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2022 Survey Results

Building Data-Centric Cultures in the Biopharmaceutical Industry:
Trends, Challenges, and Opportunities

Presented by:

CM

ClinicalMind®

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data, digital transformation, and the road ahead

The promise of digital transformation in biopharmaceuticals is thrilling and potentially game-changing. By applying new technologies, in just the right way, we can carve a path to more effective products, more efficient times to market, better health care professional engagement, and higher profit margins.

Achieving this success is the key to competitiveness in today's world but it comes with its own set of challenges. Data cultures are not built overnight. In its 2021 report, NewVantage Partners[1] revealed that by May 2021, 57 percent of companies in healthcare and life sciences were already managing data as "critical business assets," and over 90 percent were accelerating the pace of investment in Big Data or artificial intelligence (AI). However, fewer than 25 percent felt they had successfully created a "data culture."

Information is the oil of the 21st century, and analytics is the combustion engine.

–Peter Sondergaard,
Gartner, Inc.

>90%

Life Science companies are accelerating investments in Big Data and AI

<25%

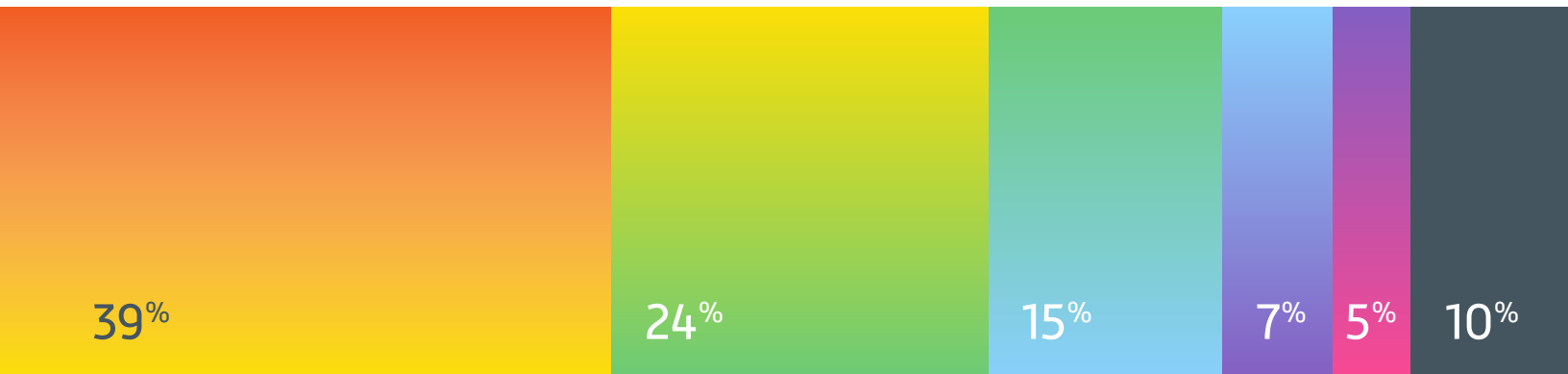Have successfully created a "data culture"

about the survey

ClinicalMind surveyed 61 leaders and executives in life science companies for the 2022 Data and Analytics in Biopharmaceuticals Survey to assess the perceptions, challenges, and drivers related to this exciting era of digital transformation.

30% Small (<50 emp)

16% Medium (50-100 emp)

21% Large (100-1000 emp)

33% X-Large (>1000 emp)
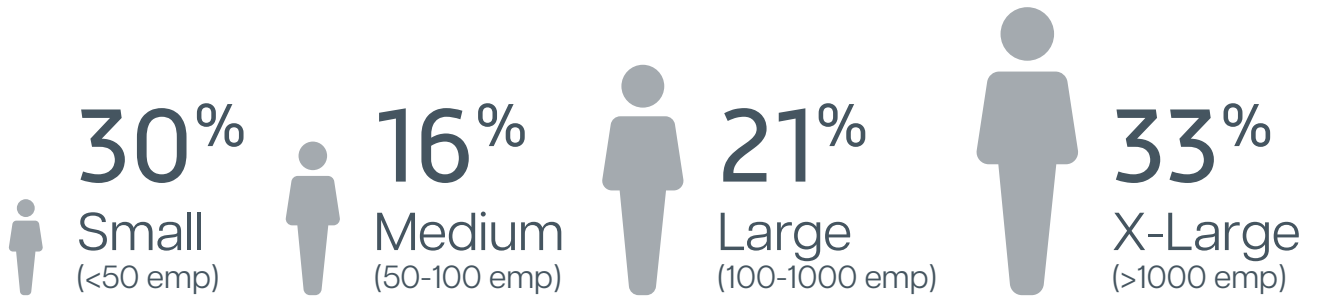
Company sizes represented in survey
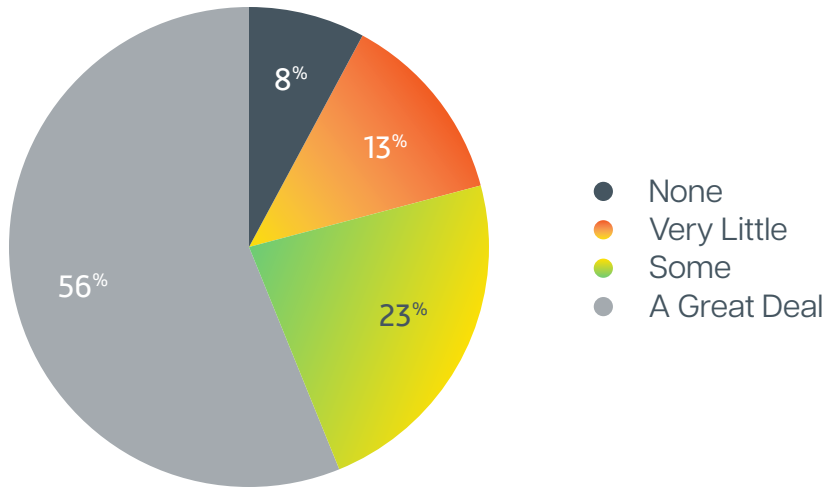
| 39% | 24% | 15% | 7% | 5% | 10% |

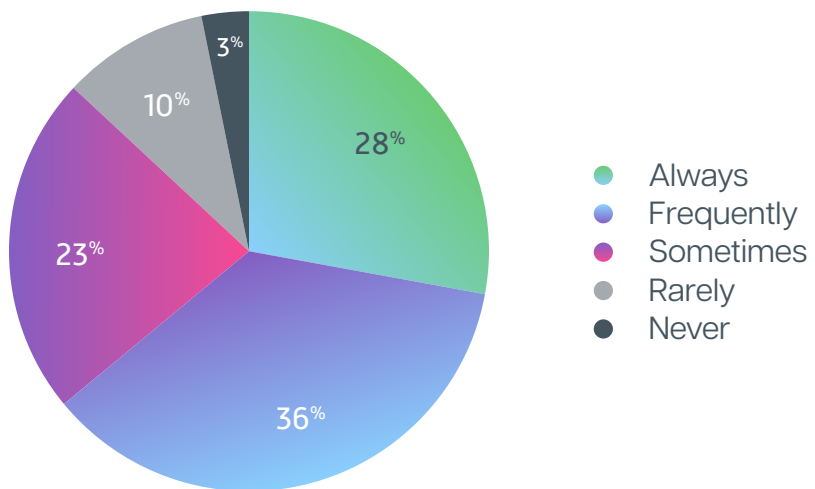Respondents can be categorized by job function:

- Sales & Marketing
- Executive Leadership
- Research & Development
- Medical, Regulatory, & Safety
- Manufacturing & Production
- Other functions

organizational encouragement works

To what extent do you feel organizational encouragement/pressure to use data & analytics in your work?

Pie chart:
- None: 8%
- Very Little: 13%
- Some: 23%
- A Great Deal: 56%

Legend:
- None
- Very Little
- Some
- A Great Deal

How frequently do you and your immediate team use data & analytics to drive business decisions?

Pie chart:
- Always: 28%
- Frequently: 36%
- Sometimes: 23%
- Rarely: 10%
- Never: 3%

Legend:
- Always
- Frequently
- Sometimes
- Rarely
- Never

what we found

It's encouraging to see that more than half (56%) of respondents reported strong organizational encouragement to use data & analytics, whereas 79% reported some encouragement. This is consistent with data suggesting that 64% are regularly using data & analytics to drive business.

In looking deeper, we found that, of those who reported very little or no organizational encouragement, only 23% used data to drive decisions. In the "encouraging" organizations, this number was 79%.
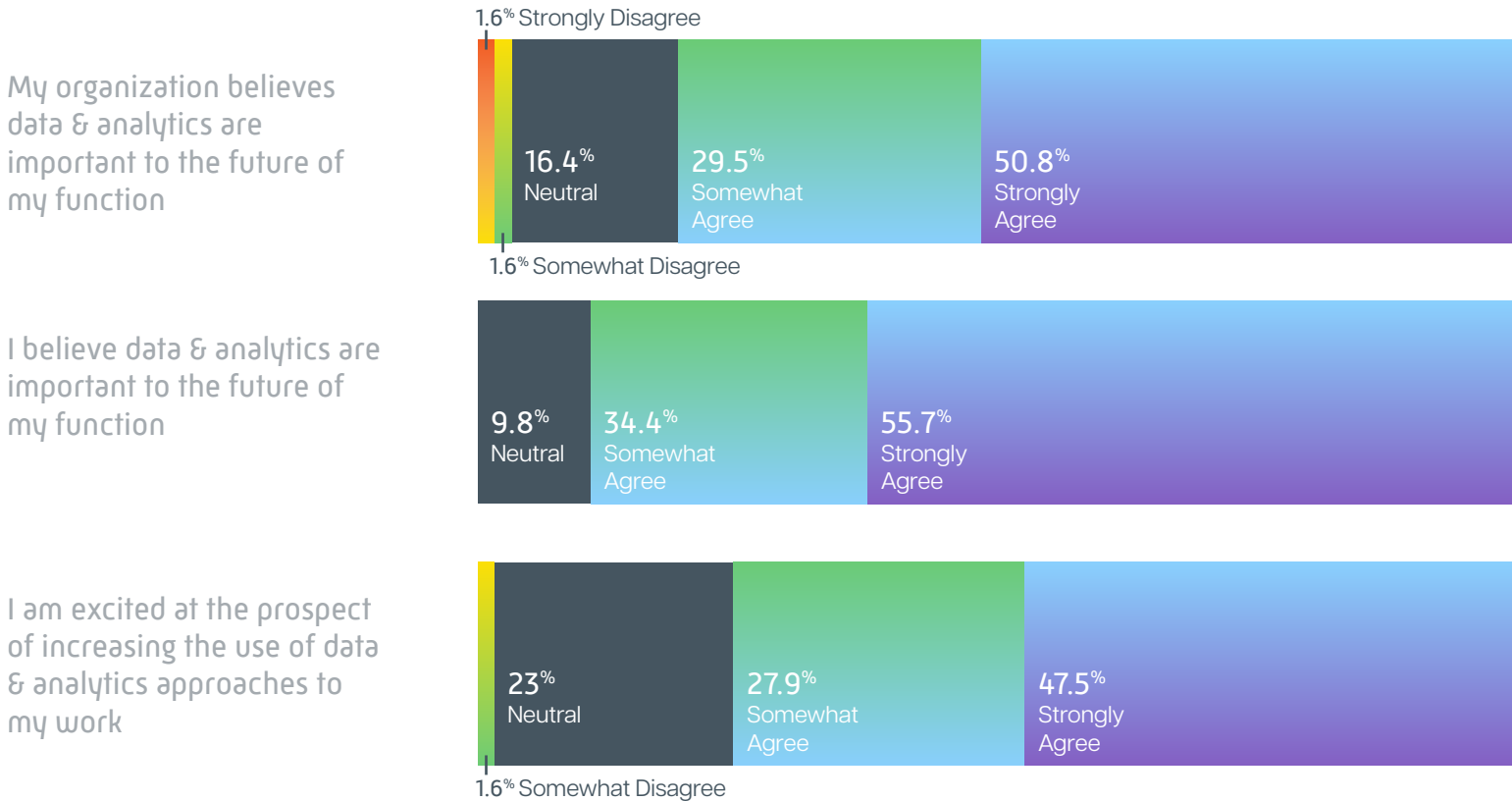
why it matters

Creating a data-driven culture starts at the top. Organizations that prioritize data-informed decision-making and communicate this priority effectively appear to be seeing results in how their teams work.

Ishit Vachhrajani, global head of enterprise strategy at Amazon Web Services, notes that "A true data-driven culture treats data as a strategic asset of the company by making data widely available and accessible." [2]

leaders & teams agree: data & analytics is important and exciting

Respondents were asked to share their level of agreement with each of the following statements:

My organization believes data & analytics are important to the future of my function

1.6% Strongly Disagree

| 16.4% Neutral | 29.5% Somewhat Agree | 50.8% Strongly Agree |

1.6% Somewhat Disagree

I believe data & analytics are important to the future of my function

| 9.8% Neutral | 34.4% Somewhat Agree | 55.7% Strongly Agree |

I am excited at the prospect of increasing the use of data & analytics approaches to my work

| 23% Neutral | 27.9% Somewhat Agree | 47.5% Strongly Agree |

1.6% Somewhat Disagree

what we found

Regardless of their role, respondents overwhelmingly felt that their organizations considered data & analytics to play an important role in the future of their function. This is consistent with the industry's overall outlook on data science.

Employees were even more bullish, with a full 90% convinced that data science would play an important role in the future of their function. One signal worth noting is that 25% of respondents "downgraded" their agreement when asked whether they were excited about increasing the use of data & analytics approaches in their work.
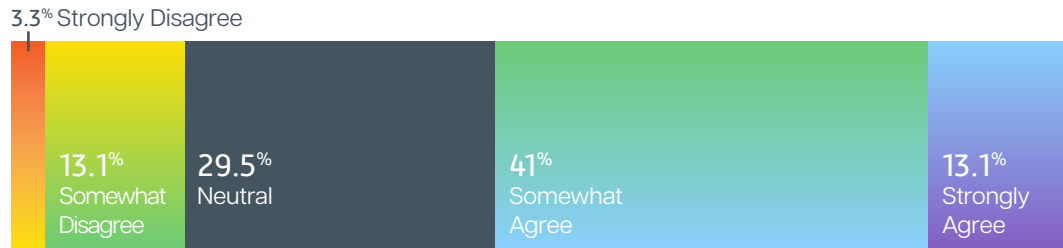
why it matters

Organizational alignment is critical when implementing a data-driven culture. The fact that organizations and employees seem overwhelmingly positive about the future bodes well for digital transformation. Of course, belief in the future doesn't always translate into excitement. This is where "pain-free" solutions and careful implementation become so important.

One quarter of respondents who felt that data solutions were important in their roles felt less excited about them. To address this potential anxiety, organizations can support their people by providing training and resources and enlisting good partners. Implementing data science solutions can feel overwhelming, and it can sometimes be difficult to know where to start. This is why it's critical for today's analytics partners to have highly client-focused approaches. There's no benefit in making data science feel like a mystery.
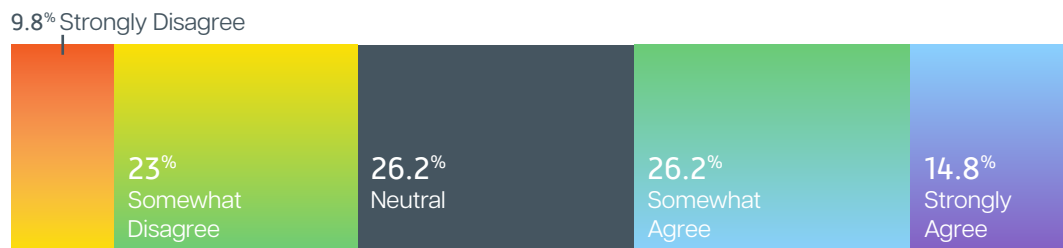
most have excellent data access, fewer can make the most of it

Respondents were asked to share their level of agreement with each of the following statements:

I believe my team has access to the data we need

3.3% Strongly Disagree

| 13.1% Somewhat Disagree | 29.5% Neutral | 41% Somewhat Agree | 13.1% Strongly Agree |

I believe we are making the most of the data we have access to

9.8% Strongly Disagree

| 23% Somewhat Disagree | 26.2% Neutral | 26.2% Somewhat Agree | 14.8% Strongly Agree |

what we found

More than half (54%) of respondents agreed (13% agreed "strongly") that their teams currently had access to the data that they needed. Fewer respondents, however, felt that they were making the most of the data available to them - 41% agreed, but 33% disagreed, making this the most polarizing question on this survey.

It's interesting to note that among companies that showed a great deal of organizational support for data and analytics (56%), only 21% of employees strongly agreed that they had access to the data they needed, while 15% felt they were able to make the most of that data.

why it matters

Building a data-driven cultures is an emerging skill in the industry, but progress is evident. It's reassuring to see fairly strong data access, especially for those who report strong institutional support for data and analytics. We also see great opportunity to begin closing the gap between data access and the ability to extract business value from it. There's a natural progression to optimizing a data culture, and it appears that many organizations are moving in the right direction.

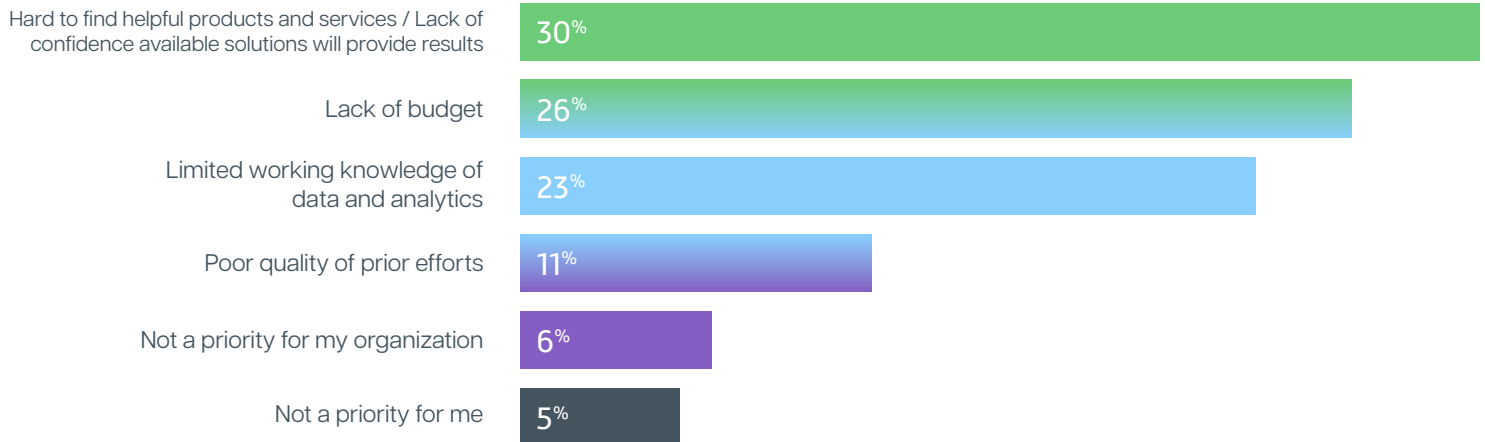commitment > building data access > driving business value

Only 3.1% reported strong agreement that they had institutional support for data & analytics, had good data access, and were making the most of that data.

In a "glass half full" world, we're seeing that a majority of industry professionals felt they had good access to data and the organizational support to secure that access. On the other hand, only 3.1% of respondents strongly agreed that they had strong organizational support with access to data, and were also making the most of that data. We hypothesize that this can be attributed more to companies being in the earlier stages of building a strong data culture, than to ineffective attempts at doing so. Success can take time.

knowledge, funding, and good partners: breaking down barriers to a strong data culture

Respondents were asked: Which of the following do you feel stands in the way of you and your team using data & analytics to drive business decisions? (Ranked by frequency):

Barrier	%
Hard to find helpful products and services / Lack of confidence available solutions will provide results	30%
Lack of budget	26%
Limited working knowledge of data and analytics	23%
Poor quality of prior efforts	11%
Not a priority for my organization	6%
Not a priority for me	5%

what we found

Three items – 1, 2, and 3 – dominated the list of barriers to successfully using data and analytics to drive business decisions – but perhaps they boil down to one.

Item 4 was at the lower end of the list, with organizational and individual emphasis on data & analytics appearing not to be significant among respondents.

why it matters

This is great news! The two most structural issues in this list – organizational priorities and personal priorities – can create inertia and are difficult to resolve. However, they were given low weight in the survey. In our experience, the most commonly cited challenges are easier to overcome. Let's take a look at the top three reported challenges and how they may be related:

#3. Limited working knowledge
Limited understanding of data science may not necessarily be a significant limiting factor. *Business understanding* and *human subject matter* expertise are the foundational ingredients to success in data and analytics. If you understand your business, the questions you need answered, and the results you require – you're already well on your way to success. A quality data & analytics partner will simply help you unlock and reveal what's already there. You don't need a data science degree to be successful.

#2. Budget challenges
As a provider of Medical Communications and Data & Analytics services, we are very sensitive to the importance of budget efficiency and creating value. Fortunately, data science is particularly good at creating efficiencies through automation, reducing overhead, and amplifying results. In some instances, targeted analytics solutions can be budget neutral or better.

#1. Finding the right partners
As someone very interested in AI technology, this author recently went down an online rabbit hole to explore AI-generated images. This led to the creation (shown here) of a "donut to help medical writers concentrate and stay creative." Interesting? Yes. Useful? Not as much. Today, there are a great many solutions and agency partners claiming to offer data and analytics, AI, machine learning and similar products and services. It can be frustrating, without formal training in the field, to understand which solutions can offer substantial value. At the risk of oversimplification, here is a simple 3-question test to help you start to evaluate data & analytics solutions:

1. Does the partner have the human talent and experience to understand your underlying business, and the questions and challenges you face?

2. Is the process collaborative and rational, or is the product claiming to be a "black box" that produces value without collaboration?

3. Based on case studies and your understanding of the service – can you easily imagine gaining substantial business value from it?

AI-generated image: "A donut, to help medical writers concentrate and stay creative."

Source: www.craiyon.com

prospects are bright for data & analytics in life sciences

Respondents were asked to share their level of agreement with each of the following statements:

My organization is investing in data & analytics

1.6% Strongly Disagree

| | | **18%** Neutral | **34.4%** Somewhat Agree | **39.3%** Strongly Agree |

6.6% Somewhat Disagree

word cloud

Please share one word to describe
what you would want
your ideal data & analytics
experience to be:

efficient • innovative • delegatable • easy • effective • cloud • simple • seamless • fun • value-adding • rewarding • encompassing • journey • clear • integrated • robust • accurate • usable • expert • effortless • fruitful • enlightening • helpful

the future is bright

73% of those surveyed reported that their companies were actively investing in data & analytics. This is consistent with, but slightly lower than, the NewVantage data mentioned above. If funding is where the heart is, we can already see that the data component of digital transformation is viewed as important to the industry's future. There's also a consistent perception of what this future should feel like: simple, efficient, seamless, and useful.
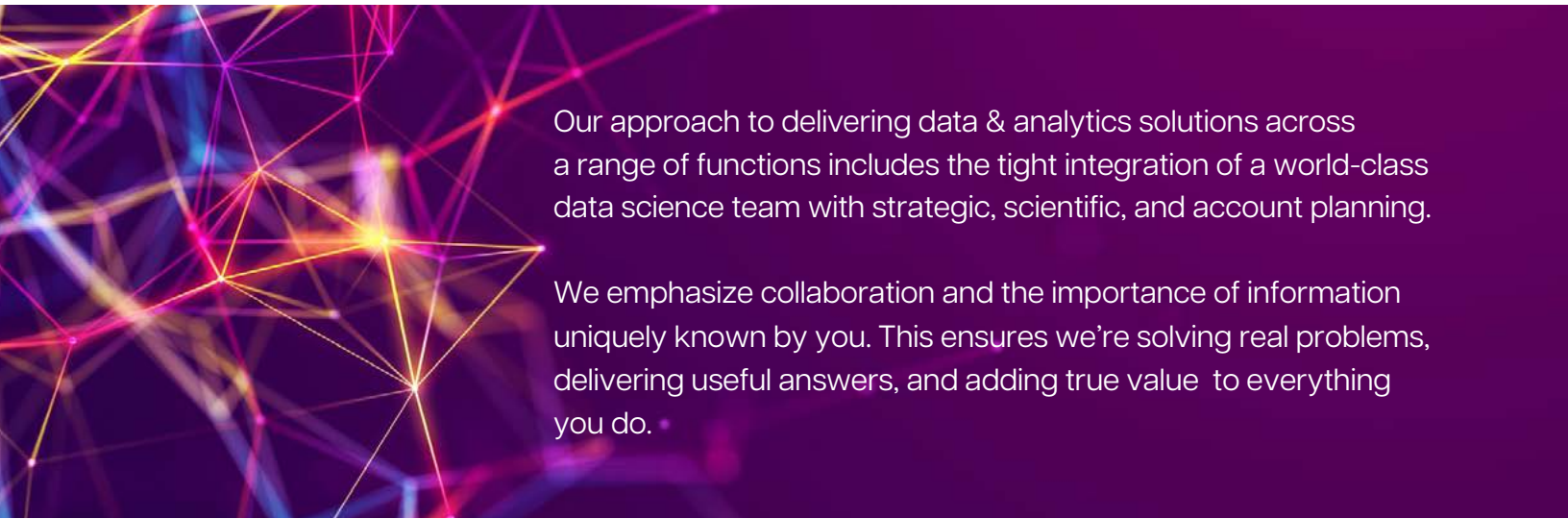
While gaps and challenges exist, it's encouraging to see that the barriers and challenges that the industry faces are also the ones that can be most readily overcome.

Craig Mundie, who advises CEOs on their corporate strategy, observed that "Data are becoming the new raw material of business". As the biopharmaceutical industry embraces data & analytics, we are well positioned to transform this raw material into the life-changing therapies of the future.

meet clinical mind

Make better decisions:

Underneath the mountains of data in healthcare, you'll find the human stories, challenges, and connections that make this information matter. Our Data Science team leverages cutting edge technology and deep industry experience to unlock the transformative power of data. This spans the complete range of our products and services, adding value to everything from initial lexicon and strategic platform development, Key Opinion Leader identification and engagement plans, and content and publications, to advisory programs, speaker bureaus, and sales training.

Our approach to delivering data & analytics solutions across a range of functions includes the tight integration of a world-class data science team with strategic, scientific, and account planning.

We emphasize collaboration and the importance of information uniquely known by you. This ensures we're solving real problems, delivering useful answers, and adding true value to everything you do.

To learn about Clinical Mind and leveling up your data game, contact:

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