

The State of Data as a Product in the Real World

2023



Presented by



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Introduction

Welcome to the first edition of **The State of Data as a Product in the Real World** study! Pathfinder Product teamed up with Women in Analytics (WIA) and the DataConnect Conference to dive into what it means for companies to treat data like a product.

The idea for this study was inspired by the 2023 DataConnect Conference, where the theme was “Data as a Product: An Empathetic Approach to Delivering Value.” The session topics and discussions got us thinking — there’s so much to explore here! How do different companies understand and use data as a product? Are they even doing it at all?

Data is increasingly all around us and has the power to provide us with valuable insights. Understanding how to harness its potential is crucial, which is why we wanted to take a closer look at how companies are making the most of their data. Are companies treating it as understandable, discoverable, trustworthy, accessible, and valuable — like a product? What are companies investing in making this happen? Who is involved in making these decisions? What are some of the biggest challenges?

We contacted our network of data and product experts to get the inside scoop. We wanted to understand their perspectives on how companies view and approach leveraging data, data strategies and decision-making, plus the real-world challenges and benefits of treating data as a product.

So, here it is! We’ve packed this study with insights, thoughts and advice from experts to give you a clear picture of what’s happening in the world of data as a product. We hope to provide you with valuable insights, foster a deeper understanding of the current landscape, and fuel discussions on innovative and empathetic approaches to delivering value through data.

To learn more about Pathfinder Product, [visit our website and schedule a free consultation](#) if you’d like to learn how we can support your Data as a Product journey.

To learn more about one of the industry’s premier data events, [explore the DataConnect Conference](#).

Executive Summary

The State of Data as a Product in the Real World study set out to demystify the concept of treating data as a product and to discover how companies across the spectrum are navigating this territory.

Methodology Brief

The study's insights were derived from a survey that was distributed across professional networks. The survey targeted leaders of, members of, and professionals who work closely with data teams. The survey garnered 174 responses over one month. The study was also informed by key insights from experts to provide additional context and advice.

Respondent Insights at a Glance

- Out of 174 respondents, 111 respondents (63.8%) identified as in a leadership role while 63 (36.2%) identified as individual contributors
- Most respondents indicated that they are a member of a data team (41.4%) or frequently work with a data team (39.1%)
- Top 3 industries represented are Health (27.6%), Technology (25.3%), and Banking/Finance (20.7%)
- Majority of respondents were from large enterprises (59.2%), with representation from midsize organizations (27%), small businesses (7.8%), and micro enterprises (6.3%)

Study Highlights

Respondents overwhelmingly reported that treating data as a valuable, usable asset had a positive impact on their organization with 42.9% reporting some positive impact and 38.1% reporting significant positive impact

- Based on weighted ranking, the top three use cases for data were to:
 - Inform strategic decision-making
 - Improve operational efficiency
 - Enhance customer service
- Based on weighted ranking, the bottom three use cases for data were:
 - Machine Learning (ML)
 - Artificial Intelligence (AI)
 - Data monetization
- Top three challenges reported when implementing a strategy to treat data as a valuable, usable asset:
 - Integrating data products into existing workflows and systems (63.2%)
 - Ensuring data quality and reliability (62.6%)
 - Aligning data products with business value and goals (54.6%)

What the Heck is “Data as a Product”?

When we started working on the survey that would inform this study, we spoke with several leaders and experts in various data fields. We wanted to get their take on the concept of data as a product and what they would hope to learn from a study on the subject. Nearly every person said, “You need to define exactly what you mean by data as a product — people either don’t understand it or it means different things to different people.”

Point taken! We started our survey with level-setting on our definition:

“The term “Data as a Product” (DaaP) might be relatively new to some. In essence, it represents a paradigm shift where data is no longer viewed merely as a byproduct of business operations, but rather as a valuable asset. This concept calls for planning, strategizing, and employing specific tactics to enhance the quality, accessibility, and usability of data. The primary purpose of DaaP is to maximize its utility — this could include supporting internal decision-making processes, product development, data products such as dashboards or AI/ML models, or generating revenue through data monetization.”

While some practitioners equate “data as a product” with “data products”, we see them as distinct. We view data as a product as the process of applying product thinking to data to ensure it is fit for its intended use. A data product is the end result of doing so. An example would be ensuring high-quality, secure, and well-understood data (leveraging data as a product fundamentals) to feed a large language model (the data product).

Scott Hirleman, CEO of Data Mesh Understanding and host of Data Mesh Radio, spends hours discussing data as a product with data experts. When asked how they define the term, Scott shared:

It’s taking product management principles and applying it to data. When saying applying it to data, it’s not creating a data product. Data products are the output. They are what ends up being the mechanism to share information with each other. There’s a difference between creating data products and data as a product thinking. You have to think about what it is you are trying to accomplish, and then when and how you set yourself up to do that. Good products deliver value to their customers. We need to focus on delivering business value, outcomes over outputs.

– Scott Hirleman

The ability to apply that product thinking to data, however, isn’t always a given — another reason the distinction is important. This ability requires having the right mentality about data’s potential value and enabling an organizational culture that supports the tactics involved in making data fit for use. When these Data as a Product Fundamentals — Mentality, Enablers, and Tactics — are in place, organizations tend to be well-positioned to gain the most value from their data and build valuable data products.

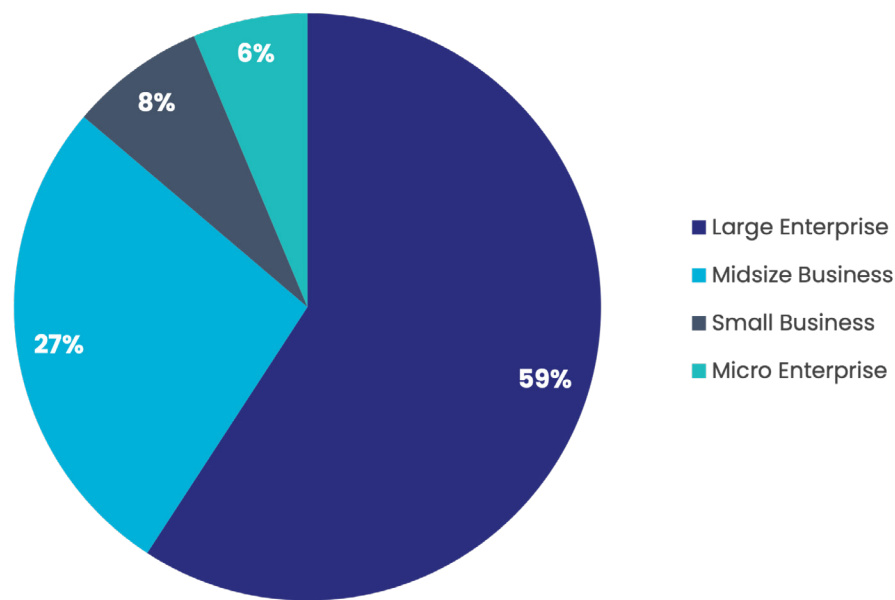
We set out to understand the current landscape of data as a product by assessing elements of each of these fundamentals and perceptions of understanding, success, and impact.

Demographics

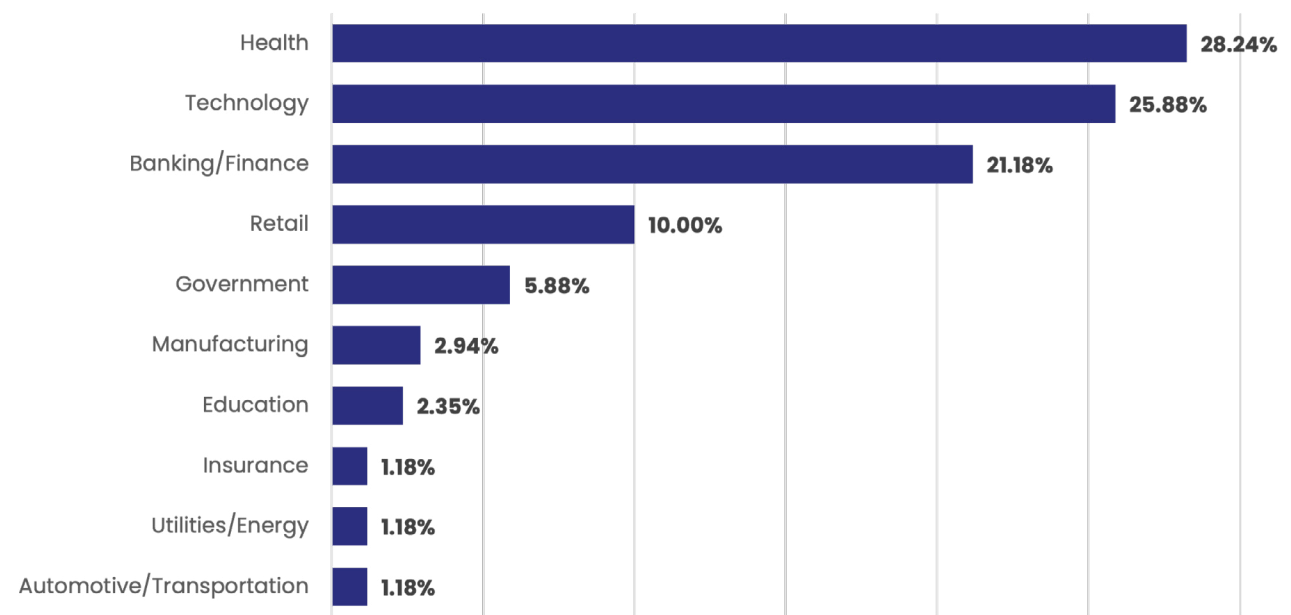


174 professionals completed the survey, providing a fairly diverse representative sample of company sizes, industries, and roles.

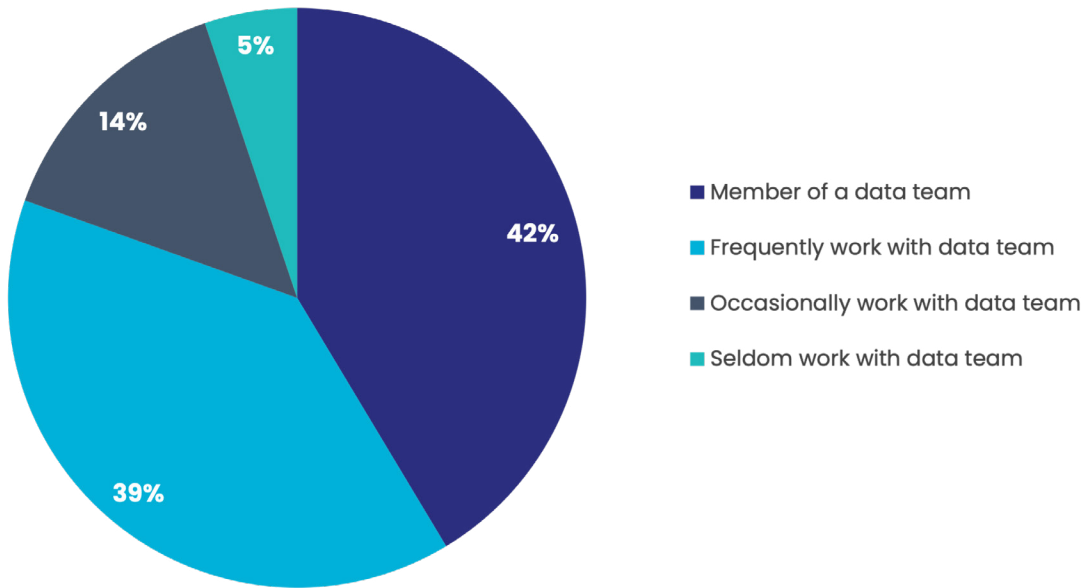
Respondents by Company Size



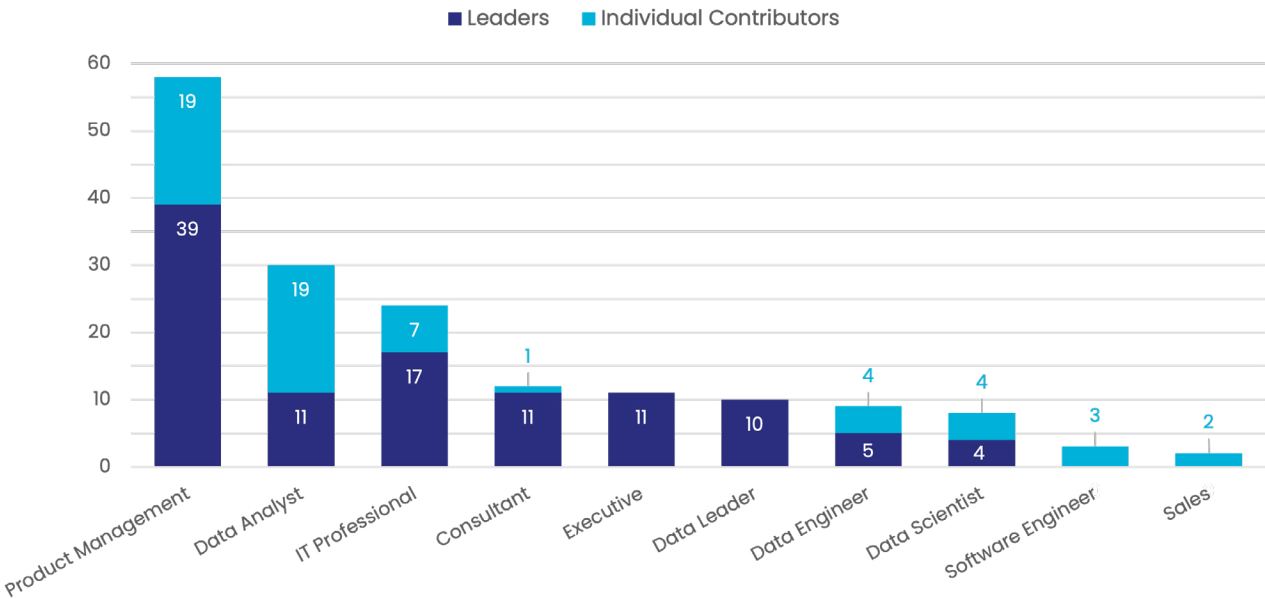
Respondents by Industry



Respondents by Data Team Relationship



Respondents by Role



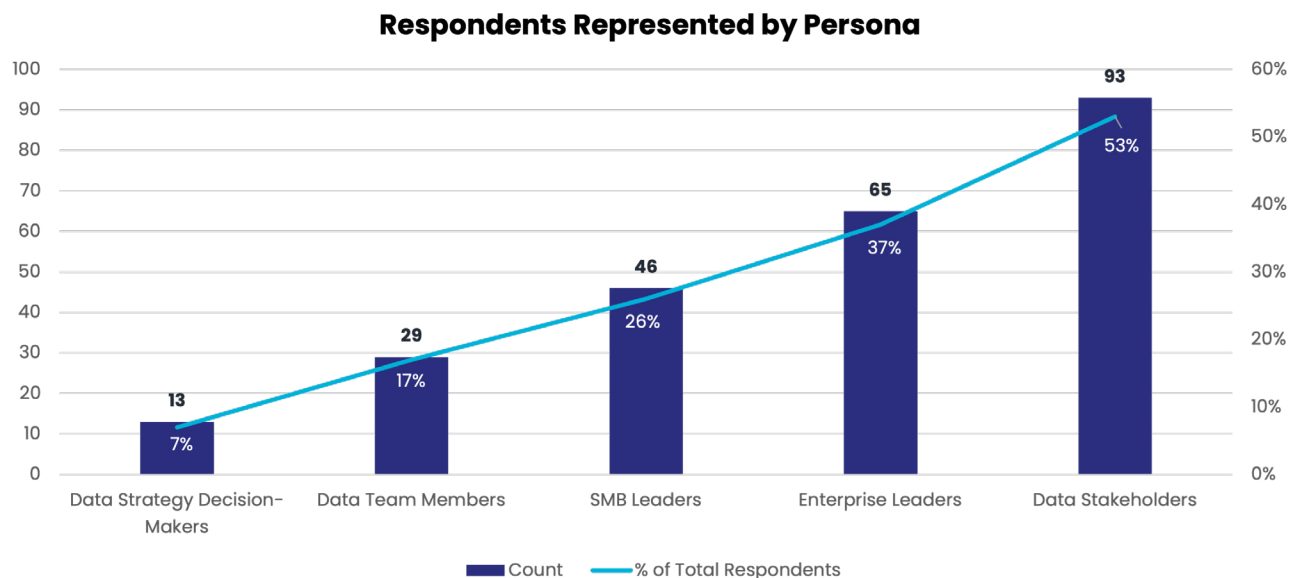
Personas

In our journey to decode the state of Data as a Product, we quickly recognized that our respondents varied quite a bit. Different roles, responsibilities, goals, and environments shape unique perspectives on data's value and challenges. To offer a clearer, more nuanced view of our findings, we've broken down our respondents into different personas.

These personas aren't just categories — they represent real-world players, each influencing the data ecosystem in their own way. They allow us to understand specific needs, challenges, and aspirations, offering actionable insights tailored to each group.

Here's a snapshot of our personas:

- **Data Stakeholders** frequently or occasionally work with data teams
- **Enterprise Leaders** hold leadership roles in large organizations (501+ employees)
- **SMB Leaders** hold leadership roles in small to medium-sized organizations (1-500 employees)
- **Data Team Members** hold individual contributor roles as members of a data team
- **Data Strategy Decision-Makers** are primary decision-makers for data strategies



As you review the results, consider them from the perspective of the persona you most closely identify with, but also from the viewpoints of other personas to gain a comprehensive understanding of their perspectives as well.

Introducing the Data as a Product Fundamentals

In the landscape of data-driven decision-making, it's crucial to recognize that just having data isn't enough. As with any asset, how organizations manage and leverage their data determines its true value. Central to this paradigm is the concept of treating data as a product. But how do organizations transition from seeing data as a byproduct of business operations to viewing it as a product? Enter the Data as a Product Fundamentals.

Each element is important for guiding organizations in developing, nurturing, and optimizing the Data as a Product mindset.



MENTALITY

- **Organizational Data Awareness:** Recognizing the intrinsic value of data within the organization
- **Data-Driven Goals:** Establishing objectives that revolve around leveraging data for strategic advantages
- **Defined Use Cases:** Identifying specific scenarios where data can play a pivotal role in driving results

ENABLERS

- **Organizational Structure & Culture:** Crafting an environment that not only supports, but aligns on and champions the value of data
- **Strategic Investment in Data:** Prioritizing funds, resources, and time towards data initiatives
- **Collaboration and Communication:** Encouraging dialogue and teamwork between data teams and other departments to drive improved outcomes as well as data literacy

TACTICS

- **Data Privacy:** Implementing strategies to ensure data's confidentiality and adherence to legal guidelines
- **Data Governance:** Establishing standards, roles, and responsibilities around data
- **Data Quality:** Pursuing accuracy, timeliness, and reliability in data collection and management

Introducing the Data as a Product Fundamentals

These fundamentals do not represent a linear process; each element supports and reinforces the others. Challenges in one fundamental element can certainly lead to obstacles in another; for example, jumping straight to implementing tactics without the right organizational mentality and enablers can lead to less-than-ideal outcomes. Having a strong, data-driven strategy without the appropriate organizational structure in place may hinder execution and realization of critical goals.

Throughout this study, we'll delve into each fundamental element, highlighting key findings from our survey. You'll find expert quotes and real-world examples illustrating both the successes and challenges companies face in implementing these fundamentals.

However, it's important to note that there's no one-size-fits-all approach. Different organizations, with their unique needs, goals, and structures, may prioritize these fundamentals differently. As you read on, consider where your organization stands and how you can leverage these insights, tailored to your context, to advance your data as a product journey.

Mentality: Organizational Awareness of Data's Importance

An organization's mindset regarding data is critical to successfully leveraging data as a product. Yet, in diverse organizations, those allocating resources for data-focused initiatives may have differing perceptions on the keys to success, depending on their proximity to the data practitioners.

The first step is recognizing that data plays an important role in not just data-specific initiatives, but overall organizational goals, such as growing revenue and retaining customers. According to a 2014 McKinsey study¹, companies that effectively leverage data and analytics acquire 23 times more new customers and deliver 15 times more customer value. It is critical to recognize the potential of your data's value when treated as a strategic product and its contribution to organization-wide — and not just data-specific — goals and strategy.

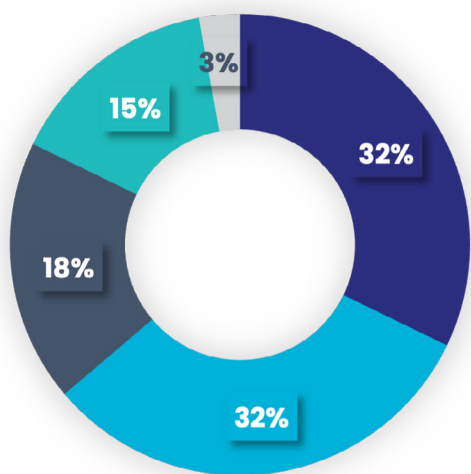
We asked the following questions to assess an organization's Mentality:

- How would you describe your organization's understanding of Data as a Product (DaaP)?
- Where would you place your organization on the data maturity curve?
- Please indicate your level of agreement with the following statement:
- My organization integrates data as a central component in its
- decision-making processes.

Additionally, we asked respondents to rank their organization's use cases for data:

- Please rank the use cases for data in your organization in order from most to least prevalent.

Data as a Product Understanding



- We have a general understanding and are in the process of implementing DaaP concepts
- We have heard of it, but haven't actively applied DaaP concepts
- We have a comprehensive understanding and consistently apply DaaP concepts
- We have little to no understanding of DaaP concepts
- Not sure

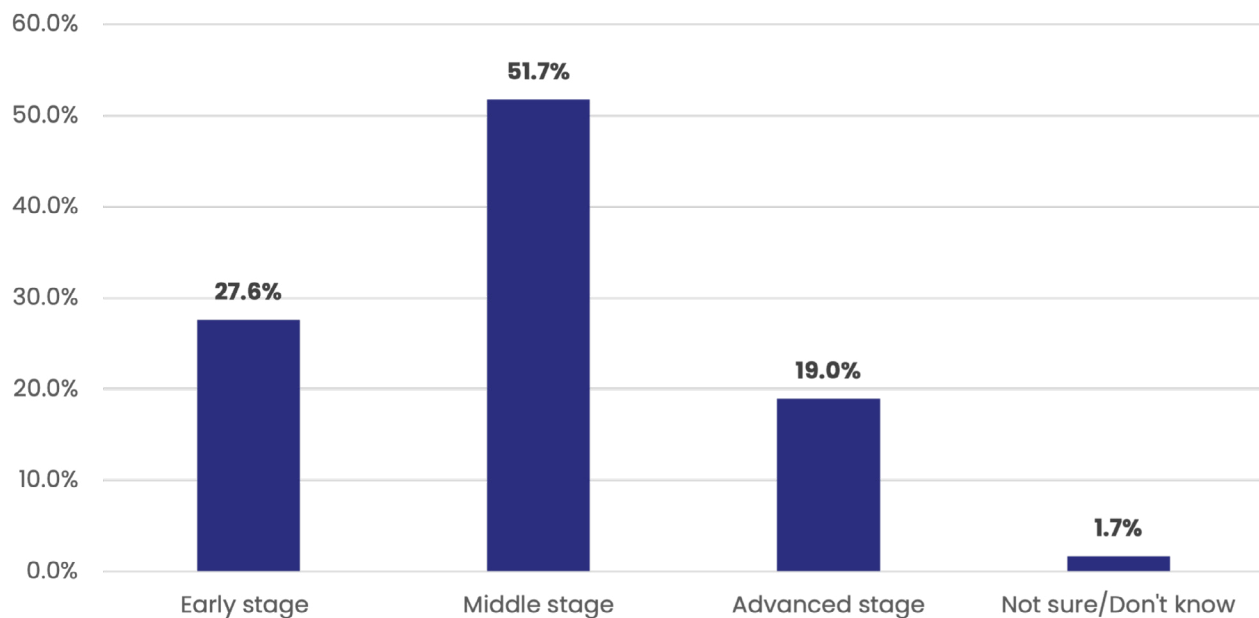
¹McKinsey. "Five facts: How customer analytics boosts corporate performance." McKinsey, 1 July 2014, <https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/five-facts-how-customer-analytics-boosts-corporate-performance>.

Understanding of Data as a Product

A significant number of respondents (32.2%) claim their organizations to have a general understanding of DaaP and are in the process of implementing its concepts. This is followed closely by 31.6% that have heard of DaaP but haven't actively embraced it. Notably, only 18.4% express a comprehensive understanding and consistent application of DaaP concepts. Nearly 15% admit to having little to no understanding, which highlights an evident knowledge gap in the market.

Insight: There's a clear need for more educational resources and training to bridge the knowledge gap and guide organizations in implementing Data as a Product principles effectively.

Data Maturity Curve

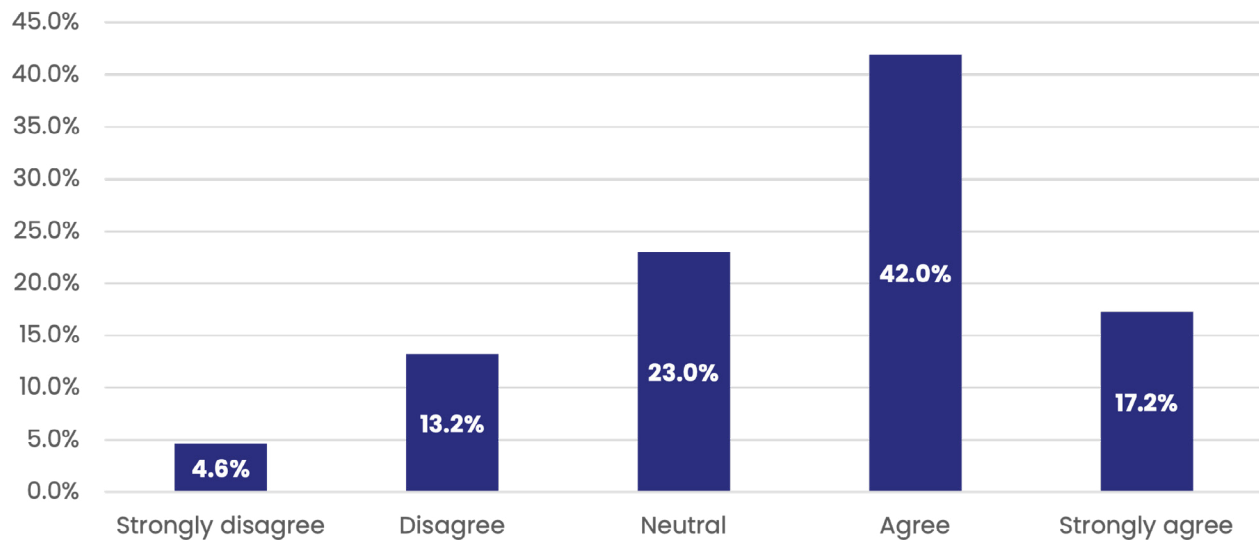


Position on the Data Maturity Curve

Over half (51.7%) of the respondents see their organizations in the middle stage of data maturity, signifying they're gaining value from their data but believe there's further potential. Meanwhile, 27.6% consider themselves in the early stage, suggesting they're still grappling with the basics. Only 19% feel they're at an advanced stage, extracting significant value from their data.

Insight: The bulk of organizations are in the transitional phase of their data maturity journey. Tailored guidance and best practices can accelerate their move toward the advanced stage.

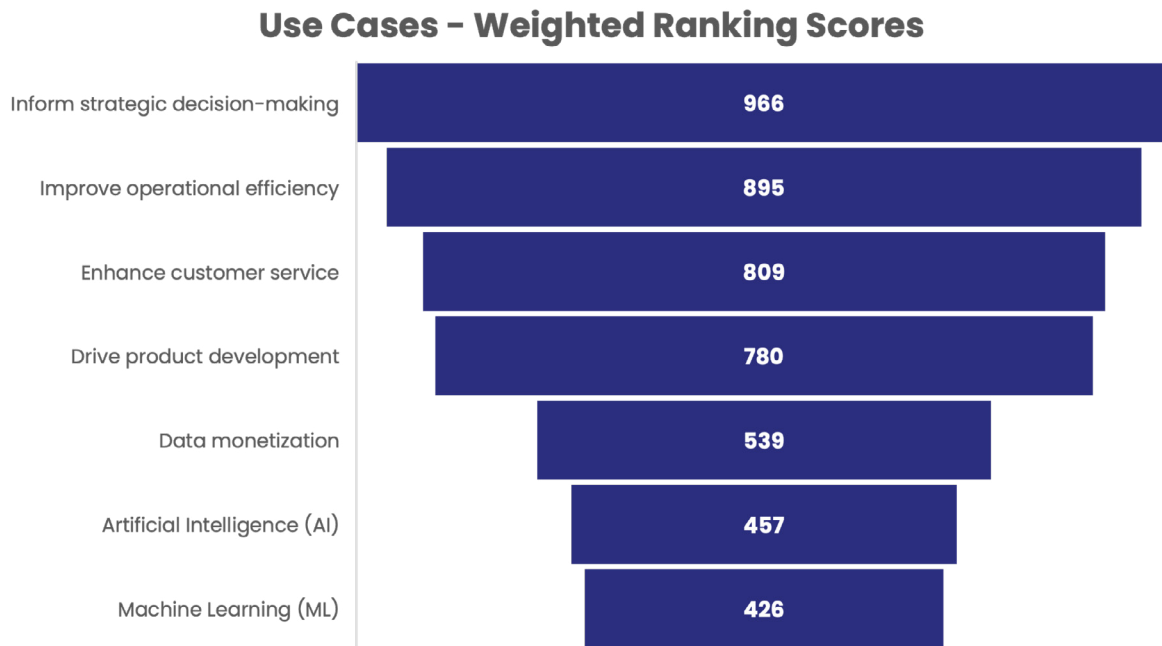
Data-Driven Decision Making



Data Integration in Decision-Making

The majority of respondents (42%) stated they agree that data is a central component in their organization's decision-making processes, and a further 17.2% strongly agree with this sentiment. However, 13.2% disagree, and 4.6% strongly disagree, indicating some level of resistance or lack of integration of data in decision-making processes.

Insight: While many organizations have embraced data-driven decision-making, there's still a segment that hasn't integrated data into their core processes, which presents an opportunity for targeted interventions and support.



Use Cases for Data in Organizations

When it comes to leveraging data, 'Informing strategic decision-making' is the top use case, with a weighted score of 966. We asked people to rank different ways their organization uses data, from the most to least prevalent. The most prevalent got the highest score and least prevalent, the lowest. The scores were then added based on respondents' answers, so that scores were weighted based on prevalence.

This underscores the importance of data in shaping strategy, allowing organizations to make informed decisions with increased confidence. 'Improving operational efficiency' and 'Enhancing customer service' follow closely, revealing the operational and customer-centric benefits organizations seek from their data. Notably, advanced applications like 'AI' and 'ML' are at the bottom, suggesting that while they're recognized, they may not yet be mainstream in terms of application.

Insight: There's a clear hierarchy in how organizations use their data, with strategic and operational benefits taking precedence. However, as AI and ML adoption and literacy grows, we can anticipate a shift in these priorities.

In conclusion, the 'Mentality' findings indicate a varying degree of understanding and application of DaaP concepts across organizations. While many are in the transitional phase of their data journey, there's a clear appetite for further knowledge and guidance, particularly in leveraging data for strategic and operational benefits.

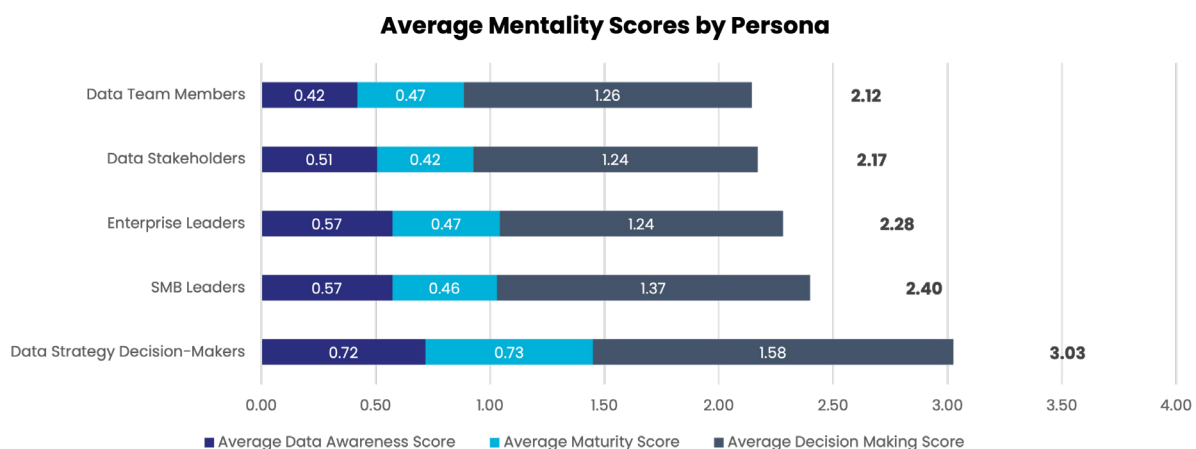
Mentality Insights by Persona

When it comes to understanding and valuing data, not all roles have the same perspective. Assessing the 'Mentality' perceptions through the lens of various personas allows us to provide nuanced insights. To achieve this, we employed a weighted scoring model to capture the relative importance of different aspects of the data mentality.

In our approach, respondents answered the questions listed below. Each question was assigned a weight reflecting its significance in shaping the overall data mentality of a persona:

- How would you describe your organization's understanding of Data as a Product (DaaP)? Weight: 1
- Where would you place your organization on the data maturity curve? Weight: 1
- Please indicate your level of agreement with the following statement:
My organization integrates data as a central component in its decision-making processes. Weight: 2 (this question was weighted higher because it is less subjective than the prior two, and more reflective of an organization's Mentality in practice)

The below chart represents scores by persona, out of a total possible score of 4:



Notably, there's a perceptual gap between different roles within the organizations. Data Strategy Decision-Makers have the most optimistic view of their organization's data maturity and integration of data in decision-making. In contrast, Data Team Members, who are closer to the ground-level execution, share the least positive perception of the organization's maturity in these aspects.

This disparity underscores potential differences in viewpoint between those setting the strategy and those implementing it, and reflects the importance of fostering communication and alignment across all levels of an organization, particularly about the value of data and the role it plays in organizational success.

Wendy Batchelder, Chief Data Officer of Salesforce, shared this advice during the 2023 DataConnect Conference main panel session:



Just remember that you are a business leader first and a data professional second. The biggest value that you can provide your company is to be that translator...the more that you can speak in plain terms about what your value is, why it matters to the business, and being able to translate to where they are coming from, the more successful you'll be.

– Wendy Batchelder

Enablers: Cultivating an Environment for Data-Driven Success

An organization's culture has a massive impact on its ability to effectively leverage data as a product and ultimately maximize its utility and value. According to the 2023 New Vantage Partners Data and Analytics Leadership Annual Executive Survey², less than a quarter of firms report having a data-driven organization or data culture, despite technological advancements.

Furthermore, cultural factors are identified as the primary obstacles to realizing business value from data investments. A significant 79.8% of data leaders cite cultural issues, such as organizational receptivity to change, business transformation, changes to organizational processes, people and skills, organizational alignment, and communications, as the main challenges.

These findings highlight the importance of an organizational culture that supports data strategy and execution focused on the people and processes that lead to and support data-driven success.

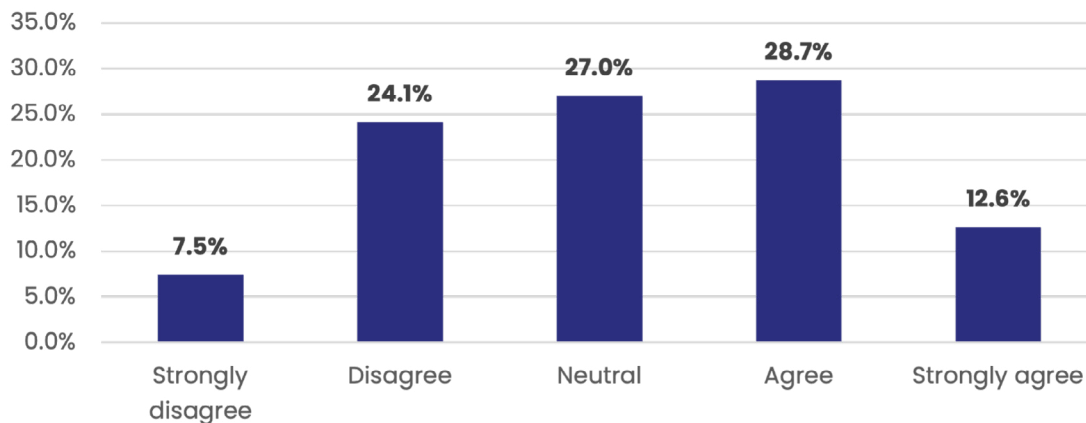
In the survey, we asked the following questions to assess organizations' DaaP Enablers:

Strategic Investment in Data

- Please indicate your level of agreement with the following statement:
My organization has a well-defined strategy for creating and managing data as a significant asset.
- How is data-related work primarily funded in your organization?
- Approximately what proportion of your organization's IT budget is allocated to Data, AI, and ML initiatives?
- Has your organization's investment in data strategy/data-related products increased, decreased, or stayed the same over the past year?

²NewVantage Partners. "Publications & Media." NewVantage Partners, 2023, <https://www.newvantage.com/thoughtleadership>.

Data as a Product Strategy

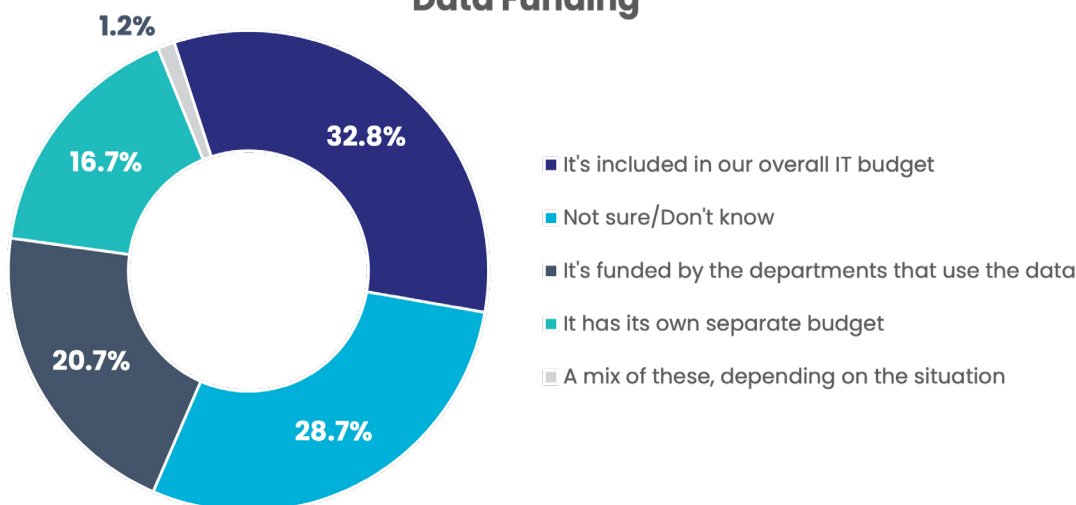


Data as a Product Strategy

The majority of respondents (41.3%) believe their organization has a well-defined strategy for data. However, a significant proportion (27.0%) remain neutral, and 31.6% of respondents either “Disagree” or “Strongly disagree” with the statement, pointing to possible strategy deficiencies in their organizations.

Insight: The split in responses indicating a well-defined strategy for data suggests that organizations should invest in not only defining a strong data strategy but also elevating communication across all teams to ensure alignment and shared understanding.

Data Funding

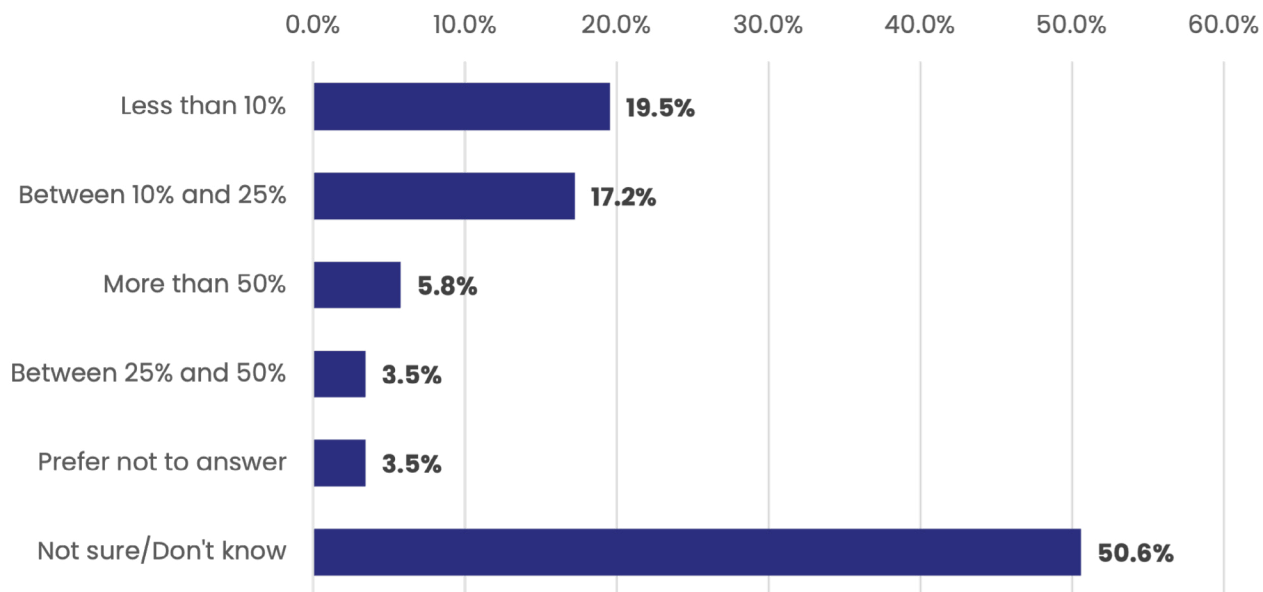


Data Funding

For 32.8% of respondents, data-related work is incorporated into the overall IT budget, suggesting that for many, data is viewed as a subset of IT. However, 20.7% specify their departments using the data fund themselves, hinting at a decentralized, perhaps siloed, approach to data funding. A mere 16.7% have a separate, dedicated budget for data-related tasks.

Insight: A fairly significant number of respondents (28.7%) indicated they don't know how data-related work is funded. This lack of budget clarity is also reflected in the Data Budget Allocation question responses.

Data Budget Allocation

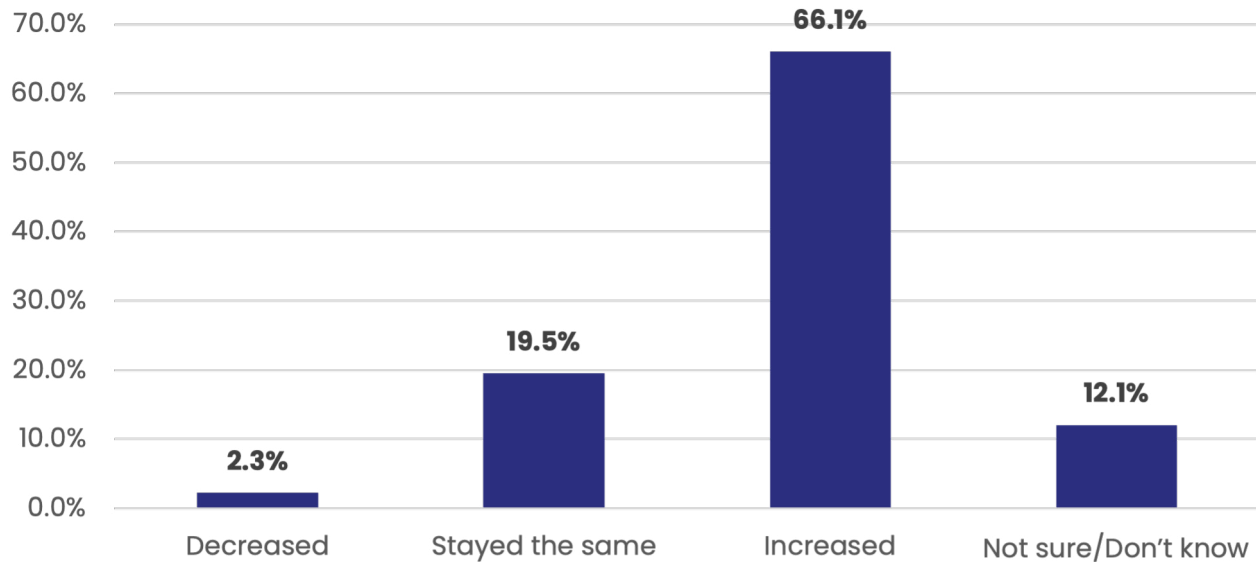


Data Budget Allocation

A striking 50.6% of respondents are unsure about the proportion of their IT budget dedicated to Data, AI, and ML, suggesting a need for better communication about funding priorities. A combined 37.7% allocate between less than 10% to 25% of their IT budget to data, with only 5.8% prioritizing over half their budget for data initiatives.

Insight: Over half of the respondents lack clarity about their data budget allocation, indicating potential gaps in communication or transparency around budgetary decisions. Lack of clarity about budget can lead to uncertainty in executing data strategies effectively.

Data Investment Over Past Year



Data Investment

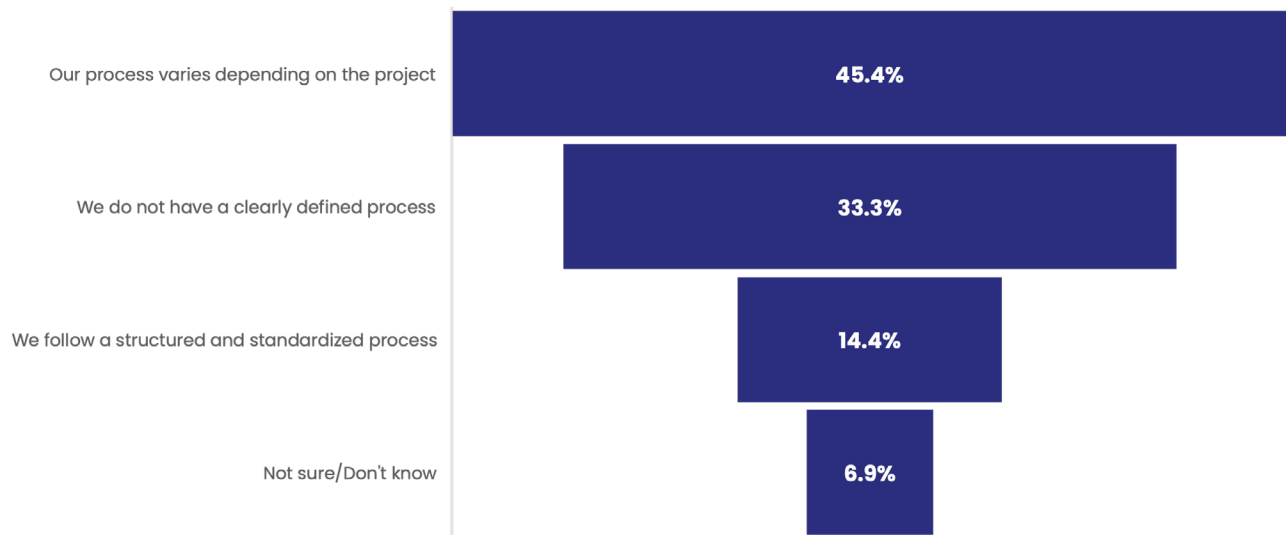
A promising 66.1% of respondents reported that their organization's investment in data strategy and related products has increased over the past year, indicating a growing emphasis on data in business strategies. Only a minor fraction (2.3%) saw a decrease, which is a positive sign for the future trajectory of data investments.

Insight: The disparity between the lack of understanding about budget allocation and the reported increase in data-related investments suggests that while organizations recognize the importance of investing in data, there may be a communication gap or lack of transparency regarding how these funds are specifically allocated and managed.

Organizational Structure & Culture

- Considering common stages (i.e., project proposal, data collection, model development, testing, and implementation), which of the following best describes the process for launching a new data product or project in your organization?
- Who has the primary authority for making decisions about data strategy in your organization?
- Who is primarily responsible for decisions about data-related investments in your organization?

Organizational Data Process

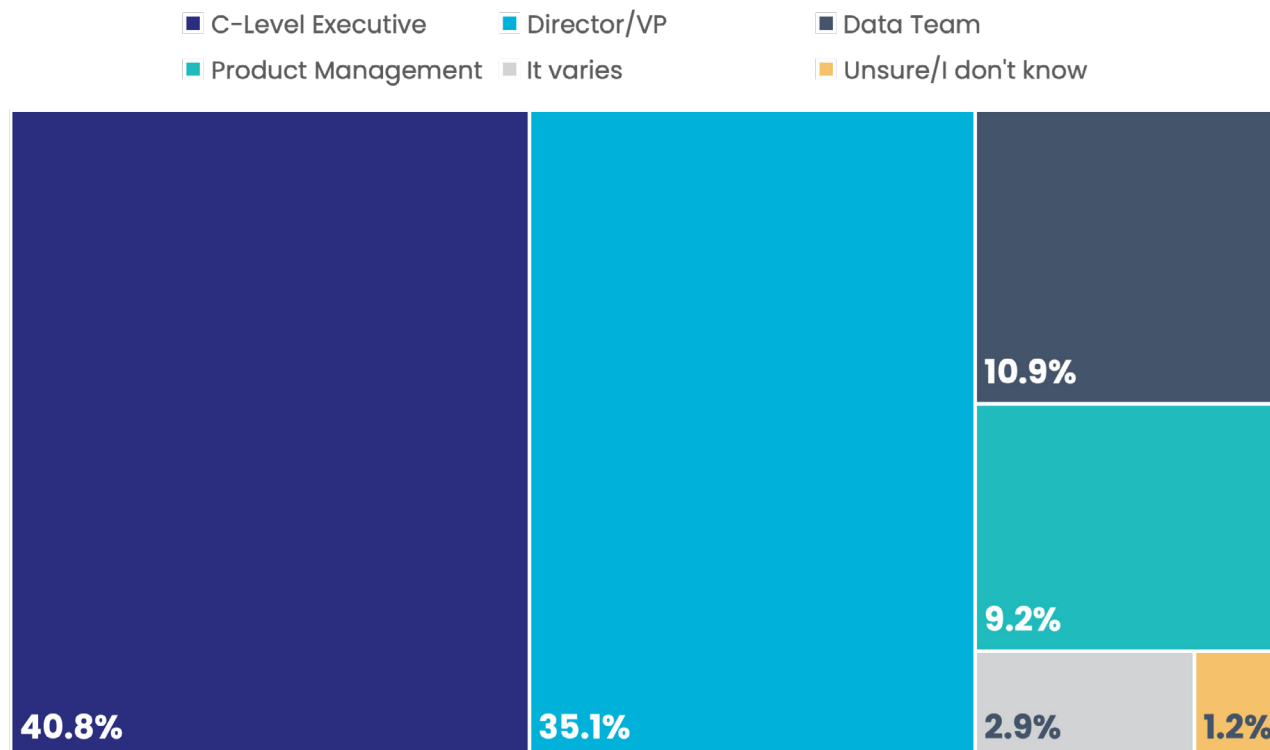


Data Process

A significant 45.4% of respondents' organizations have a varying process for launching new data products or projects, indicating flexibility in their approach. However, 33.3% admit to lacking a clearly defined process, which could lead to inconsistencies in execution. Only 14.4% follow a structured and standardized process, ensuring consistency across projects. A minor segment (6.9%) is unsure about their process.

Insight: While adaptability in data processes can be beneficial for tailor-made solutions, the sizable portion of organizations without a clear process raises concerns about efficiency, consistency and reproducibility. The relatively low percentage of those with a standardized process suggests there's room for improvement in streamlining data product or project launches.

Data Strategy Decision Authority

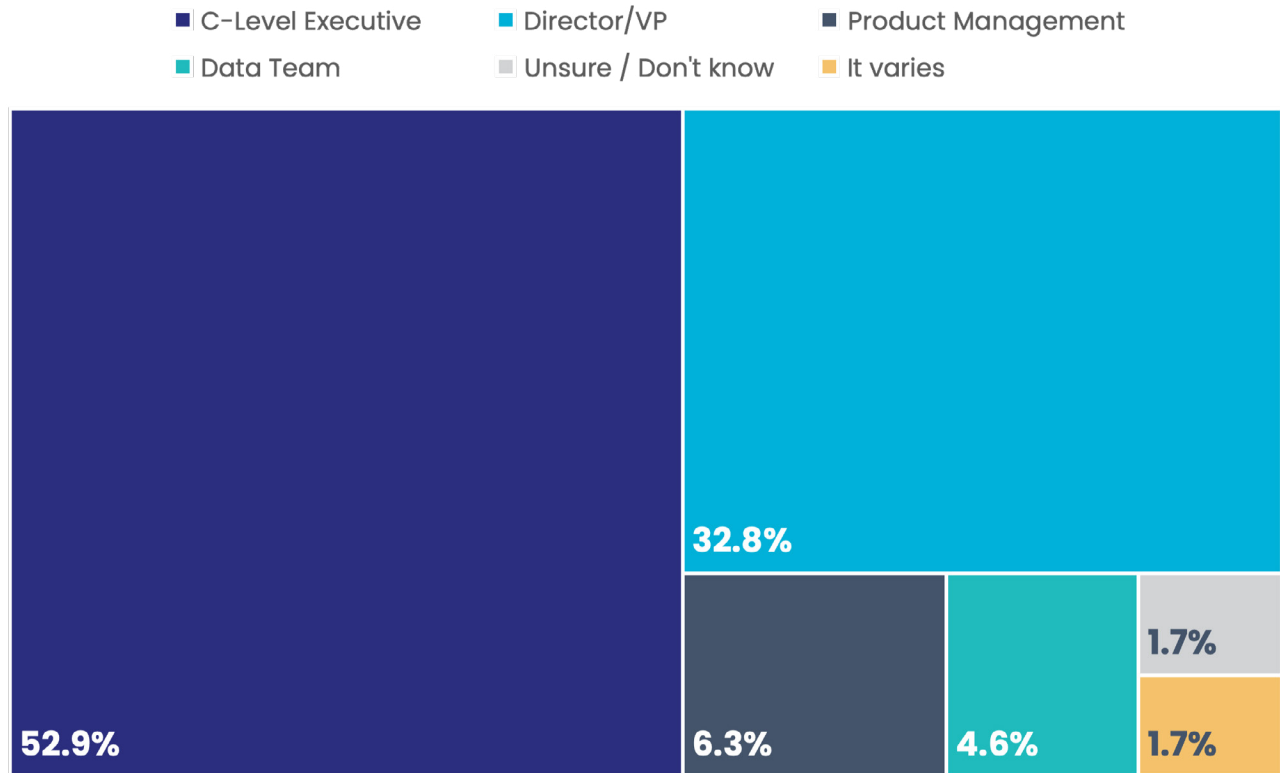


Data Strategy Decision Authority

In terms of data strategy decision-making within organizations, C-Level Executives take the lead, with 40.8% having primary authority. They are closely followed by Director/VP level executives at 35.1%. The Data Team and Product Management play lesser roles, with 10.9% and 9.2% respectively. A minor segment (2.9%) mentioned that the authority varies, and only a small fraction (1.2%) is unsure about who holds this authority.

Insight: The predominance of C-Level Executives and Director/VPs in decision-making indicates the strategic importance of data within organizations. However, the relatively low percentage of Data Teams being primary decision-makers suggests that while they might be key players in execution, they might not always be the central authority in strategy formulation.

Data Investment Authority



Data Investment Authority

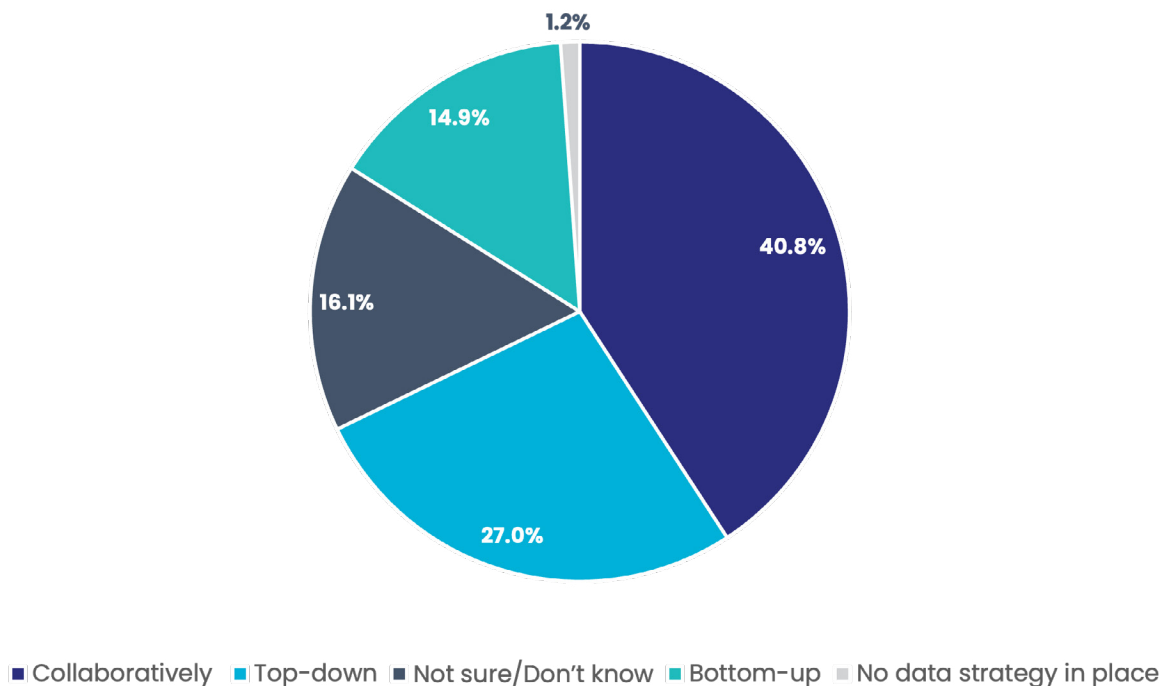
When it comes to decisions about data-related investments, C-Level Executives are even more prominent with 52.9% having primary responsibility. Directors/VPs follow at 32.8%. Product Management and the Data Team have lesser involvement, with 6.3% and 4.6% respectively. A minority either varies in their decision-making or is unsure about who holds this responsibility, at 1.7% for each group.

Insight: C-Level Executives holding the majority in investment decisions further emphasizes the strategic weight of data initiatives. It's notable that the Data Team, who might be directly involved in data-related tasks, have limited say in investment decisions, suggesting a top-down approach in many organizations.

Collaboration and Communication

- How is your data strategy typically formed?
- How would you rate your own influence on decisions about data strategy in your organization?
- Which best describes your organization's operating model for data?

How is Data Strategy Formed?

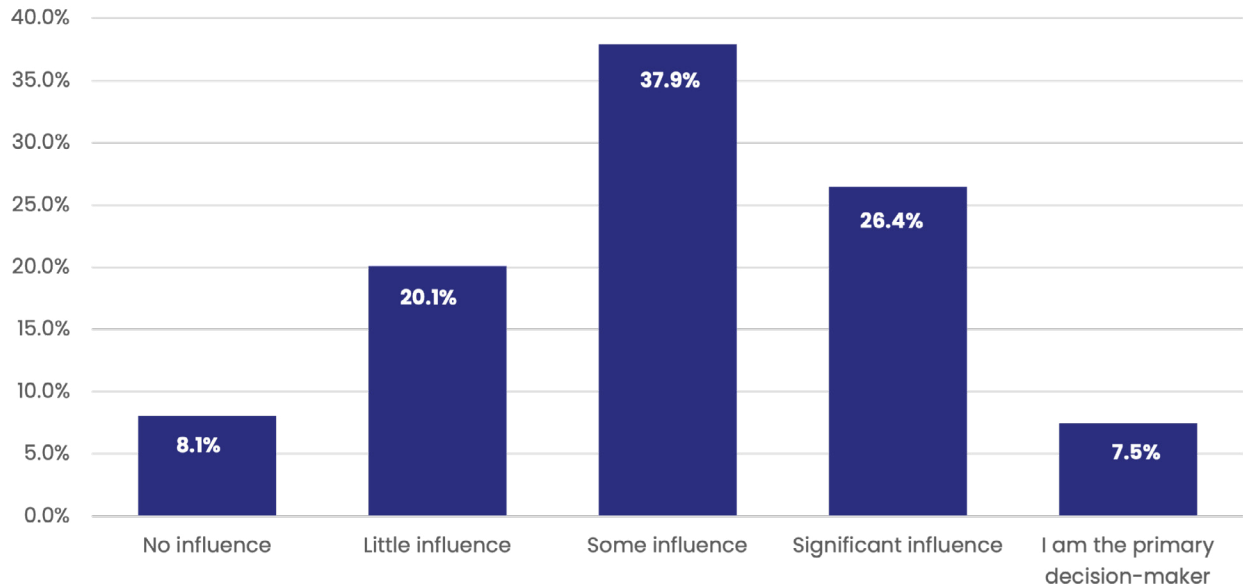


Strategy Formation

The formation of organizations' data strategy is largely Collaborative, with 40.8% of respondents indicating that leadership and staff work together. A Top-down approach, driven by senior leadership, is seen in 27.0% of responses. Interestingly, a Bottom-up approach, where the data team or other staff propose the strategy, follows at 14.9%. Some respondents (16.1%) are unsure about their strategy formation process, and a minimal 1.2% have no data strategy in place.

Insight: While a significant portion of organizations favor a collaborative approach to strategy formation, the combined percentage of top-down and bottom-up strategies underscores the diverse ways organizations approach data strategy development. The presence of organizations without a defined strategy or an unclear strategy formation process suggests potential opportunities for improvement in communication and strategic alignment.

Data Strategy Influence

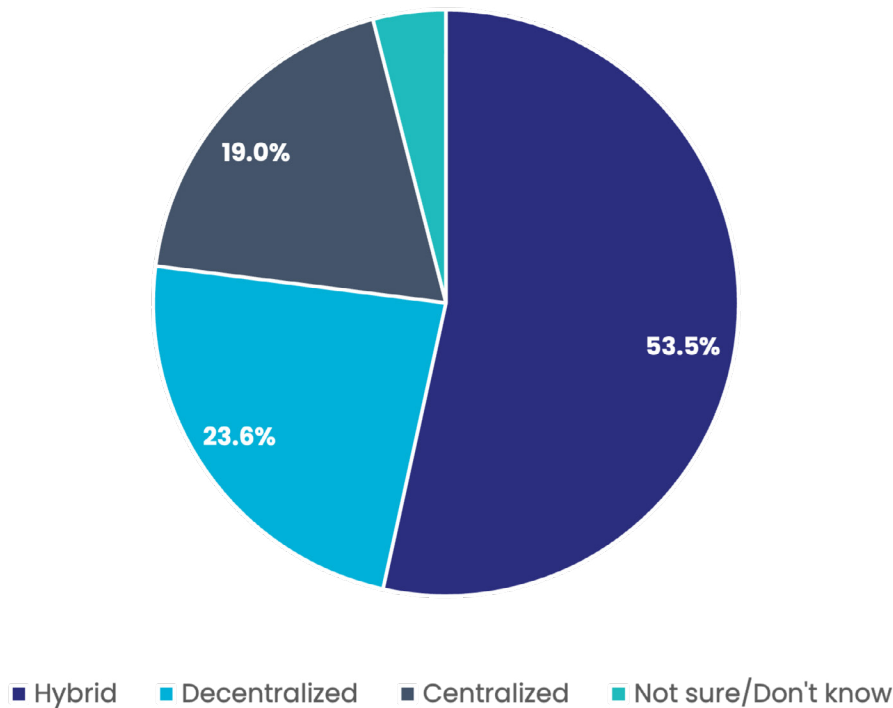


Rate of Influence

Regarding individual influence on data strategy decisions, the most common response was “Some influence” at 37.9%. This was followed by “Significant influence” at 26.4% and “Little influence” at 20.1%. A smaller fraction (7.5%) identified themselves as the primary decision-makers, while 8.1% reported having no influence on such decisions.

Insight: The spread of influence suggests a collaborative environment in many organizations, with a broad range of stakeholders having some degree of input into data strategy. However, the limited number of primary decision-makers points to a select group holding significant sway over final decisions.

Data Team Operating Model



Operating Model

The majority of respondent organizations (53.5%) operate with a Hybrid model for data, incorporating both centralized and decentralized aspects. A purely Decentralized approach, where different teams handle their data matters, is observed in 23.6%. On the other hand, a Centralized model, where one primary team oversees all data matters, is utilized by 19.0%. A small segment (4.0%) is uncertain about their organization's operating model.

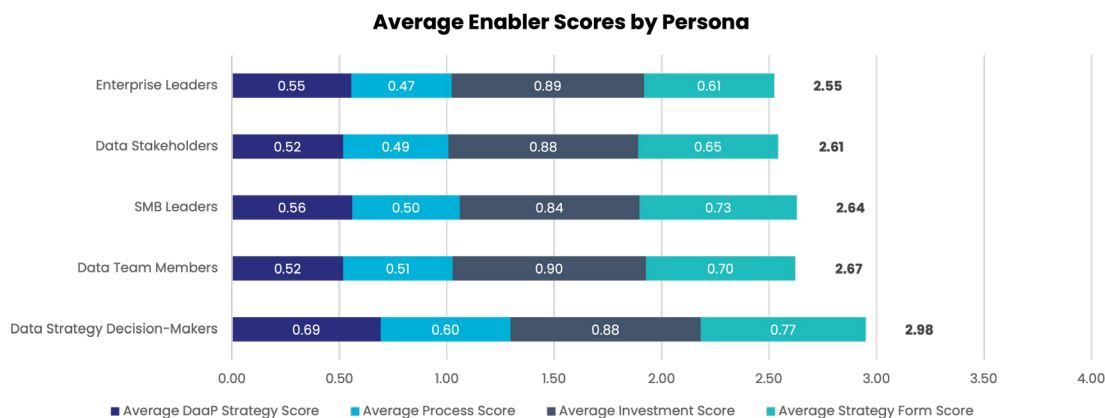
Insight: The dominance of the Hybrid model indicates that organizations are seeking a balance between centralized oversight and the flexibility of decentralized operations. This suggests a desire to combine the advantages of both models to address the diverse challenges and opportunities posed by data management.



Enabler Insights by Persona

As with Mentality, we scored relevant Enabler questions to glean insights by Persona. The below questions were each given a weight of 1:

- Please indicate your level of agreement with the following statement:
My organization has a well-defined strategy for creating and managing data as a significant asset.
- Considering common stages (i.e., project proposal, data collection, model development, testing, and implementation), which of the following best describes the process for launching a new data product or project in your organization?
- Has your organization's investment in data strategy/data-related products increased, decreased, or stayed the same over the past year?
- How is your data strategy typically formed?



While investment in data strategy and related products is perceived positively across all personas, views varied on the effectiveness of the processes and strategies in place. The Data Strategy Decision-Makers have the most optimistic view, while the Enterprise Leaders are slightly more critical. SMB Leaders and Data Stakeholders present a more balanced perspective, indicating that while there's substantial investment, there might be areas in strategy formation and process implementation that require further refinement. Data Team Members, while acknowledging positive investment, express reservations about the existing strategy and processes. This could be attributed to their on-ground experience, dealing with day-to-day challenges not always visible to leaders and decision-makers. These varied perceptions underscore the importance of bridging communication gaps. There's a clear need for continuous dialogue, feedback loops, and collaborative strategy formation to ensure alignment across all levels of the organization.

Kim Thies, SVP, Innovation & Data Solutions for ProfitOptics, offers this advice to those who may need guidance navigating challenges with Enabler fundamentals:

Transformation to adoption of DaaP within your company is dependent upon strong alignment across your organization. The key to success lies in a cross-functional change management strategy, with strong education and buy in from the executive team (to drive the vision/transformation to a data-driven culture), from finance (to articulate the value of product-thinking with your data, as well as the support of the investments in this transformation), and from technical teams (to champion the systems and processes needed to store, manage and govern the resulting data products). You will need 'change champions' leaning heavily into the initiative, and a strategy to keep them engaged, show near-term value and gain confidence in reaching longer-term goals.

- Kim Thies

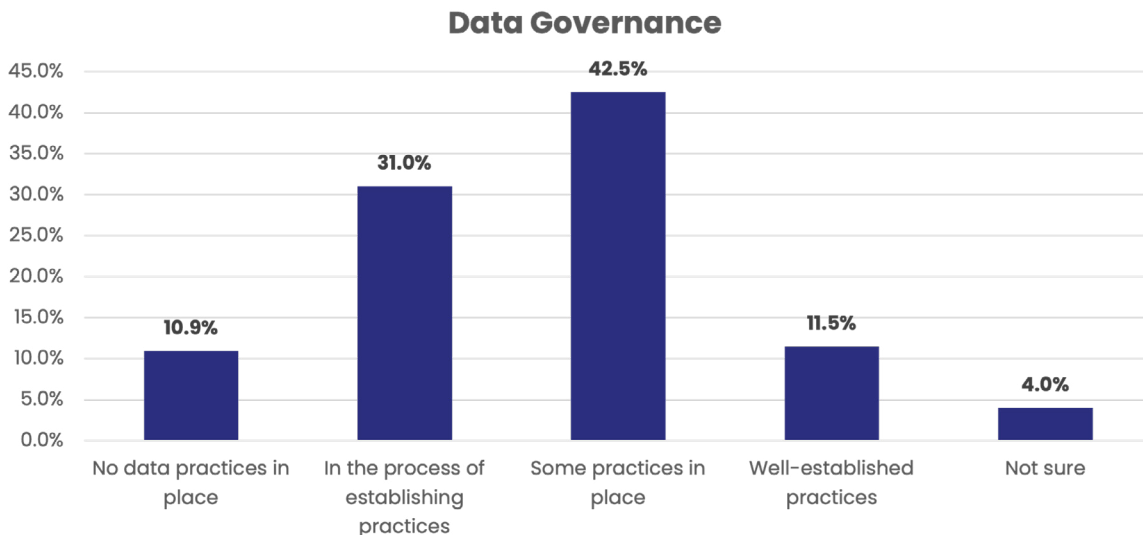
Tactics: Incorporating DaaP Practices

Recognizing the importance and potential value of data (Mentality) and ensuring cultural support and investment (Enablers) are key to effectively leveraging data as a product. However, Tactics are where the rubber meets the road. After all, data's potential can't be fully harnessed unless it's well-understood, secure yet appropriately accessible, high-quality, and trustworthy. Failing to do so can be detrimental. Gartner³ estimates that through 2025, 80% of organizations' efforts to scale digital business will fail because they do not take a modern approach to data governance. Treating data as a product involves various tactical steps, which can differ based on the organization and any industry-specific regulations. In our survey, we've zeroed in on fairly universal tactical data management practices, notably Data Governance, Data Privacy, and Data Quality.

Questions from survey relating to Tactics:

- How would you describe your organization's approach to data governance?
- How does your organization address privacy concerns when working with data?
- How would you rate the quality of data your organization produces as a product?
- Which of the following tools does your organization use to manage data?

Data Governance

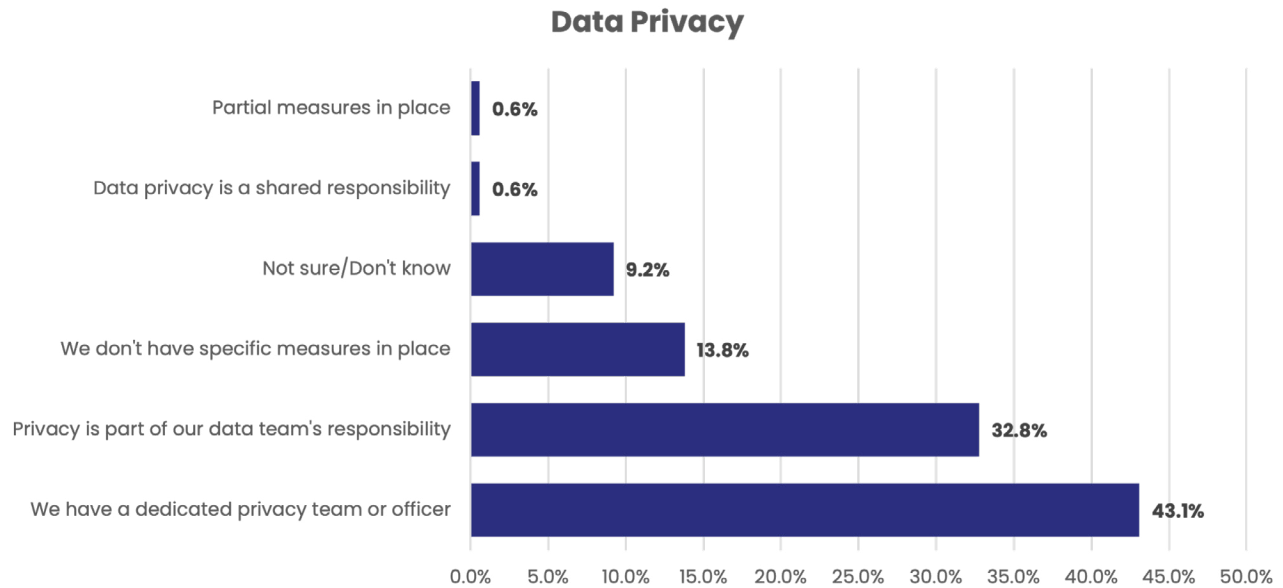


Only 11.6% of respondents reported having well-established data governance practices. Most respondents (42.5%) view their organizations as having some data governance measures in place but see room for improvement. While 31% are still in the process of establishing data governance practices, a concerning 10.9% report having no data governance practices in place.

Insight: Data governance practices vary widely and are often informed by industry regulations and the volume of data within an organization. Given that the majority of respondents consider themselves to be establishing or needing to improve data governance processes, this is an area where leaders should invest in efforts to seek out best practices to meet their organization's specific needs. Gartner stresses that a one-size-fits-all approach to data governance is not ideal, and recommends an adaptive approach anchored to overall business strategies and goals. A flexible, value-based approach can help organizations struggling to realize value from traditional, bureaucratic governance practices as well as those getting started or early on their journey.

³Gartner, and Laurence Goasduff. "Why Modern Digital Organizations Need Adaptive Data Governance." Gartner, 11 April 2022, <https://www.gartner.com/en/articles/choose-adaptive-data-governance-over-one-size-fits-all-for-greater-flexibility>.

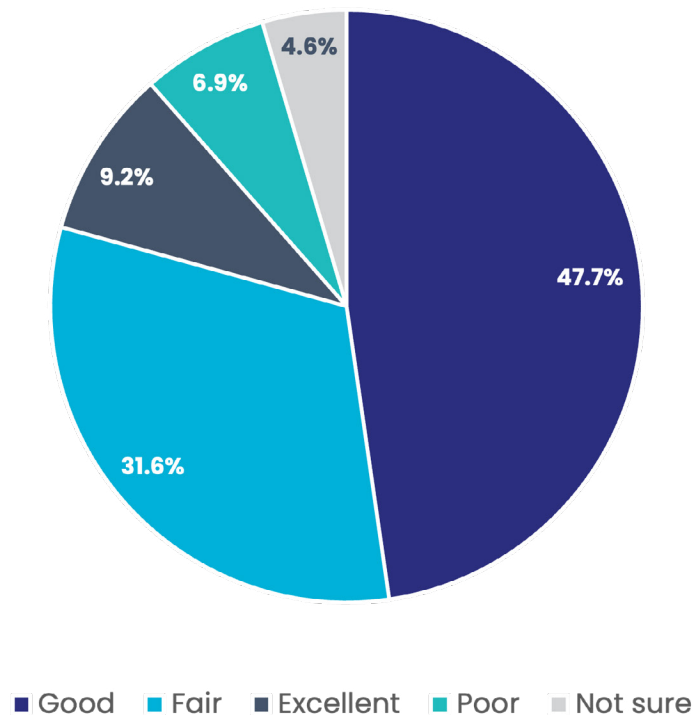
Privacy Concerns



A significant number of respondents (43.1%), report their organizations have taken the initiative to set up a dedicated privacy team or officer. However, for 32.8%, data privacy concerns are addressed by their general data teams. Notably, 13.8% admit they have no specific measures in place.

Insight: The number of organizations without dedicated privacy measures, combined with those that have privacy as a shared responsibility, reveals potential vulnerabilities and risks. As data privacy becomes even more critical, organizations should consider specialized teams or training to address these concerns adequately.

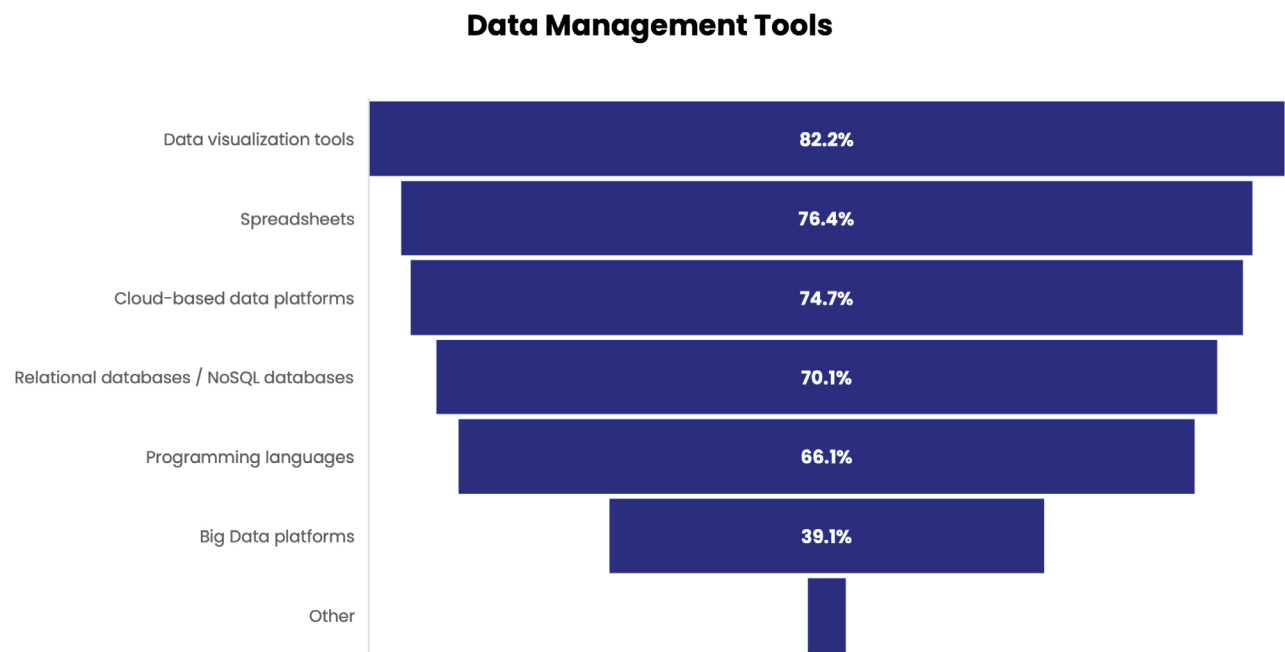
Data Quality Rating



The majority of respondents (47.7%) rate their data quality as 'Good'. However, a combined total of 38.5% feel their data quality is either 'Fair' or 'Poor', indicating mixed feelings about the reliability of their data output.

Insight: With a sizable percentage of respondents not entirely confident in their data quality, there's a clear need for organizations to invest in quality assurance processes and tools. Ensuring high-quality data is crucial for informed decision-making and upholding trust among stakeholders.

Tools for Managing Data



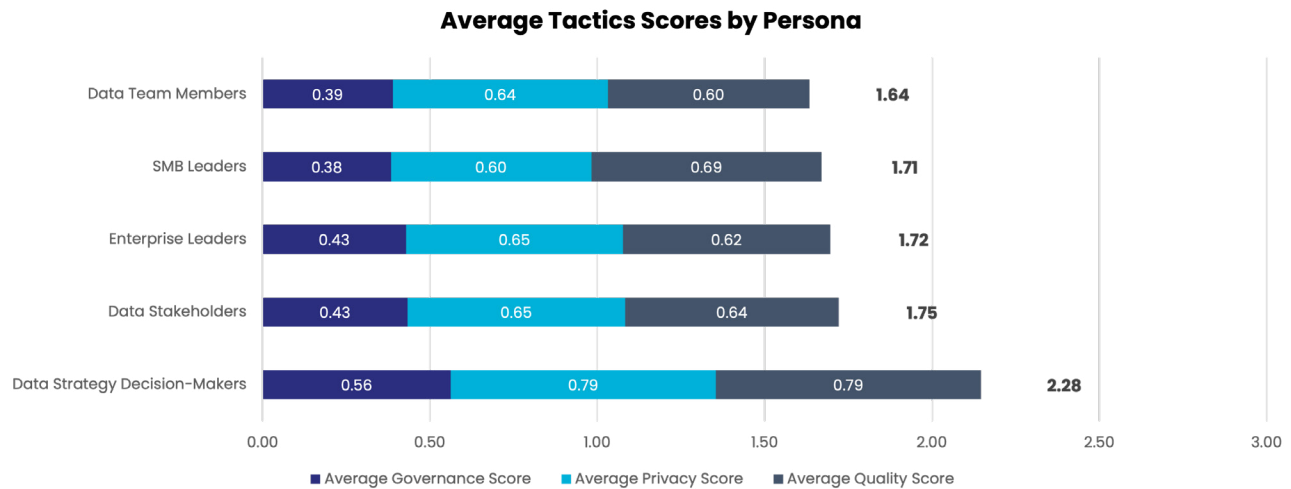
Data visualization tools are the go-to for 82.2% of respondents, showcasing their importance in today's data-driven businesses. Traditional methods, such as spreadsheets, are still prevalent at 76.4%, while cloud platforms have been adopted by 74.7%.

Insight: The widespread use of visualization tools indicates the increasing importance of data representation in business insights. However, the continued heavy reliance on spreadsheets suggests that many organizations might benefit from exploring more advanced, integrated data management solutions to boost efficiency and collaboration.

Tactics Insights by Persona

Once again we scored applicable questions by persona for nuanced insights; each question has a weight of 1.

- How would you describe your organization's approach to data governance?
- How does your organization address privacy concerns when working with data?
- How would you rate the quality of data your organization produces as a product?



Across all personas, results reflect an acknowledgement of having good data practices while recognizing the need for continuous improvement. Data governance is notably an area indicating opportunities for growth. Data privacy is generally well-regarded, reflecting its criticality; however, SMB Leaders appear to prioritize data quality. The noticeable perception gap between Data Strategy Decision-Makers and Data Team Members (also reflected in previous scoring) hints at potential disconnects or misalignments across different role tiers.

Rehgan Avon, CEO & Co-Founder of AlignAI and the Founder of WIA, notes the importance of mindful Tactics when striving for valuable outcomes:

When we think about a product mindset, we have to have ongoing observations and assessment of data quality, outputs, and checks in place so that we don't have something moving along in the background that's navigated away from our original intent.

- Rehgan Avon

Data Strategy Challenges and Issues

As we've seen from the weighted ranking of data use cases, data-driven decision-making is a top consideration for many organizations. However, these processes are not always straightforward; many companies face hurdles when formulating and implementing their data strategies. We sought to understand the most prevalent challenges with making decisions about data strategy and investment, and issues with implementing strategies to treat data as a product.

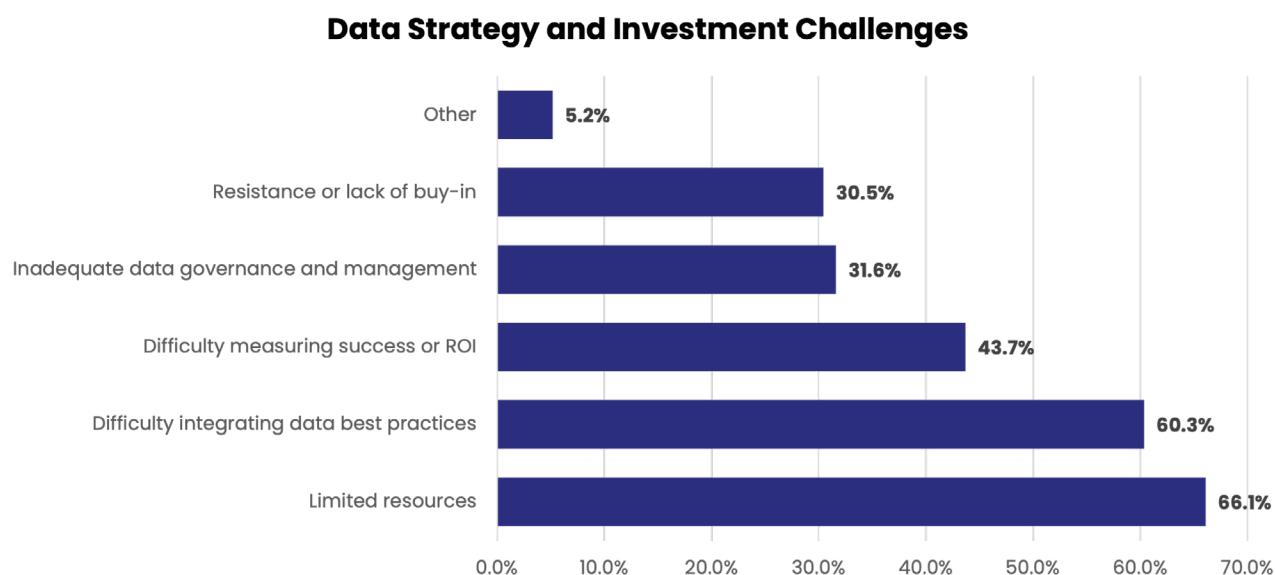
We asked our respondents the following questions to better understand which challenges and issues were top of mind:

- What are the biggest challenges your organization faces in making decisions about data strategy and investment?
- Which of the following issues has your organization encountered when implementing a strategy to treat data as a valuable, usable asset?

Note: Each of these questions allowed respondents to select multiple response options.

Challenges: Data Strategy and Investment Decisions

In our exploration of organizational challenges related to data strategy and investment, a clear narrative emerges. The results reveal the most prevalent obstacles faced when making decisions about data strategy and investment.



Resource Constraints Lead the Pack: A majority 66.1% of respondents cited limited resources — financial, human, or time — as their primary challenge. This not only underscores the tangible investments required to drive a successful data strategy but also hints at the broader organizational adjustments needed. Without adequate resources, even the best-laid data plans can falter. (Enabler challenge)

Operational Integration Proves Daunting: While awareness of data best practices is rising, a significant 60.3% of respondents state their organizations find it challenging to weave these practices into their existing processes and roles. This poses an interesting question of whether the existing processes and roles are well-aligned to data-driven success or if they should be revisited in some cases. (Enabler challenge)

Quantifying Data Success is Elusive: The age-old challenge of ROI rears its head, with 43.7% of respondents grappling with measuring the success of their data initiatives. This indicates a dual challenge: the inherent difficulty in quantifying intangible data benefits and a potential lack of effective tools or metrics to do so. (Mentality challenge)

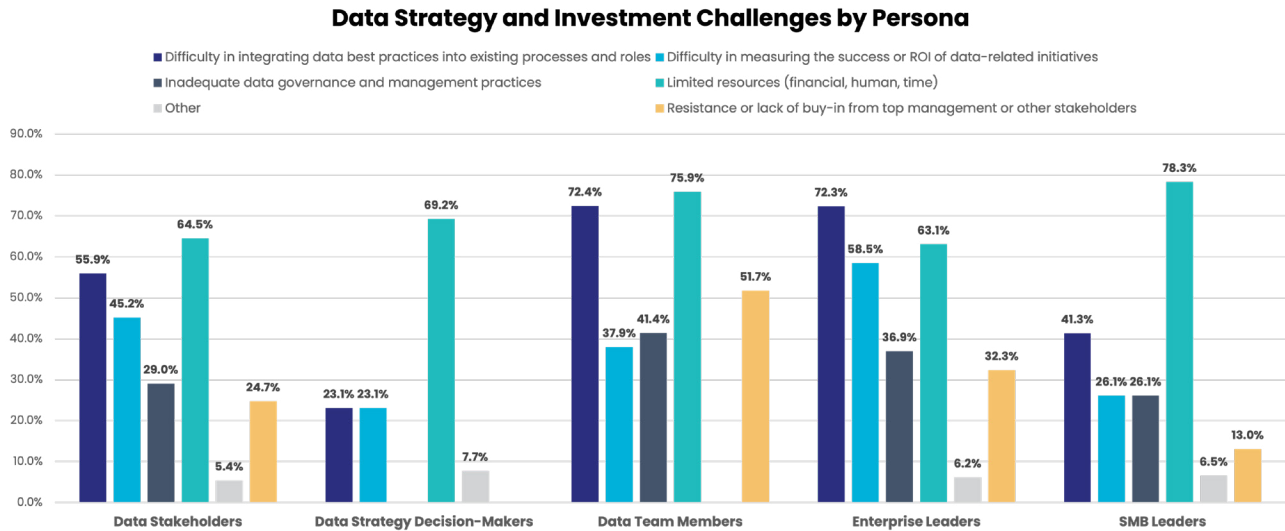
Governance Remains a Grey Area: Despite the buzz around data governance, 31.6% of organizations feel their governance and management practices are inadequate. This could be a reflection of the ever-evolving data landscape and the challenges in staying updated. (Tactics challenge)

The Human Element Can't Be Ignored: Data isn't just about numbers; it's about people too. A notable 30.5% of respondents face resistance or lack of buy-in from stakeholders, emphasizing that a successful data strategy isn't just about the right tools or processes — it's about fostering the right organizational culture. (Enabler challenge)

Key Takeaway: As organizations advance on their journey to treating data as a product, they must navigate many different types of challenges. These types of challenges underscore the multifaceted nature of implementing successful data as a product strategy — it's not only a technical endeavor but also a fundamental shift in organizational resources, integration, measurement, governance, and culture.

Data Strategy and Investment Challenges by Persona

Delving deeper into the challenges by persona reveals interesting findings that provide additional nuance to the overall results.



While limited resources is the top concern for most personas, it's interesting that it's not the primary concern for **Enterprise Leaders**. This might suggest that larger enterprises have comparatively more resources but face greater complexity in integrating data best practices within a larger and possibly more established infrastructure.

Enterprise Leaders face the most significant challenge in integrating data best practices (72.3%). This might stem from the complexities of integrating newer data practices into legacy systems and processes, which are often more prevalent in larger enterprises.

Data Strategy Decision-Makers report the difficulty in measuring ROI as their second-highest challenge (23.1%). This is particularly interesting as these individuals are at the forefront of decision-making. Their concern might reflect the pressures they face to justify data investments and demonstrate tangible value to the rest of the organization.

The fact that **Data Team Members** rate resistance or lack of buy-in as a significant concern (51.7%) — higher than any other persona — reveals the friction they might encounter when advocating for data initiatives. This group, being on the frontline of data work, may often face challenges in getting organizational alignment or selling the importance of their projects to higher-ups.

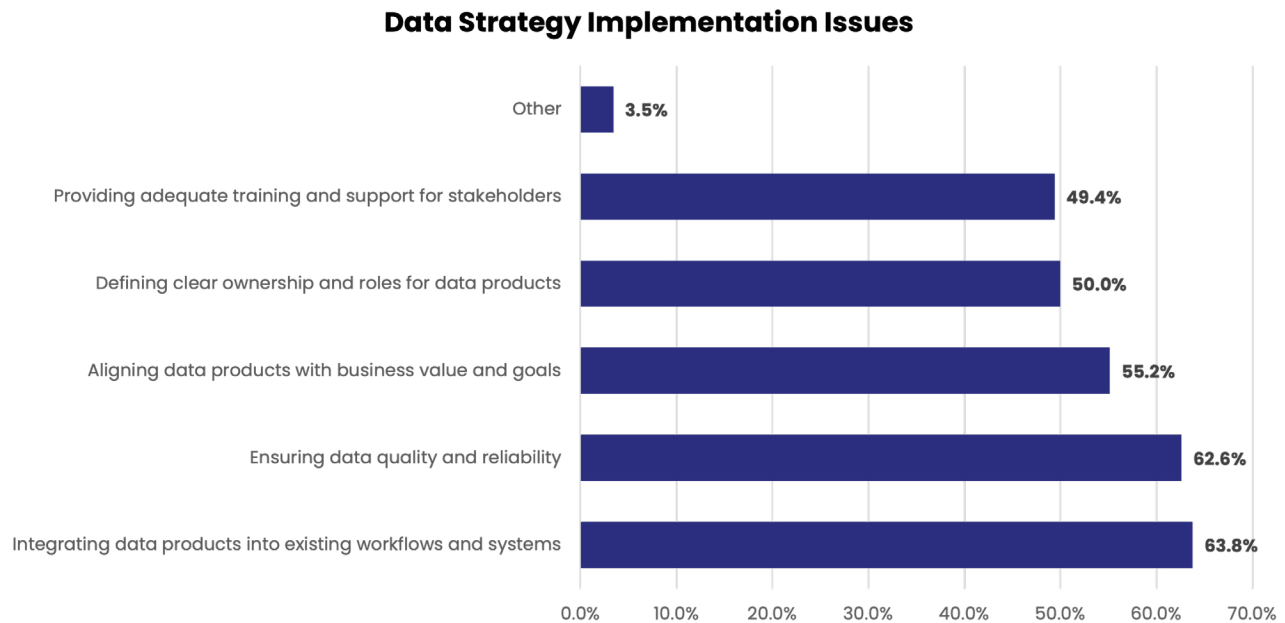
Data Strategy Decision-Makers do not list inadequate data governance as a top concern. This omission is noteworthy. It could imply that they are either satisfied with the existing governance structures or that their focus is more on strategy and ROI rather than the nitty-gritty of data management. On the other hand, **Data Team Members**, who are more involved in the day-to-day handling of data, express concerns about data governance (41.4%), suggesting that they might be facing challenges in this area that aren't as visible to the decision-makers.

The lack of concern about resistance or lack of buy-in among **Data Strategy Decision-Makers** compared to **Data Team Members** might indicate a disconnect. While decision-makers might feel confident in the decisions they make regarding data, the team members who execute these strategies might be the ones facing resistance on the ground.

Insight: The disparities across the personas highlight that challenges are often role-specific. While decision-makers might be more concerned with high-level strategy and ROI, those in execution roles, like data team members, grapple with on-the-ground issues like resistance and governance. The disparity in challenges faced by Data Strategy Decision-Makers and Data Team Members might indicate communication gaps. There could be a need for better alignment and understanding between the strategy and execution teams. For organizations, understanding these disparities is crucial. Addressing the unique challenges of each persona holistically can lead to a more cohesive and effective data strategy and implementation.

Issues: Implementing Data Strategies

While the issues faced with implementing strategies to treat data as a product tend to be more tactical, mentality and enabler issues are present as well.



Integration is a Strategic and Tactical Difficulty: Topping the list, 63.8% of respondents report issues with integrating data products into existing workflows and systems when implementing data strategies. This was also identified as a major challenge with making decisions about data strategy and investment, indicating potential friction between new data initiatives and organizational status quo. (Enabler issue)

Quest for Quality: Closely following, 62.6% of respondents reported issues with ensuring data quality and reliability. Data integrity and trustworthiness is critical for data-driven organizations; without reliable data, decision-making can be flawed, leading to costly mistakes or hours of time spent manually “fixing” data issues by data teams, rather than focusing on high-value work. (Tactics issue)

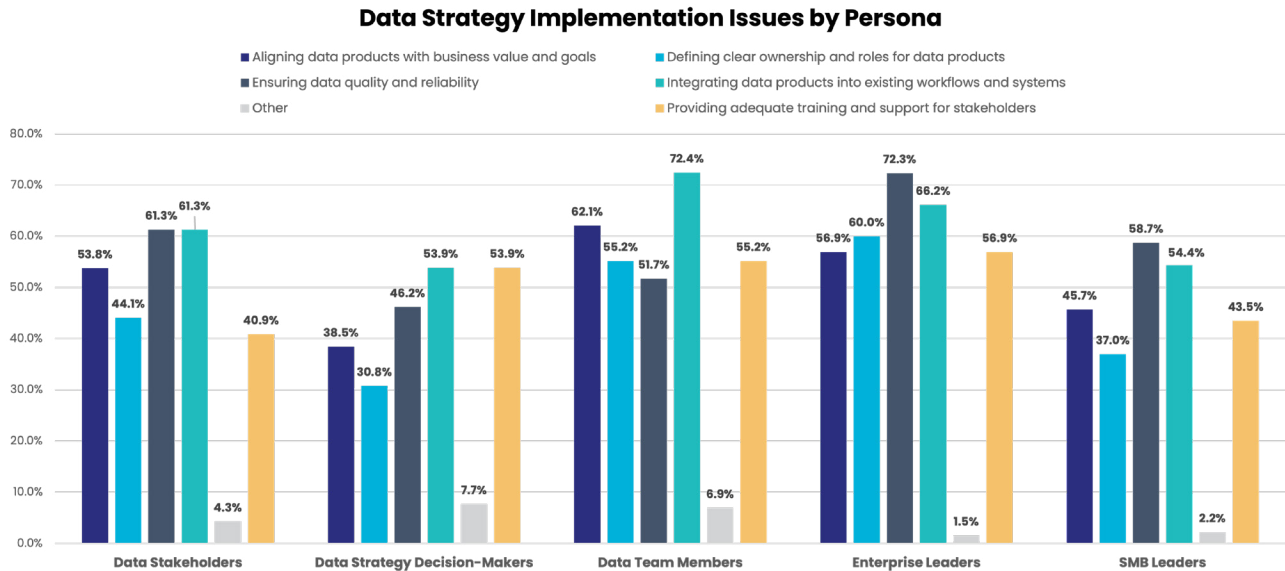
Alignment with Business Goals: Over half of the respondents (55.2%) mentioned the challenge of aligning data products with business value and goals. This highlights a possible disconnect between data teams and business units, emphasizing the importance of a unified vision and collaboration. (Mentality issue)

Ownership Ambiguities: With 50% of respondents voicing concerns, defining clear ownership and roles for data products emerged as a significant issue. Clearly delineated responsibilities can accelerate decision-making, ensure accountability, and streamline data processes. (Enabler issue)

Training & Support: Just under half (49.4%) of the respondents acknowledged the need for better training and support for stakeholders. This suggests that while organizations may have robust data products, there’s room for improvement in ensuring end-users can effectively harness these tools. (Enabler issue)

Data Strategy Implementation Issues by Persona

As we dive into the issues by persona, similarities and disparities emerge in perspective.



Ensuring data quality and reliability is a universal concern across all personas, with Enterprise Leaders flagging it as the most significant issue at 72.3%. It highlights that as organizations scale, ensuring the quality and reliability of data becomes even more critical. While Data Stakeholders and SMB Leaders also rate this concern highly (61.3% and 58.7% respectively), Data Strategy Decision-Makers and Data Team Members place it slightly lower on their list.

Integrating data products into existing workflows is the top concern for Data Strategy Decision-Makers (53.9%) and Data Team Members (72.4%), suggesting that those involved in the strategic and implementation phases often face challenges in making data solutions fit seamlessly within existing structures. Interestingly, while it's a top concern for Enterprise Leaders (66.2%), it's tied for top concern among Data Stakeholders (61.3%). This indicates that both leadership and stakeholders feel the pinch of integration challenges.

Data Team Members and Enterprise Leaders both rate "aligning data products with business value and goals" relatively highly (62.1% and 56.9% respectively). This implies that those who are in the trenches of data work and those overseeing broader organizational strategies recognize the challenge of ensuring data efforts align with overarching business goals. Data Stakeholders and SMB Leaders also find alignment challenging, but it's slightly less of a concern for Data Strategy Decision-Makers, who likely spend more time in this area.

Enterprise Leaders show considerable concern about “defining clear ownership and roles” (60%), suggesting that in larger organizations, clear demarcation of roles and responsibilities in data initiatives is vital. This sentiment is mirrored by Data Team Members (55.2%). Data Stakeholders and SMB Leaders feel this concern to a lesser degree, and it’s even less of an issue for Data Strategy Decision-Makers.

Data Team Members and Enterprise Leaders emphasize the need for training and support (both at 55.2% and 56.9% respectively), highlighting the importance of ensuring that those handling data and those making decisions based on it are well-equipped. Data Strategy Decision-Makers also rate this as a key concern, tied with integrating data products, indicating that they see the importance of supporting the teams they oversee.

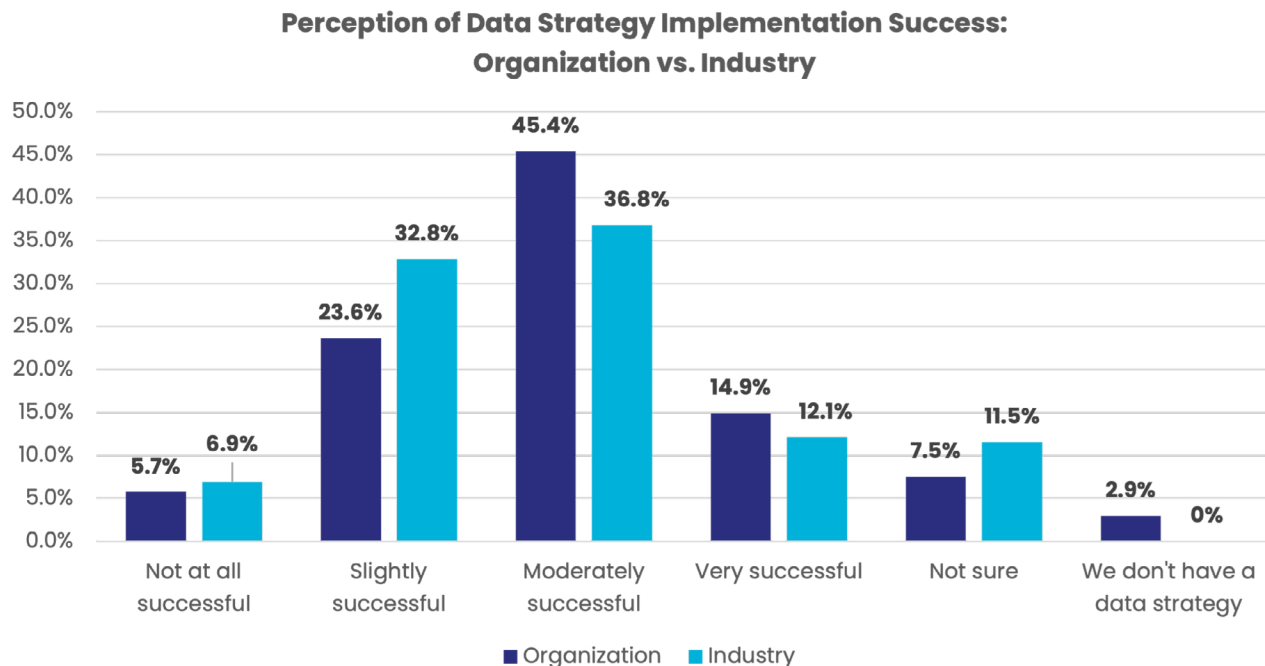
Insight: Data quality and reliability seem to be universally recognized as paramount. However, the emphasis on other challenges varies, pointing to different pain points experienced by different roles. The challenge of integrating data solutions into existing systems and processes is felt most acutely by those closest to implementation and strategy — Data Team Members and Data Strategy Decision-Makers. The need for clear ownership and role definition is particularly salient for Enterprise Leaders, hinting at possible complexities in larger organizations. Adequate support and training are seen as vital across the board, but especially so for those deeply involved in data work.

Perceived Success and Impact

So far, we have examined organizations' understanding of data as a product as well as their DaaP Mentality, Enablers, Tactics, Challenges, and Issues through the lens of different personas. Understanding the perceived success and impact of data strategies is also crucial for evaluating their real-world efficacy. We asked survey respondents to self-assess the perceived success and impact of their current data practices with the following questions:

- How successful do you think your organization has been in implementing its data strategy?
- Do you think your industry has been successful overall in implementing data strategies?
- On a scale of 1 to 5, where 1 represents 'Never' and 5 represents 'Always', how often has the use of high-quality, accurate, and timely data led to valuable outcomes for your organization?
- To what extent has treating data as a valuable, usable asset had a positive impact on your organization?

Perceived Success: Organization and Industry



45.4% of respondents consider their organization's data strategy implementation to be moderately successful, indicating foundational achievements yet leaving room for improvement. Notably, only 14.9% asserted a high degree of success. The data also reveals that 7.5% are uncertain of their strategy's effectiveness, pointing to possible ambiguity in strategy execution or success metrics.

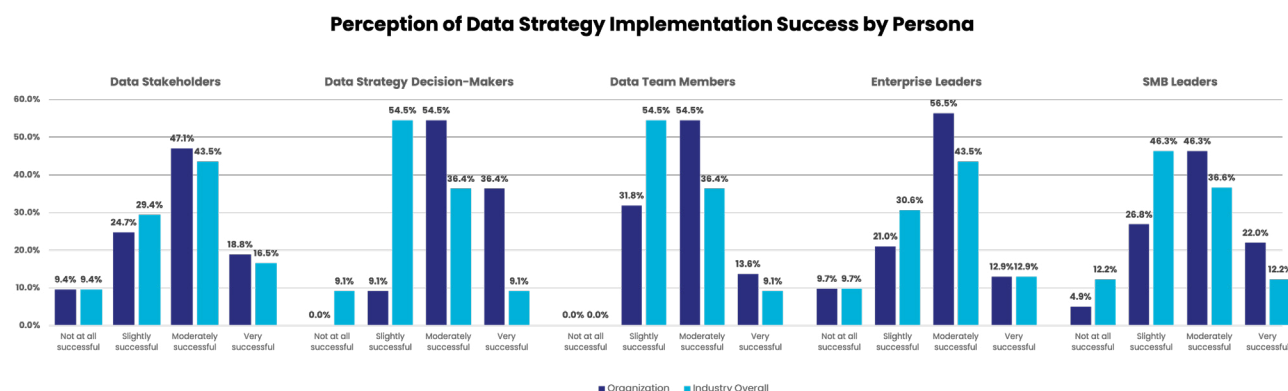
Perceptions are less optimistic when respondents assess their industry at large, with only 12.1% attributing high success to industry-wide data strategy initiatives. A substantial 32.8% see their industry as slightly successful.

Insight: Notably, there is a disparity in confidence levels, with individuals feeling more optimistic about their own organization's efforts than those of the industry at large. This could suggest a disconnect between internal measures of success and industry standards or a lack of visibility into other organizations' practices.

The majority of respondents report at least moderate success in their organization's data strategy, indicating that while many companies are making progress, there is still considerable potential for growth and optimization. However, the perception of success at the industry level is less favorable, with a third of respondents only slightly confident in the industry's data strategy success, which could point to a need for industry-wide standards or collaborative efforts to elevate data practices.

The level of uncertainty, reflected in the 'Not sure' responses, especially at the industry level (11.5%), highlights a possible lack of clear benchmarks or communication around successful data strategy outcomes. This uncertainty calls for a more defined set of success metrics, improved articulation of successful data strategies, and increased industry collaboration around best practices.

Perceived Success by Persona



Differences in perception become more pronounced when dissected by professional roles.

Data Strategy Decision-Makers exhibit the highest level of optimism, with a significant 30.8% reporting very successful outcomes, likely reflecting their direct involvement and influence over strategy implementation. Their confidence contrasts sharply with the broader industry perspective, where only 7.7% perceive high success, suggesting that these leaders may have an inward-focused view or a vested interest in viewing their initiatives positively.

Data Team Members show a notable level of uncertainty (13.8%) and a significant percentage (10.3%) indicating the absence of a data strategy. Once again, this points to a potential disconnect between strategy development and its operational execution. Their view of industry success is also more critical, with higher perceptions of slight success (41.4%) compared to their own organizations.

Enterprise Leaders tend to view their organization's data strategy efforts as moderately successful (53.8%), which is consistent with a cautious but positive outlook. Their uncertainty is lower compared to Data Team Members and Decision-Makers, suggesting they might have a broader perspective on the successes and challenges of data strategy implementation. SMB Leaders have a similar pattern, but they are more likely to rate their efforts as very successful (19.6%) compared to Enterprise Leaders, which might reflect a higher impact of successful data strategies in smaller business environments or perhaps a need to justify their strategic decisions.

Data Stakeholders seem to have a more balanced view, with a moderate to high level of perceived success, but also a recognition that not all is perfect, as indicated by the 8.6% who do not see any success. Their perception of the industry aligns closely with their view of their own organization, which may suggest they have a realistic grasp of the industry's capabilities.

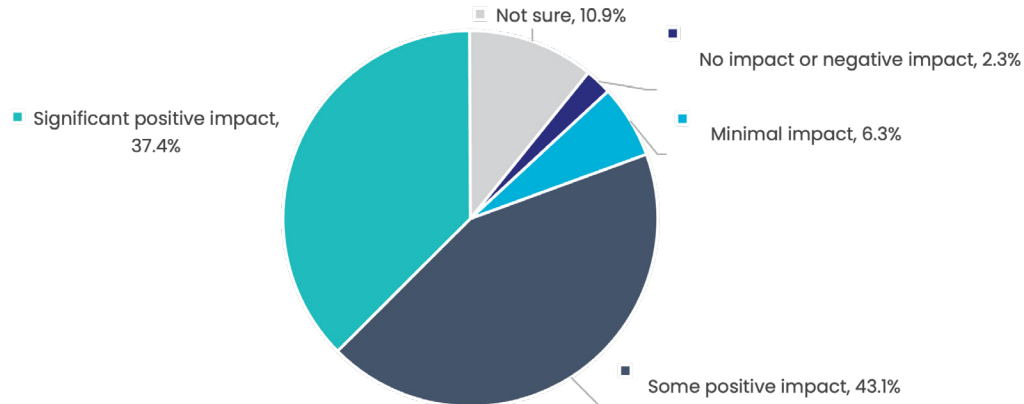
Data Strategy Decision-Makers appear to have a more pessimistic view of their industry's success, with a high percentage (46.2%) considering it only slightly successful. This could indicate awareness of industry-wide challenges or higher expectations due to their role in shaping strategy.

Across almost all personas, except for Data Strategy Decision-Makers, there is an acknowledgment that some organizations do not have a data strategy. This is particularly pronounced among Data Team Members (10.3%) and SMB Leaders (4.3%), suggesting that smaller organizations or specific teams within larger entities may be lacking in strategic direction.

Insight: Data Strategy Decision-Makers are notably more optimistic about their organization's success compared to the industry, suggesting a possible inward-focused bias or greater satisfaction with initiatives they directly control. Data Team Members exhibit both a higher degree of uncertainty and a notable perception of strategy absence, indicating a disconnect between strategy formation and its operational execution, which could signal communication gaps within organizations. Enterprise Leaders generally perceive moderate success but are less optimistic about the industry, which may reflect a more comprehensive understanding of broader challenges. SMB Leaders, on the other hand, show higher confidence in their strategies' success, possibly due to the more visible impact of data strategies in smaller business environments. The acknowledgment of a complete absence of data strategy in some organizations by various personas, especially Data Team Members and SMB Leaders, points to uneven adoption of data strategies across the board. These findings highlight the need for enhanced strategic communication and execution organizations, as well as a need for a more unified approach to data strategy within industries.

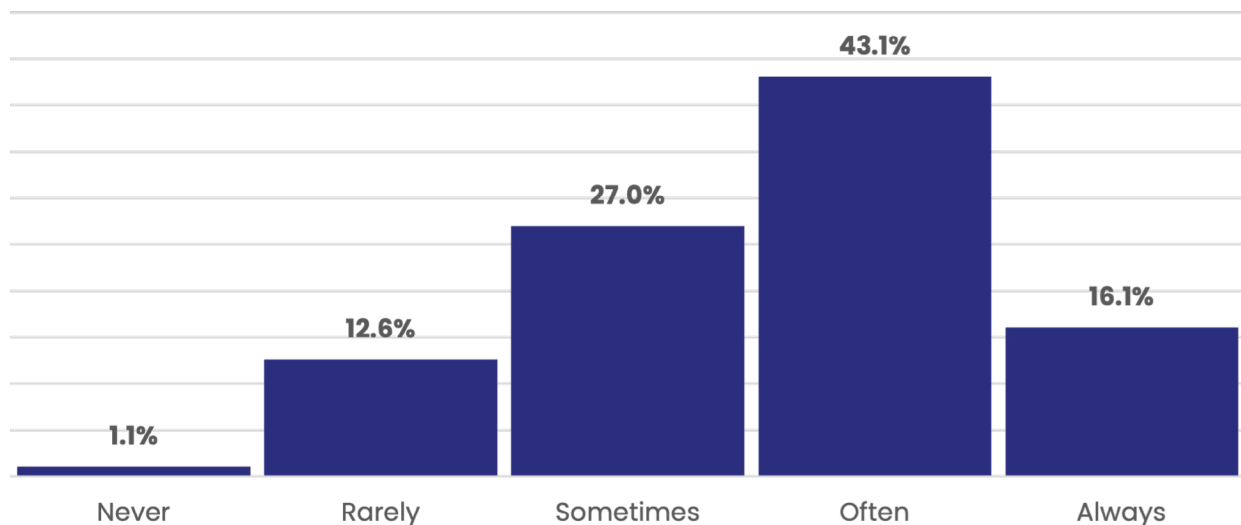
Impact and Outcomes

To what extent has treating data as a valuable, usable asset had a positive impact on your organization?



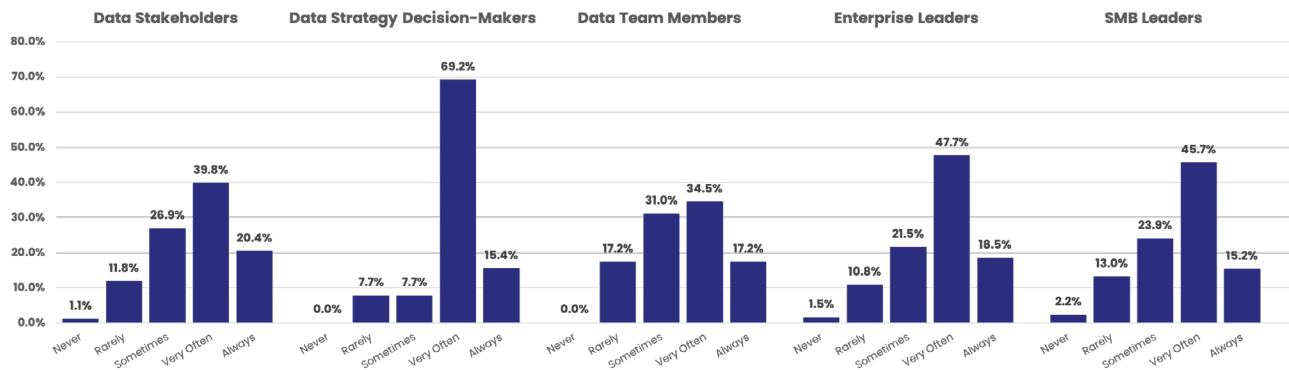
When assessing the impact investing in data has on an organization, a negligible 2.3% feel that there is no impact or a negative impact, which is reassuringly low. 6.3% perceive only a minimal impact, indicating that while data is valued, the translation into tangible benefits is not always clear. 43.1% acknowledge some positive impact, a sign that data is moving the needle in the right direction for many organizations. Notably, a substantial 37.4% experience a significant positive impact, attesting to the powerful effects of a well-integrated data strategy. However, there is still uncertainty for some, with 10.9% not sure of the impact, suggesting a potential area for improved measurement and communication of outcomes.

How often has the use of high-quality, accurate, and timely data led to valuable outcomes for your organization?



When asked to self-assess how often high-quality data led to valuable outcomes, a small minority (1.1%) report never experiencing valuable outcomes from data. Rarely experiencing valuable outcomes is relatively uncommon, with only 12.6% in this category. A significant portion of respondents (27.0%) indicate that high-quality data leads to valuable outcomes sometimes, suggesting intermittent success. The largest group, 43.1%, find that they often see valuable outcomes, denoting a consistent benefit from their data practices. It is encouraging that 16.1% of participants state they always achieve valuable outcomes, highlighting the potential of fully realized data strategies.

By Persona:
How often has the use of high-quality, accurate and timely data lead to valuable outcomes for your organization?



We were also interested in understanding which factors were likely to influence these perceptions. Through analysis employing descriptive statistics, Spearman's rank correlation, and Chi-square independence tests, we examined the relationship between organizational data strategy success and positive outcomes realized from data.

Organizations that reported high-quality data also reported more success in their data strategies. Simply put, better data quality often means a better data strategy.

Insight: Focus on improving the accuracy, reliability, and overall quality of your data. This could involve investing in better data management tools, training staff in data literacy, or implementing stricter data governance policies.

Companies that are more mature in their data handling and have developed data processes and policies tend to report higher data strategy success.

Insight: Work towards advancing your organization's data maturity. This can be done by adopting structured data processes, clear data policies, and regular data audits to ensure continuous improvement.

The more a Data as a Product strategy aligns with an organization's overall goals, the more positive impact it tends to have.

Insight: When developing DaaP initiatives, ensure they are closely aligned with your organization's broader objectives. This alignment ensures that the efforts in data product development directly contribute to the company's success.

Organizations where data strongly influences decision-making processes tend to see more positive impacts from their DaaP initiatives.

Insight: Cultivate a data-driven culture within your organization. Encourage decision-makers at all levels to rely on data insights for making informed decisions. Providing training and access to data analysis tools can be a good start.

Key Takeaways by Persona

Data Stakeholders frequently or occasionally work with data teams and have a vested interest in the successful application of data strategies. For these individuals, it is crucial to foster a deeper understanding of data's strategic value and to champion data literacy within their teams. They should advocate for and participate in cross-functional collaborations with Data Team Members and Data Strategy Decision-Makers to ensure that data initiatives are closely aligned with business needs and that insights from data are effectively communicated and leveraged across the organization.

Holding leadership roles in large organizations, **Enterprise Leaders** should prioritize cultivating a strong data-driven culture and infrastructure. They should lead the charge in breaking down silos and integrating data strategy with the overall business strategy. For them, it is crucial to endorse and facilitate continuous education and upskilling in data competencies across their large and diverse teams to maintain a competitive edge in data utilization. It is also important that these leaders invest in their own upskilling and literacy efforts. The landscape is changing rapidly and they, as well as their teams, need to be prepared.

As leaders in smaller organizations, **SMB Leaders** can often act more nimbly than their larger counterparts. They can leverage this agility by pioneering innovative data strategies and driving quick adoption across the organization. They should focus on creating a strong, clear vision for how data can drive business outcomes and ensure that their teams are equipped with the necessary tools and knowledge to realize this vision.

As individual contributors on data teams, **Data Team Members** have hands-on experience with the operational aspects of data strategies. They should communicate challenges and successes up the chain effectively, advocate for necessary resources and tools to improve data quality and governance, and continuously seek to bridge the gap between data strategy and its execution through transparent and consistent communication. While Data Strategy Decision-Makers have the most optimistic Mentality/Enabler/Tactics scores, Data Team Members have the lowest across the board. Savvy Data Team Members should work on managing up, creating proper documentation, and embracing self-service analytics that promote transparency and stakeholder empowerment.

Data Strategy Decision-Makers set the direction for data strategies. They should ensure that strategies are not only aligned with business goals but are also practical. They should work closely with data teams to understand the day-to-day realities and facilitate an environment where data strategy decisions are informed by both top-down business objectives and bottom-up feedback from those implementing and utilizing the data. Another notable finding was the disparity in understanding or acknowledging organizational data strategies across personas. This indicates that Data Strategy Decision-Makers should focus on making their strategies more visible and increase their strategic communication efforts.

Learn More



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Survey Design and Distribution

Survey Background

The survey titled “The State of Data as a Product in the Real World” was designed to gather insights from professionals across various industries on their organizations’ approach to and understanding of Data as a Product (DaaP). The survey consisted of a series of questions aimed at capturing participants’ roles, organizational details, data strategies, challenges faced, and perceived outcomes of treating data as a product.

Sampling Method

The survey employed a convenience sampling method, utilizing multiple online platforms for participant recruitment. The survey was shared on LinkedIn, the WIA community, various Slack communities relevant to data practitioners, product management and IT professionals, and directly through emails to potential respondents. This approach allowed for the inclusion of diverse perspectives from individuals occupying different roles and industries and facilitated the collection of a broad spectrum of insights on DaaP.

Data Collection Period

The data collection period for the survey spanned from August 14 to September 15, providing respondents with ample time to participate. This timeframe enabled the accumulation of a set of responses for subsequent analysis.

Response Rate

During the data collection period, the survey garnered a total of 174 responses. This sample size offers a foundation for extracting meaningful insights and identifying trends and patterns related to Data as a Product in various organizational contexts.

Data Analysis

Upon closing the survey, the response data was normalized and leveraged for further analysis. Advanced analytical techniques coupled with expert interviews were employed to derive comprehensive insights from the collected data.

Limitations

It is crucial to acknowledge that the survey’s convenience sampling method might introduce selection bias, as participants who were more interested or invested in the topic were more likely to respond. The findings of this study should be interpreted with this limitation in mind, and may not be entirely representative of the broader population of data and product professionals.