







5 pillars of becoming a data company

guide



The process of becoming a data company and placing data at the core of your operational and strategic processes is complex – but you can take your first steps today. To successfully gain business value from data, you'll have to put in effort in several domains:

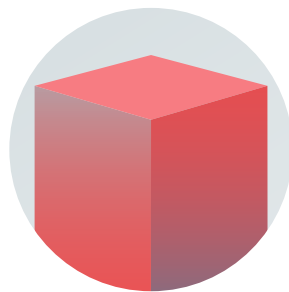
**organizational culture, data competencies
and data-related technologies.**



In this guide, we offer a **5-pillar overview** and provide high-level guidance on the decisions to make and actions to take as you embark on – or continue – your data journey. These 5 pillars are by no means exhaustive, and several steps can be taken at once. The business outcomes of data maturity are numerous:



1. Create reports that matter



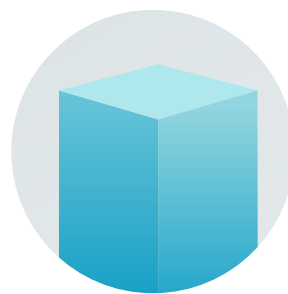
2. Make informed, insightful decisions



3. Increase operational efficiency



4. Save time and costs through automation



5. Become truly customer centric and offer excellent customer experiences

your company will do more with less, better, faster and stronger, for a big competitive advantage and the flexibility to tackle the dynamic future ahead.

Pillar 1

Organizational mindset shift

From the very earliest beginnings of your data journey, it is absolutely key to think of the journey not as an IT project with a clear beginning and end, but as a fundamental transformation. To fundamentally transform, every employee of

your enterprise must understand how data can impact business processes, and believe that these impacts lead to higher efficiency, better business results, and greater added value.

Educate your workforce

When it comes to becoming data driven, your entire organization must be involved and educated in the uses, impacts and benefits of data.

- Work with your HR team to offer **training sessions and interactive courses** in which participants work together to explore data sources, applications, tools and use cases.
- Include **people from multiple functional areas** in the same sessions to break down silos.
- Encourage **brainstorming** and maintain a list of learnings and concrete data use cases that arise during courses and programs.

Convince your experts

Your most skilled people may rely heavily on their expertise to make decisions about processes, people, products, etc. However, even the most informed, experience-backed gut instincts aren't based on the insights present in real data and are, as a result, more error prone.

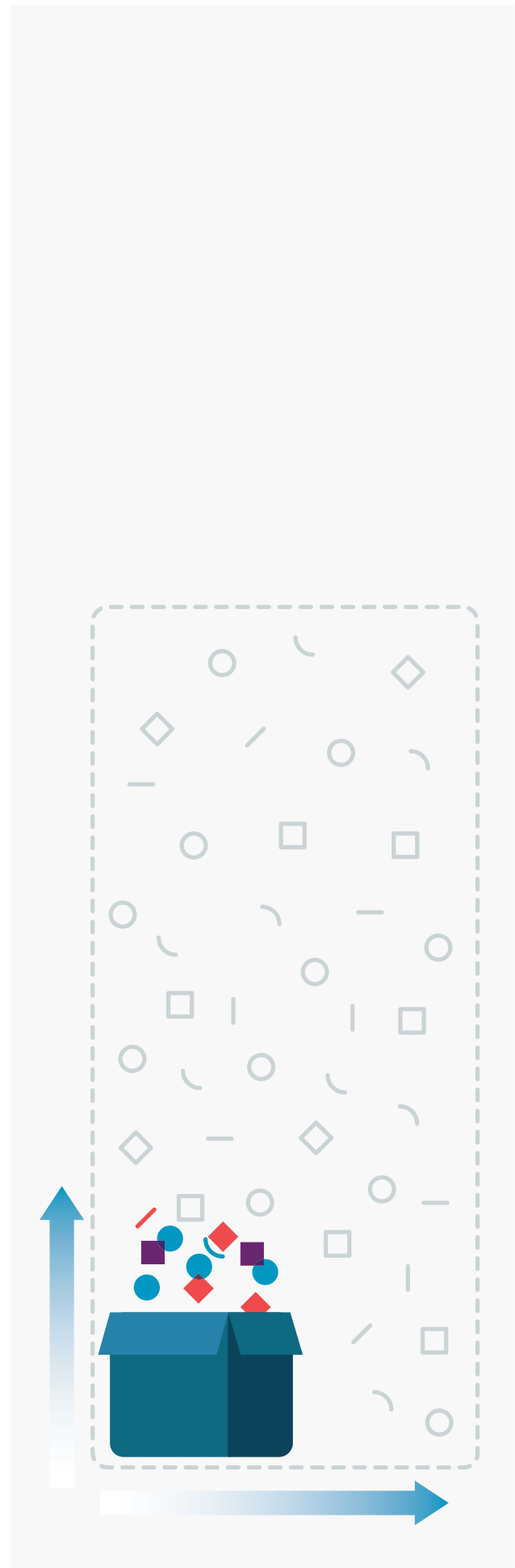
- Highlight case stories in which real data was used by organizations **to measurably improve** complex processes.
- Introduce **data champions** – early believers – responsible for driving data-guided decision-making in their functional areas.
- Examine **the impacts of data on decision-making** processes (including the speed of these processes) and compare with non data-backed, “gut feeling” decision-making.



Focus on metrics, access and use

The early and up-front focus on the measurable, monetary impacts of data-driven decisions and process improvements are important drivers of buy-in.

- Talk about metrics often to **cultivate a culture of data literacy** and establish the credibility of data.
- Encourage teams to **explore relevant data** so that they more easily recognize patterns, notice anomalies and make decisions backed up by data insights.
- Request that every operational decision be **data driven or data proofed** at the very least.
- Empower every employee to **consult the data** relevant to their day-to-day responsibilities – from a cultural as well as a technical perspective.
- Create **a clear playbook** for the use of data insights in business decision making.



Pillar 2

People and knowledge

In addition to changing mindsets from the top down and bottom up, your organization must invest in the skills needed to manipulate, analyze, visualize and work with data. Whether you

do this in house or work with a dedicated partner – or a combination of both – depends on your company’s needs and goals.

Scale up proficiencies

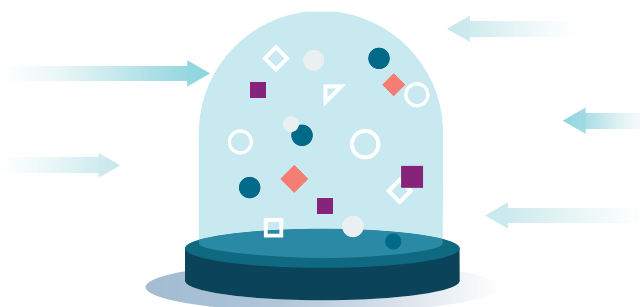
The more proficient your organization becomes with data, the more in-depth competencies you’ll need. As you gain experience, you will be able to move from answering basic business questions about the present to enhancing processes and even predicting future conditions.

- **Build up the skills you need today**, based, for example, on the tools you use for reporting, the logic you use to offer purchase recommendations to customers, or simply how you track website traffic.
- A **multidisciplinary team of experts** with different roles, including data scientists, data engineers, software developers and operations specialists, offers the comprehensive expertise you need to successfully meet business goals with a data project.
- Given the shortage of data science and analysis skills, it may be **more cost effective** to work with temps, contract hires and third parties.

Establish a center of data excellence

A chief data officer (CDO) – or its equivalent – is responsible for prioritizing data and analytics strategies and projects, and aligning the business with the IT organization. Their overarching goal is to measure and ensure that data and analytics efforts within your organization are aligned with a greater vision and delivering real business value in the form of efficiency, profit, engagement, etc.

- Rather than including data and analytics expertise in each functional area, centralize your data expertise in a **dedicated team** that works across silos and departments to drive and manage data projects.
- Ensure that the CDO’s role also covers the growth of data literacy within the enterprise and the **establishment of a data-driven culture**.
- Invest in building competencies in the **agile methodology**, as it is the only time and cost-efficient way to manage data projects.
- Learn from every single data project by feeding the (measured) results of an exercise back into it and **involving the entire business in the discussion**, beginning with the C level.

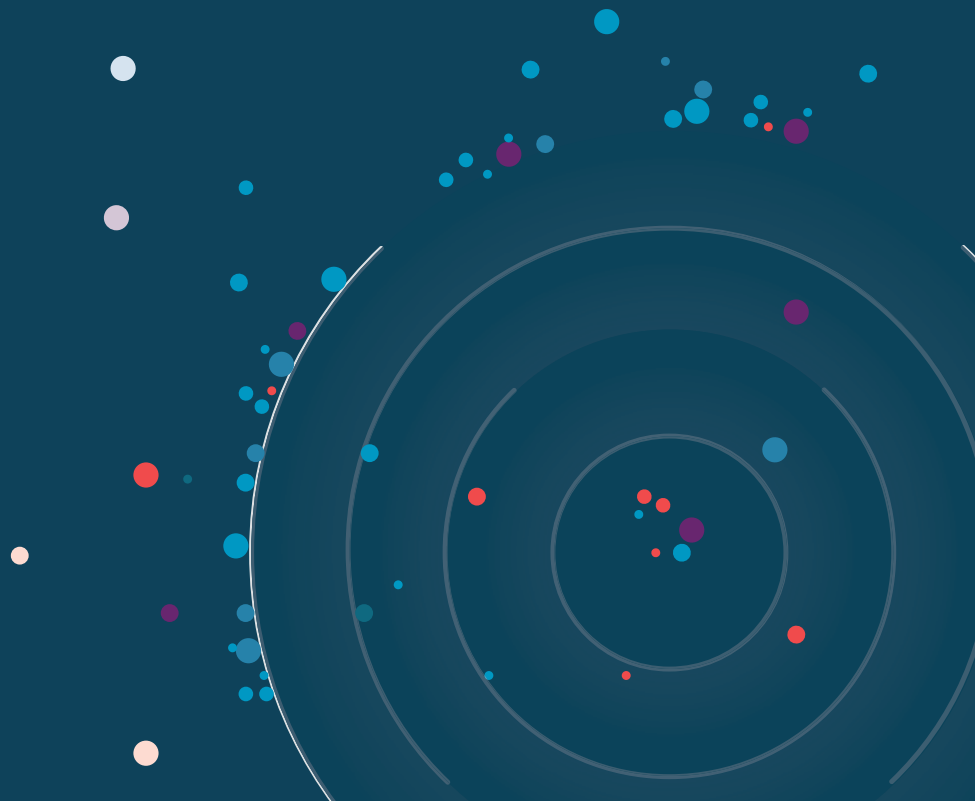


Pillar 3 Data

What business questions do you want to answer with data? What data do you need to gather to do so? Do you have it? Can you get it in the future? There is an incredible volume of data out there to

gather, and simply mining it all is no longer feasible, except for the very largest players. Before you do anything with data, you need to know up front what you want to achieve with it.

- Collect data with a **concrete business purpose** in mind.
- Ensure that current and historical data from different business domains **is available and discoverable** for data scientists and product owners, via **datalake** or **self-service** capabilities.
- Guard **the transparency of data** to ensure that it is complete and reliable and to avoid setting up a data-driven “black box”. These lead to confusion and false conclusions.
- Guarantee actionable data insights through intuitive **visualization capabilities** for business users.
- Are you missing essential data? Consider **renting data sets** to train algorithms, or consider using pre-trained algorithms.
- Note that competitive differentiation may hinge on your ability to gather data points that are **highly relevant to your industry**; rented data may not suffice in providing the context-dependent insights you need.



Pillar 4

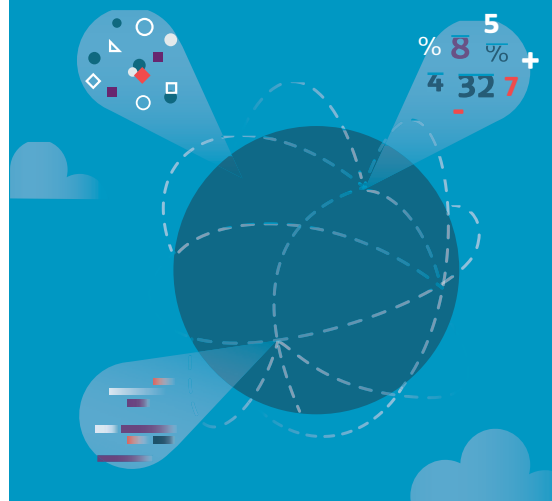
Technology and tools

Starting simple with an Excel sheet and a basic analytics app is completely possible. But as your business relies more and more on data insights, interlinking your systems and applications and centralizing your data will become central to achieving a comprehensive picture of your operations, processes, people, products and

customers. It's also important to consider today's enormous growth in data quantity and format, all streaming into companies at high velocity via a multitude of apps and new technologies such as IoT. The pace of growth will only increase. Thus: a cloud move is inevitable for every data company.

- Invest in a data platform based in the public cloud, **which can support innovation and be scaled up as needed** to include more functionality and process an ever greater volume of data at a low cost.
- The choice between a **data warehouse** (for structured data, like ERP data or any other application data) and a **data lake** (for any type of data, such as text and images) will depend on what data collect, and what business questions you want to answer with it. It is often suggested to have both implemented and go for a **lakehouse**.
- Build watertight **security, governance and protection** into your data ecosystem, in light of GDPR requirements and increasing cybersecurity threats that could result in significant harm and loss.

Cegeka has developed a **cloud reference architecture** that both streamlines your cloud move and ensures a cloud infrastructure aligned with your company's unique needs and ambitions.



Pillar 5

Initial success story

Before you can think about accelerating your data transformation, you'll need to build your business case and competencies. The best way to start is to generate the maximum impact with the lowest effort.

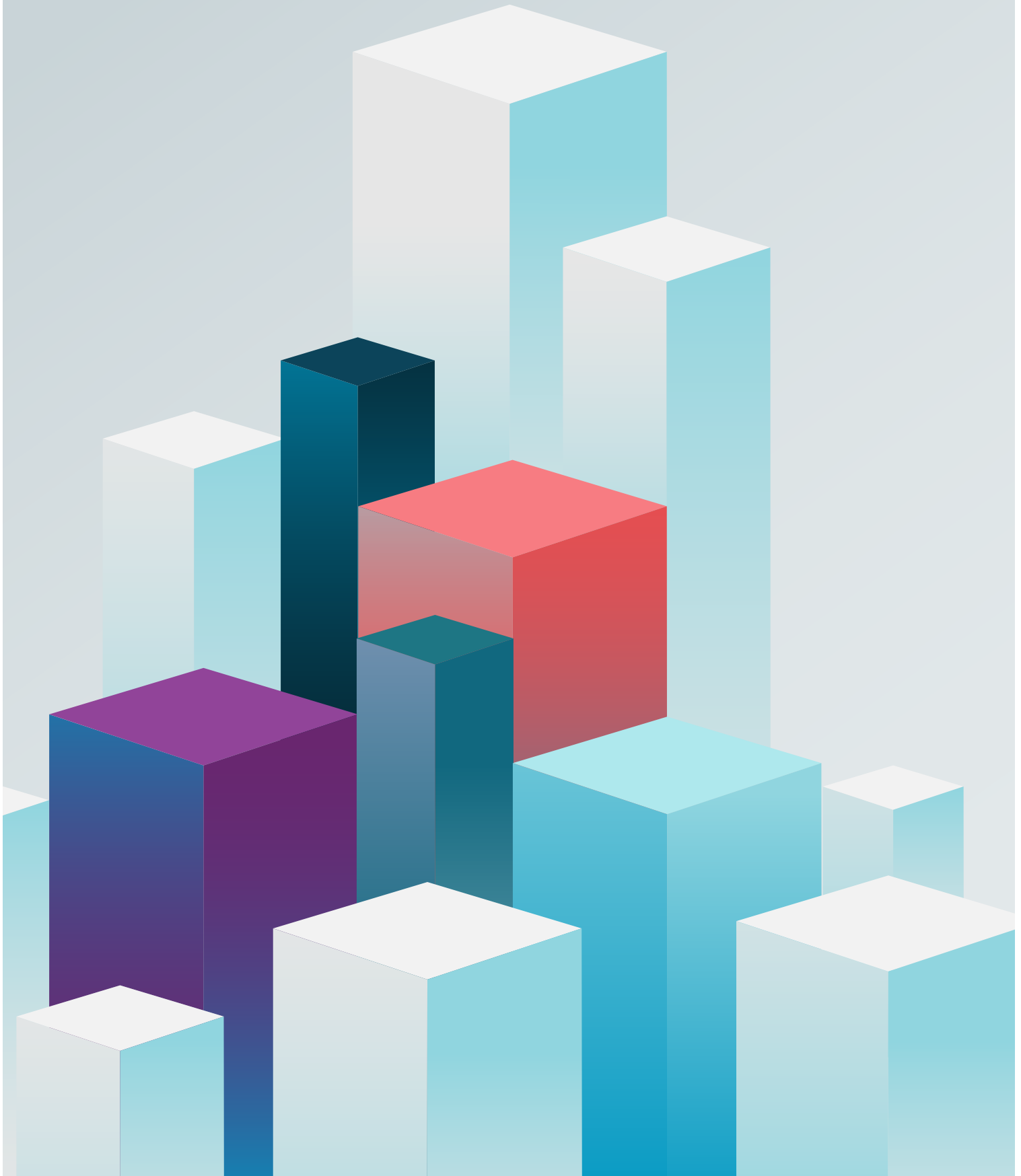
- **Avoid an enormous IT megaproject**, such as the implementation of an organization-wide data lake, in the early phases of your transformation, as the foundation needed to effectively use such a tool has not been laid yet.
- Focus on **business outcomes**, or on becoming more customer centric, in designing your first data experiment.
- Run experiments to test your hypotheses, but **stay aware of implicit biases** that may be contained in your data sets.
- Use **reliable, complete data sources** and ensure that your set is a good representation of the population you seek to learn more about.
- **Continuously improve** your data and models through feedback loops that can be incorporated into your agile process.



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Explore 4 data use cases



In determining what to invest in next on your data journey, it is important to develop a plan. Take stock of what data resources you have and use. Outline a very clear vision of what you want to do with data, including a list of priorities. And finally, compare what you have with your vision to more clearly identify how to bridge the gaps.



Deliver accurate reports

Discover how to build a secure, future-proof, self-service BI tool with a centralized data platform – and translate vast floods of data into clear insights for everybody who needs them to make decisions.



Inspire repeat purchases

Dramatically improve the efficiency and success of your sales team with an AI-driven prediction model that highlights the most promising potential customers. Ditch the manual labor and focus your efforts on the clients most likely deliver the highest value.



Quality optimization

Predict your production line's quality outcome, cut scrap and increase manufacturing efficiency without extra costs. Sounds like a dream? Far from it: it's what we can do with a digital twin and a cloud-based data platform.



Becoming data driven

Take a page out of material solutions company Sibelco's book: break down silos, establish a cloud-based data platform and establish a data center of excellence to ensure that accurate, comprehensive data insights are driving actions and decisions company-wide.

In search of expert, collaborative guidance, a no-nonsense approach and a flexible, scalable data project methodology?

Get in touch with our Data Solutions team.

