluate the potential for value creation during curation and measure adoption over time, using AI to surface the metadata that will support critical decisions on utility, refreshes, and retirement. Incremental adoption is one clear value measure that data products are working; adoption tied to a wide impact perimeter is another. Both are valuable to the enterprise.

DISCOVERY

A shopper can search for data products and analytic accelerators with text and terms she is familiar with. AI enabled search can even allow conversational search phrases and recommendations proactively pushed to her. Her results can be further refined by filtering on categories like industry or location, as well as different data types like structured or unstructured.

She quickly finds a dataset that she thinks could be useful for her company.

Accelerating your data modernization journey

Macro forces are pressuring businesses to rethink their business and operating models to remain competitive. Data and analytics are foundational to solving the complex business challenges they face. Trapping these powerful data resources in organizational dysfunction is no longer an option for those hoping to mine and apply their data to new kinds of value creation.

Sixty percent of respondents to the KPMG survey said their organizations are at the "walking" stage with respect to the development/use of data products. To drive more impact, find out what is missing. Learn why or why not your people are using your data to generate insights, or if they are using the new system you implemented. If you are not spurring them to action with a high-impact value proposition, step back to evaluate your data modernization progress. With the right approach, you can create more value—and clear the hurdles that are preventing your organization from running.

How KPMG can help

KPMG is here to help. We're harnessing the power of data to elevate the value you can achieve from making better decisions and achieving stronger business outcomes. We can help you build a robust data strategy that joins the needs of your business with the support of a modern data architecture.

Build data products that rely on agile data management systems, elevated data quality, and solid operational foundations. We'll help you establish federated data ownership practices and data models optimized for specific domains and lines of business.

Anticipate and adapt to the wide-ranging impacts AI can have on your data and organization, including budgets and data controls, secure data practices, and cloud-native architectures.

In 2024, KPMG was named a leader in data modernization services by IDC. With our digital transformation experience, advanced technology knowledge, and respected data practitioners, we provide CDOs and data leaders with solutions designed to keep you moving forward with confidence. We can help you:

Harness the power of data ethically and responsibly with trusted data principles and governance models for managing risk.

Create a consumer lifecycle approach that incorporates self-service models, AI assistants and agents, and builds a foundation for enterprise insights.

Operate and manage your data infrastructure with integrated frameworks that support access to a broad range of data sources and make analytics faster with less friction.

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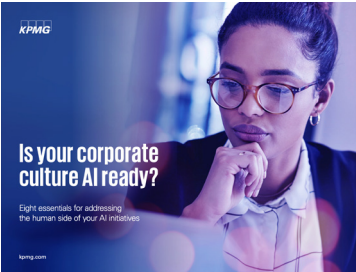**Gabriel Crane**
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