



Turning Data into Economic Value



Introduction

Today, organizations and their ecosystems generate and collect massive amounts of data as they engage in daily business operations.

A proliferation of data inside an organization yields both a challenge and an opportunity. The operational costs of manual data wrangling, integration, storage, and inefficiency are at one end of the spectrum. At the other end is the promise of near real-time insights, empowered knowledge workers, data-driven decisions, and new revenue streams. Most organizations find themselves somewhere in the middle. KPMG sees data as an asset, and as a product to be curated and certified for value. The actions to move towards “data for value” are often the least popular in that they are disruptive to the people, process, and technology of day-to-day business operations.

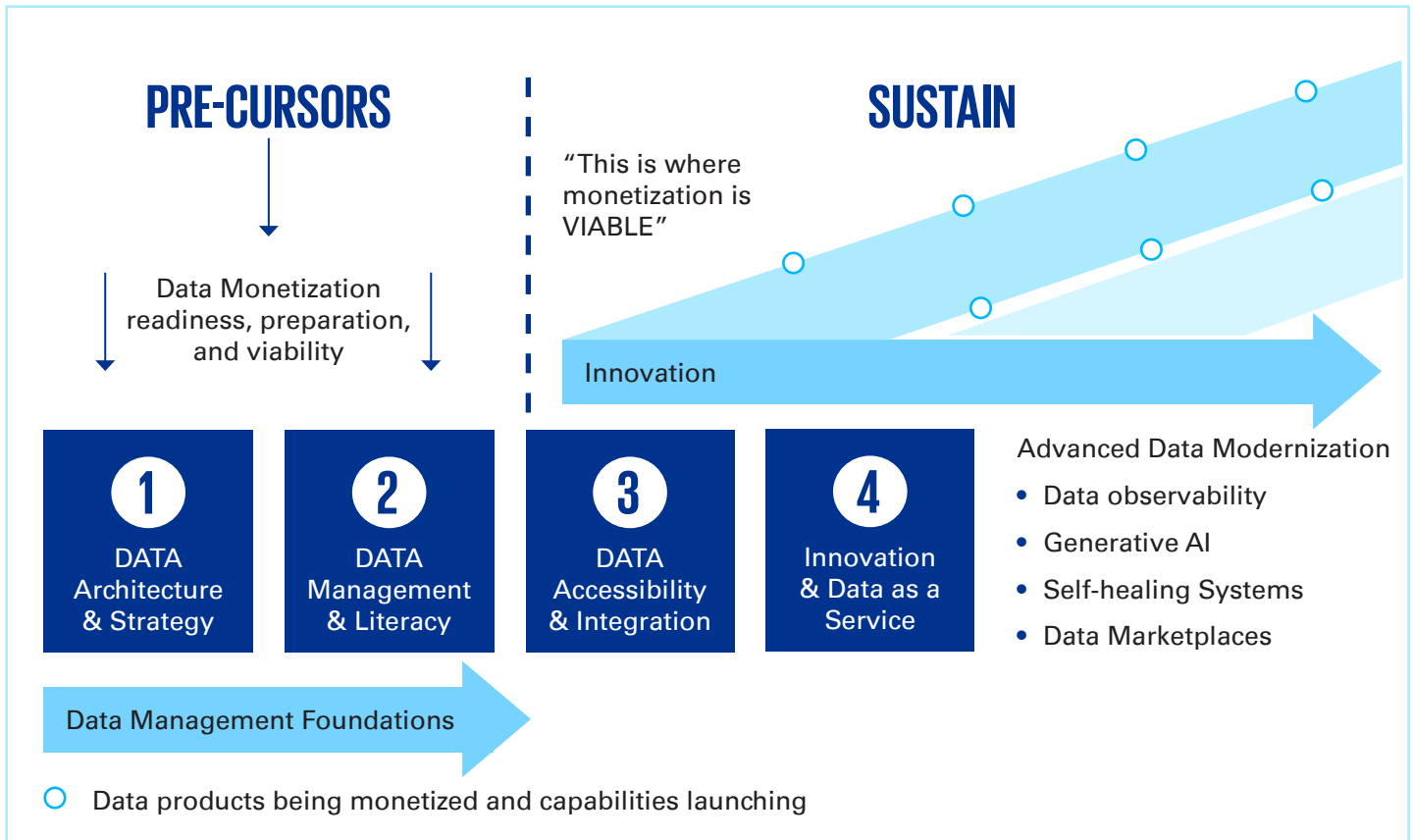
The variety of data now available through digital gathering points is sizable, and it is the cornerstone of a modern information technology estate.

Traditional data domains (e.g., customer, product, etc.) have taken on a new life with enrichment via additive metadata, time-series, geolocation, biometrics, and behavioral dimensions. One of the most exciting industries for this cache of data is within healthcare. As this sector digitizes, improved data privacy and utility is empowering patients and enabling a paradigm shift toward patient-focused outcomes and services.

When approaching data modernization and enablement, navigating the market trends and approaches can be complex. Exploration within industries that are succeeding with data, and the methods they use to scale, can help you envision a path towards data-driven, technology enabled business and economic value. This can include commercialization and monetization of data, with the right prerequisites and data strategy.



The modern data value chain has a trajectory that can only be attained progressively, through solid data management foundations. As organizations modernize their people, technology & processes around data, it unlocks the opportunity to commercialize and monetize data sustainably.



Market Perspectives and Trends

- Paradigm Shift – Data and analytics are changing the nature of industry competition, with a broader group of stakeholders invested in data-driven outcomes.
- New entrants are launching data and analytics businesses that disrupt traditional competitors value propositions.
- Shadow Market – Traditional competitors and startups are launching new data and analytics offerings related to the businesses directly.

Evolving definitions

- Commercializing Data – Data commercialization can be defined as taking existing data obtained from business operations and turning it into a new revenue stream.
- Monetizing Data – Data Monetization refers to the process of using data to obtain quantifiable economic benefit. Internal or indirect methods include using data to make measurable business performance improvements and inform decisions.



“Monetizing information as an asset is about deploying it in a variety of ways to generate economic benefits. This can range from licensing it to others, to using it to improve top or bottom-line results via process improvements. Generating measurable economic benefits from or attributable to available information assets.”¹

¹ Gregory Piatetsky, Exclusive Interview: Doug Laney on Big Data and Infonomics - 3Vs of Big Data, Big Data, Doug Laney, Infonomics, Marketplace, Privacy, January 25, 2018, KDnuggets, <https://www.kdnuggets.com/2018/01/exclusive-interview-doug-laney-big-data-infonomics.html>



Adaptation & Operations

- Competing in a Market of Near-Constant Disruption – Changes in the nature of competition brought about by data and analytics are driving necessary workforce refactoring, digital fluency and data literacy as table stakes.
- Operational Excellence – As organizations create data products and pursue monetization, the support and scaling costs are often grossly underestimated. Talent challenges and technical complexity raise additional stress points for tech executives. Operational TCO and ROI must be considered iteratively for data-heavy initiatives, as well as pruning legacy systems & data.



Innovation

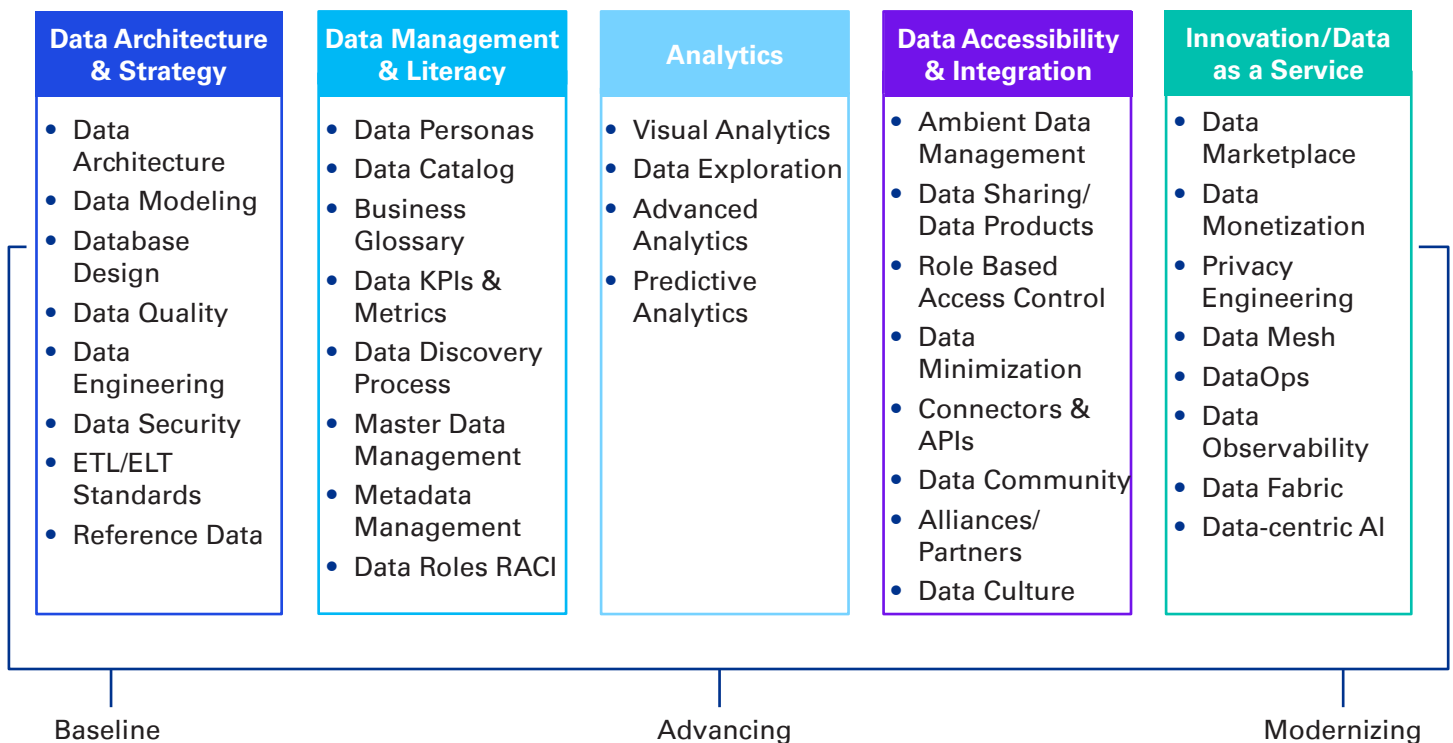
- New Perspectives on Data – Organizations can now extract new insights from data products that were traditionally uncorrelated and siloed. Now feasible through persona-driven design and cloud-native capabilities, this is a new wave of data value.
- Expanding the Pie – Companies are forming data related partnerships along the data value chain.



Data Management Spectrum

Good data monetization efforts and outcomes should ensure you get the most economic value from your data. This includes maximizing profits, reducing costs, driving productivity, and harvesting insights for your organization, customers and partners. While 'good' may be subjective, leading practices in the market can be a measure of maturity. Consider the following for your organization:

- Where are you on the Data Maturity Spectrum (below)?
- What is the cultural optimism (at the exec level and working level) regarding the value of data?
- Is your workforce aligned with roles and skills to certify, consume & take action on data products?
- Is your data product life cycle sustainable and fully operationalized?



Commercialization & Monetizing of Data – Value Chain

Generating value through data-driven process optimization, process mining and data product usage are leading practices. Identifying the value & impact of data modernization, as well as defining the value of “dormant data”, is an important pursuit. Dormant data is underutilized data, where insights are yet to be harvested. The process to activate the data value chain is outlined below.

Use Case Dynamics	Data Discovery	Data Acquisition & Ingestion	Data Processing	Analytics and Application	Data Monetization
Data Operations & Governance					
<ul style="list-style-type: none"> • Define objectives and desired outcomes • Understand what problems to be solved • Proof points of where the problem surfaces and why • Define potential economic value drivers 	<ul style="list-style-type: none"> • Understand the defined objective • Identify data sources • Assessment of suitability of data sources • Prioritize extraction • Document process and roles • Business value assessment 	<ul style="list-style-type: none"> • Data modeling • Data profiling • Data quality & scorecards • Metadata management • Data ingestion • Data staging 	<ul style="list-style-type: none"> • Data aggregation • Data correlation • Privacy controls • Data cleansing • Data transformation • Data consolidation 	<ul style="list-style-type: none"> • Type of analytics, personas and advanced AI/ML opportunities • UX/CX data visualization • Intersection of data product and value determination • Perspective on dormant data – discovery 	<ul style="list-style-type: none"> • Distribution of data, results and insights • Application to key stakeholders outside the organization • Application to inside the organization • Data product demand • Pricing approach for data products • Operations investment to sustain



Use Cases & Examples

Healthcare & Life Sciences

A healthcare organization discovers new insights within blended data sources, which they could not do previously without artificial intelligence (AI)/ machine learning (ML), synthetic data and biometrics. The innovation value is high for the pursuit of new treatments, and the resulting optimism is based on higher tech/data maturity, resource availability and commitment by executive leadership to sustain innovation efforts.

Consumer & Retail

A Consumer & Retail organization mines customer sentiment, supply chain data, and customer online engagement and turns it into data products. The impact to increasing profit is projected conservatively, due to needs for scaling the technology ecosystem & subscription framework and unifying stakeholders on data quality, all of which take time and resource investment.

Monetizing Data as an Asset (Enterprise)

Data as an asset is not only about how organizations of the future manage data, but also about how they can become information-centric organizations with data at the heart of their transformation. Enterprise shifts are occurring; seeing the value of data requires a fundamental shift in the way organizations understand

data. Data needs to be seen as more than a byproduct of business processes and rather as a driver for a broader mindset shift. Data is often seen as a management and technology problem, rather than a business one, so enabling data as an asset requires a shift in both culture and approach.

Supply Chain Value Extraction (Back Office)

Supply chain has been a significant topic over the last three years—distribution, the pandemic, global trade flows and more. The back office is more than just supply chain—this data provides valuable insights into the health of the supply chain, as well as better connectivity between the back-office functions and the broader supply chain.

The value proposition here is the opportunity to open the channels of data exchange:

- Moving from batch to near realtime and broadening data accessibility.

- Providing a contemporary consumption interface for knowledge workers (i.e., getting them out of spreadsheets and instead into data exploration tools and visual analytics.)
- Easing the friction with partners/suppliers via microservices, APIs, and data marketplaces so that predictive models can be built with a wider span of data

D2C Personalized Care (Front Office)

Rapid expansion of personalized care, in-home care, and precision medicine are driving new business models. Customized medicine and care is delivered directly to the patient. Data-forward distributors look to consolidate the value chain to deliver enhanced value to customers and partners in the supply chain. Opportunities for data exchanges between patient, provider, distributor, and manufacturer are driven by digital technologies and connected devices. The goal of data accessibility and automation of connected health

and precision medicine is to empower users with the tools they need in order to deliver personalized treatment to patients as well as to produce cost savings for healthcare systems. Data will play a significant role in Home Health, Connected Health solutions, Telehealth and Health Equity. Precision Medicine will be a game changer and not just for healthcare and life sciences, but the broader ecosystem.

Accelerate your Team – Experience KPMG Ignition to Unlock the Power of Data

Let's explore together the data-driven and technology-enabled approaches to help structure, centralize and monetize real-time data across the value chain and external to your organization:

- Setting data quality & certification foundations
- Curating data products
- Opening the data marketplace (internal/external)
- Operationalizing the data lifecycle
- Reinvesting value for growth & innovation
- Defining linkages to cyber efforts and initiatives

KPMG is ready to meet you where you are in the journey, and we encourage you to leverage the KPMG Ignition experience as the incubator for data maturity understanding and a starting point. Mapping paths to data value via data monetization can help your organization create financial value from data and sustain data-driven process improvements.



*Video – Learn more about KPMG
Ignition's Innovative Experience*

Contact us



Danielle Beringer
Managing Director
KPMG LLP
T: 863-698-4764
E: dberinger@kpmg.com



Brian Miske
Managing Director
KPMG Ignition
T: 973-876-1591
E: bmiske@kpmg.com

Some or all of the services described herein may not be permissible for KPMG audit clients and their affiliates or related entities.

kpmg.com/socialmedia



The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavor to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act upon such information without appropriate professional advice after a thorough examination of the particular situation.

© 2023 KPMG LLP, a Delaware limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. All rights reserved. The KPMG name and logo are trademarks used under license by the independent member firms of the KPMG global organization. NDP427686-1A