Building a Data Strategy:
How to Turn Dirty Data into Dollars

> More than 87 percent of organizations are classified as having low business intelligence (BI) and analytics maturity."

2018 GARTNER SURVEY

With rapid changes in market demands and technology, robust data strategies are no longer exclusive to large enterprises. Building, maintaining, and executing a data strategy is crucial for any organization's success.

If your business is among those with low business intelligence, it's time to overhaul your BI and analytics and create a robust data program that will benefit every department, customer, and person in your organization. If you don't have a data strategy, you are missing opportunities that your data can unlock.

Building a data strategy requires a structured approach and a clear roadmap to reach your goals and objectives. This white paper will overview the value and potential data holds, how to prepare, launch, and maintain a data strategy, and the real-life benefits of a data strategy.

Table of Contents

The Value & Potential Your Data Holds

A modern data strategy is a dynamic roadmap that drives your business to a future where data becomes a core asset to the organization. A data strategy is essential to maximize the potential of your business and technology and is a powerful differentiator to stand out from your competitors.

A strong data strategy enables business leaders to implement six crucial elements for success:

1 Increase revenue

2 Reduce risk

3 Improve efficiency & reduce costs

4 Increase customer engagement

5 Manage & govern data to ensure compliance

6 Connect intelligence across departments, geographies, & organizational hierarchies

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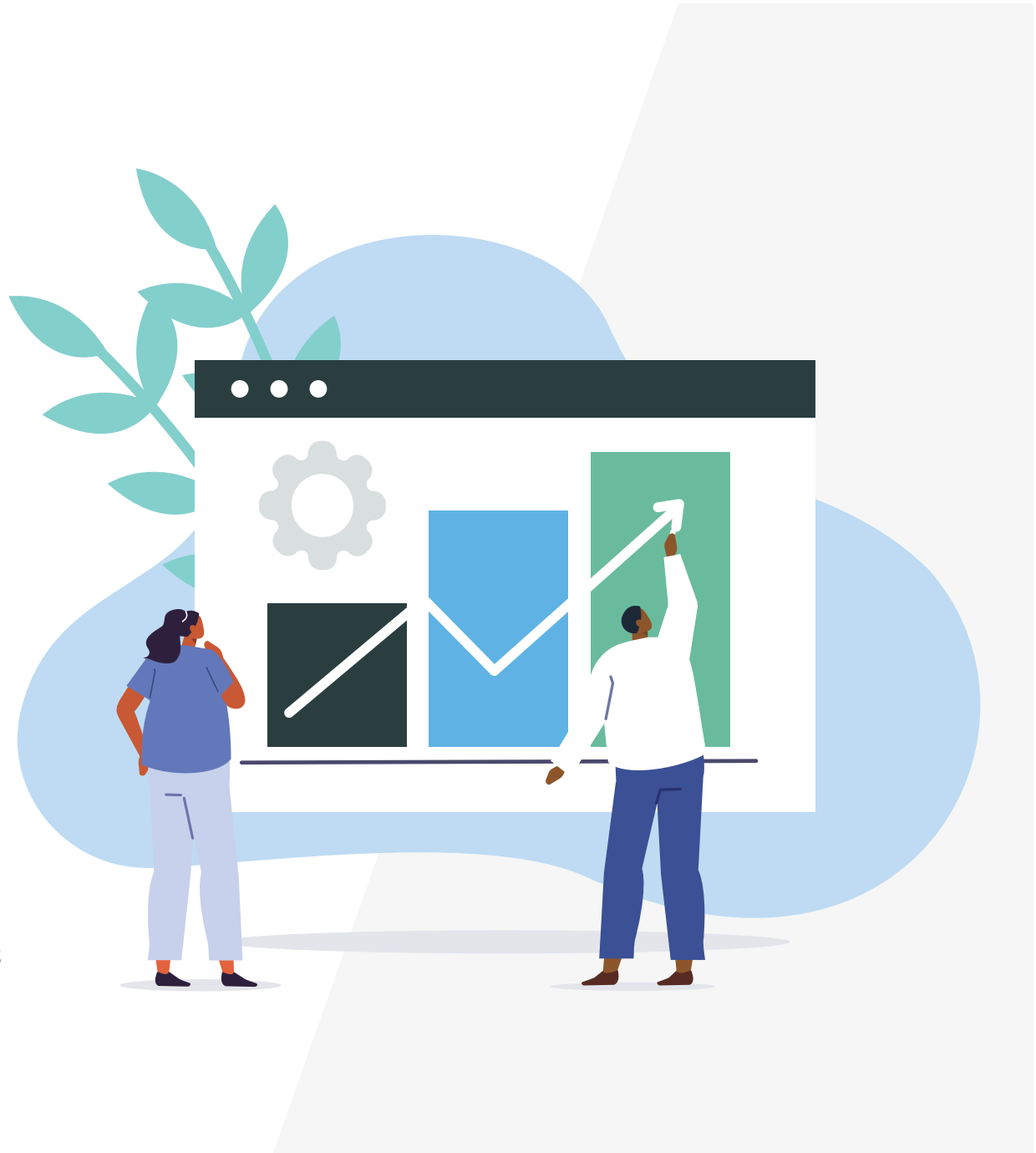
48%

Data has been used to reduce insurance claim costs by **48 percent.**

$50M

If UPS cut an additional mile off each driver's route, they could see annual savings of as much as **$50 million.**

90%

A mobility company employed data-driven campaigning, recovering **90 percent** of the revenue lost in the COVID-19 crisis and improving conversion rates fivefold.

The **Quantifiable Business Benefits** of a Data Strategy

The disadvantages of not having a data strategy became clear during the pandemic. Many organizations struggled because they were limited to analyzing their critical data infrequently due to manual processes and/or low technology capabilities.

Data Strategies Turn Data into Dollars

It has become vital for organizations to leverage their own data, plus other sources such as publicly available data, social data, review data, and other commercial sources. These data sources, such as social media, allow companies to look at themselves and their competitors from the outside in, helping them understand the sentiment around the organizations and its products. With data like this, even small or medium companies can get ahead, protect their company, and improve agility.

Signs It's **Time to Invest** in a Formal Data Strategy

Look at your current data ecosystem and what you are doing with your data.

The demand for insights is driving the sponsorship of data initiatives from both IT departments to business departments and functions. With this change, data is becoming more crucial for each department. Five or ten years ago, the typical pattern would be to go to your IT department to ask for a report and join a long queue waiting for a generic analyst to build it. Today, departments are aggregating their own data with domain-specific analysts, building KPIs specific to their objectives, and managing their own data priorities.

If your current data operation has an imbalance between processing and benefiting from data, it is time to invest in a data strategy. Larger organizations may be best served with departmental or hub-and-spoke models, whereas smaller organizations may need to centralize capabilities and build a self-service strategy.

Ask yourself and your stakeholders questions like the following:

→ Are our tools coping with the "four Vs" of data: *volume, variety, veracity, and velocity?*

→ Does our business have the tools to increase revenue by maximizing data?

→ Are we reducing risk by using data and AI to support "gut-feel" decisions?

→ Is our data stored in spreadsheets and cobbled together, causing widespread inefficiency?

→ Do we understand trends (*e.g.*, customer churn) and respond quickly to change?

→ Do we have data governance in place that ensures compliance?

→ Are we able to automate the discovery of data easily within our organization?

→ Can we bring together information across departments to build holistic insights?

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Opportunities Hidden in Your Data

Here are some ways taking advantage of data can help:

Understand your people better

Instead of assigning roles based on intuition, data can help you match the right people to the right places with the right customers, driving operational efficiency.

Manage and extend relationships

Let's say you're in manufacturing, and your data tells you sales are dropping at one of your retailers. You talk to the retailer, and it turns out that a competitor is selling a better or cheaper product. Knowing that, you can adjust and continue to maximize your relationship with that retailer.

Attract and retain top talent

Technology and business users want the best tools to do their best work. A data-driven organization leveraging modern Cloud data and AI capabilities will provide these and create a workplace in which employees are empowered to find creative solutions and implement data best practices.

Improve operations

With more visibility into logistics, sales can increase revenue, and facilities can take advantage of smart energy. The benefits are holistic, spanning your entire organization.
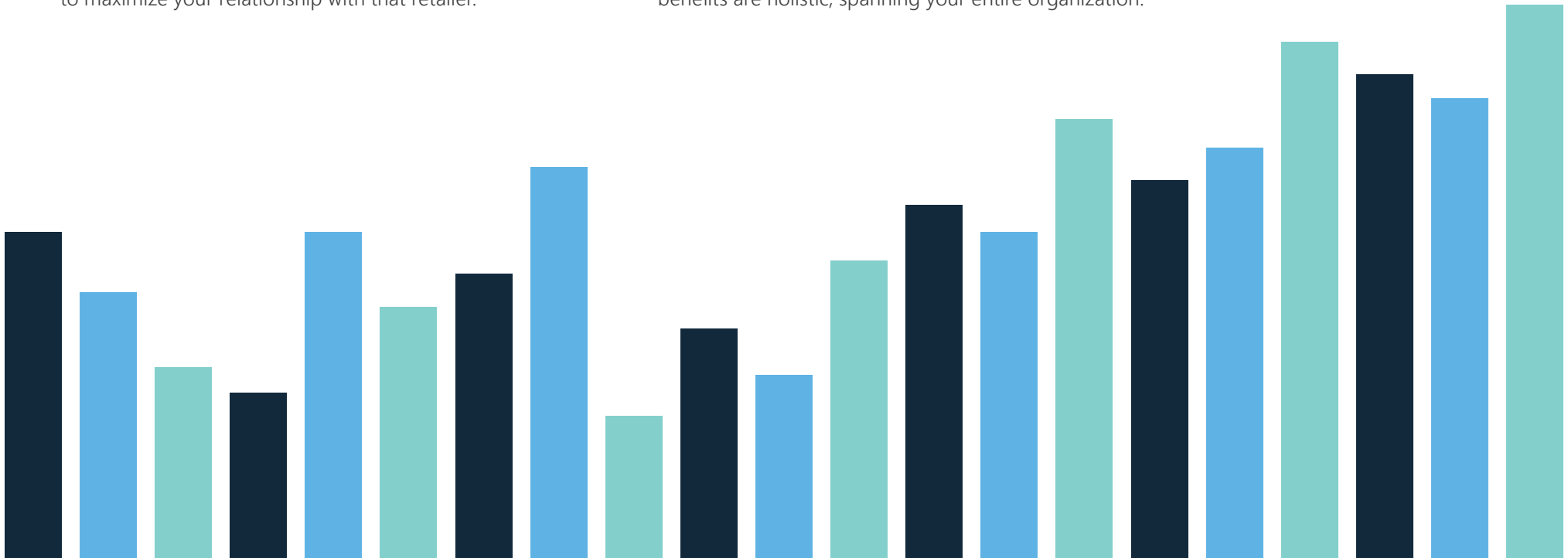
65%

You know how important a data strategy is, but you can't do anything without the investment to finance your plan. Considering **65 percent of decisions involve more stakeholders or choices** than two years ago, the business case you make has to be convincing and clear.

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How to **Get Buy-In** from Top Executives

Here are a few tips to get buy-in, even when facing opposition:

First, understand their perspective.

Senior executives want quick answers to questions they're asking so they can decide and move forward. They're typically not skeptical about the need for data strategy; they're asking themselves, "how do I get this solution quickly and at a cost I can absorb?" When pitching to execs, ensure you have a compelling business case outlined to expedite decision making, including the following:

→ Return on investment models

→ Defining your risks and how you plan to mitigate them

→ Demonstrating alignment with organizational goals

→ Clear success criteria

→ Defined timelines

→ Identifying transformation or organizational change required to achieve the strategy

→ Socializing you plan with individual execs to refine your pitch and get early buy-in

Second, illustrate the benefits.

Executives want the ability to make fact-based decisions instead of relying on intuition. Put your plan into business language and clearly demonstrate how it aligns with the organization's goals. With a data strategy, you can deliver hard facts about what's changing and how fast.

Third, invest in training, employing a team, or bringing in a partner.

A strategy alone isn't enough to aggregate, process, and model data. Many new skills and roles are required to deploy, use, and operate a modern data platform. Often, some of these skills are only required for a portion of time and getting the right mix at the right time can be a challenge. The right partner can help you deploy the right technology and present the business case to justify the investment.

FOR EXAMPLE: You can learn why your sales were low last quarter in a particular region and for a certain product.

A good data platform—like ProArch's Dataware—can answer those questions within minutes or even immediately if you have a self-service model, and that's something executives really care about.

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How to Prepare a Data Strategy

Building a data strategy takes advanced planning, a dependable team, and the ability to pivot when necessary. The good news is that by taking the first step, you're ahead of the **70 percent** of enterprises that don't have a data strategy at all. So, what are the first steps? Consider your options, gather your team, and prepare for common roadblocks.

How to Establish Your **Data Strategy**

Have a clear objective or goal.

What are your priorities? How do you envision data helping you make those priorities happen? Be prepared to adjust and re-state your goals as you implement your strategy. Agility is key to unlocking the best results.

Understand what information you have and where it lives.

Get an idea of your current data footprint and what your organization uses that data for. Data may be stored in more places than you think, living in internal systems, external systems, shadow IT, databases, spreadsheets, file shares, collaboration tools, and out on the internet.

Understand what capabilities you have.

Explore current tools, data processing software, and infrastructure in place. What are the limitations and missing capabilities in your current architecture? What are the license and operating costs? What are the current constraints? Is the current model centralized, decentralized or a hub and spoke?

Evaluate architectural options and technology.

Revisit your goals and objectives and look for Cloud storage, orchestrations, warehouses, Spark capabilities, ingestion engines, analytics platforms, AI models, data visualization tools, and others that could help make your vision a reality. A data platform like **ProArch's Dataware** can help fast-track many of these and provide a central portal that will expedite connecting your data sources and processing the data into actionable insights.

Create a data team and assign roles.

Do you want to train an internal team, hire new employees, or outsource? Each option has its pros and cons, which will be discussed in more detail below.

Be meticulous on security.

Data has become a corporate asset and needs to be protected like any other asset. You would not leave the keys in your car with the windows wound down—and the same analogy applies to your data stores. Ensure you protect your data at rest, in transit, and that the right audiences have the right access to the right data.

Integrate compliance requirements.

It is crucial to figure out how you will govern data. Traditional manual mechanisms are no longer able to deal with the variety of data in organizations, and automation of governance has become essential to success. Neglecting to account for these requirements will hurt your business, especially considering that **data governance regulations** are becoming stricter around the world.

Plan for ongoing management and optimization.

Who will be responsible for operational excellence? If you bring in a third party, is optimization part of their services? Data changes as source systems change, connectivity issues can occur, and data pipelines can fail. It is crucial to monitor these and keep them running smoothly. Ensure you have the technology, people, and processes in place to keep your hard work working.

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Choosing Whether to
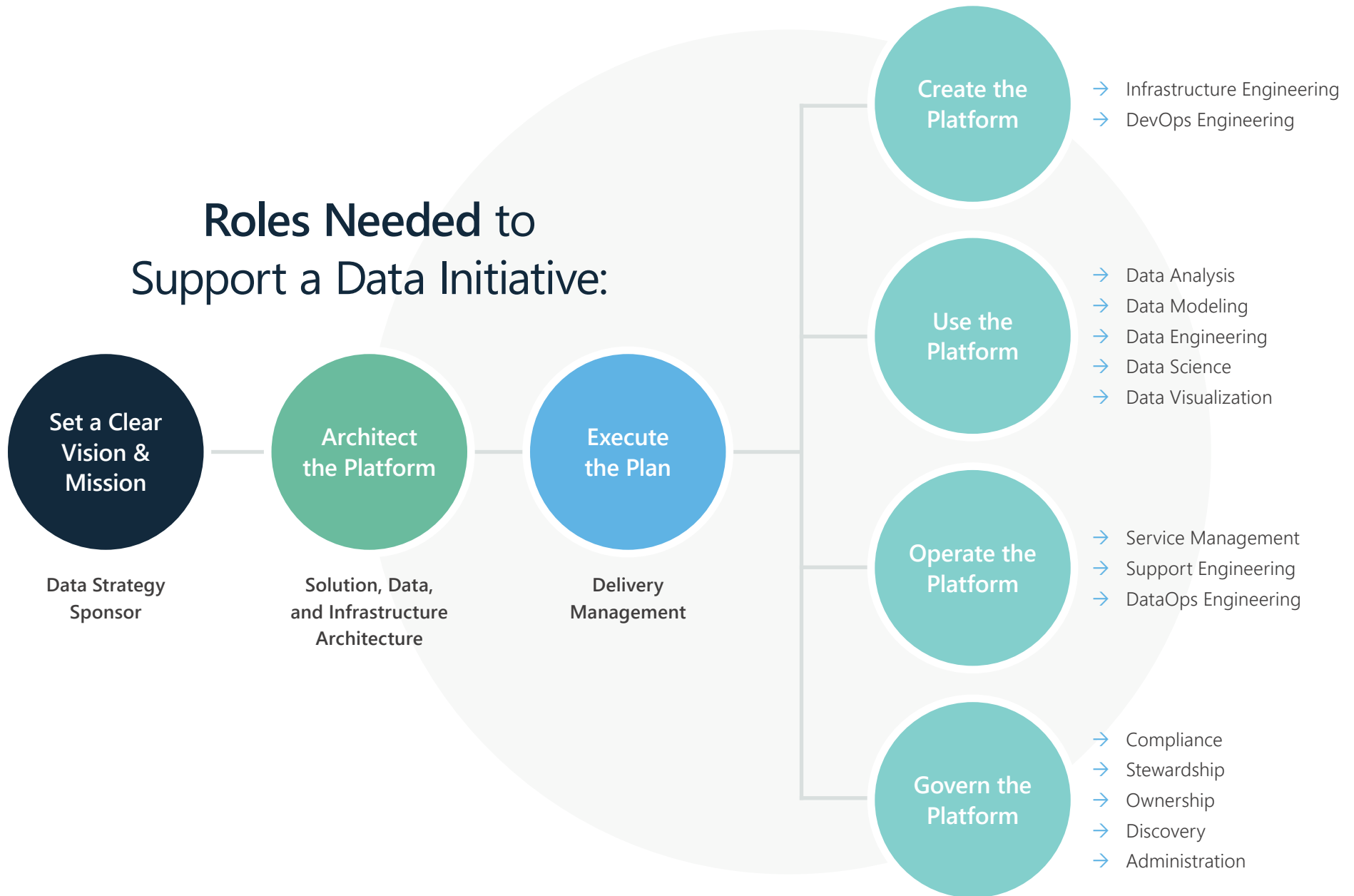# **Build a Team or Outsource**

A modern data strategy needs an approach that covers these core areas:

→ Vision and mission to set the strategy and build the business case for an implementation

→ A plan to create, build, or enhance the capabilities of the platform

→ A plan to use the capabilities to ingest, transform, model, and visualize the value in your data

→ A methodology and approach to discovering, building, and extracting value from your data

→ An operating model for maintenance and processes for support and maintenance

→ Policies, processes, and procedures for governing your data

A robust team will include multiple roles and functions to cover all areas. There will be both indirect and direct personnel associated with the project.

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Roles Needed to Support a Data Initiative:

Set a Clear Vision & Mission

Data Strategy Sponsor

Architect the Platform

Solution, Data, and Infrastructure Architecture

Execute the Plan

Delivery Management

Create the Platform
- → Infrastructure Engineering
- → DevOps Engineering

Use the Platform
- → Data Analysis
- → Data Modeling
- → Data Engineering
- → Data Science
- → Data Visualization

Operate the Platform
- → Service Management
- → Support Engineering
- → DataOps Engineering

Govern the Platform
- → Compliance
- → Stewardship
- → Ownership
- → Discovery
- → Administration

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The Pros & Cons of Building an Internal Versus an External Team

	INTERNAL TEAM	EXTERNAL TEAM
PROS	**Data Security:** Only your organization ever touches your data. **Control:** You have all the skills in-house to service any need. **The Convenience of Getting Started:** You don't have to search for and vet outside organizations. **Bring Together Fractured Teams:** Eliminate duplicative data effort between business units.	**Speed & Reliability:** Data initiatives are lifted up much faster because they have proven processes already in place, driving high-quality results. **Experience:** Have access to industry veterans who can also tap into other disciplines within the organization. **Flexibility**: You can have people of different roles involved for as long as it makes sense. Teams can be scaled up and down as required. **Managed Services:** Maintain and support your strategy often for about half the cost of employing a full-time person.
CONS	**Speed:** It can take three to six months to bring on existing resources from within or hire new. **Fractional Resources:** Some roles—that are both expensive and hard to retain—are needed at only certain times in a data program. **Cost:** FTEs can exceed budgets. The average salary for a data architect in the U.S. is **$122,774.** **Experience:** You have a limited pool of experience and expertise to utilize.	**Data Privacy:** You must verify and trust that the organization is following best practices and regulations when it comes to protecting your data. Choose one that has strong ties to cybersecurity and rigorous development practices. **The Time to Get Started:** Searching for an outside organization can be time-consuming and difficult. **Not All Partners are Equal:** Many organizations claim to be data experts but have little real-world experience.

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Common Roadblocks to Building a Data Strategy

Here are four common roadblocks to look out for:

Underestimating the people element of a data strategy.

No matter what platform you choose, the toolsets are tried and tested and will likely do the job cost-effectively. However, you need to be able to interpret the data and understand how it relates to your business and your people. If you don't have team members that can do that, the technology isn't worth much.

Lack of alignment.

You must get buy-in from all levels of the organization. This can be difficult. In fact, in a survey about market and reference data strategies at financial services firms, **76 percent** of respondents said that "improving how they manage market and reference data will require drastic changes in their organization, technology or strategy." In other words, a cultural shift and transformation is necessary if your data strategy is to yield the lasting results you want.

Overambition.

Many organizations choose goals or objectives that are too broad or deep. Your data strategy must be practical and achievable for your people, particularly those already overloaded. Sometimes you need an external team to come in and help you accelerate the strategy so your team doesn't burn out.

Creating only one strategy for the entire business.

The necessary level of granularity will differ from company to company, but for medium and larger businesses, a single data strategy will not suit every department. Each department needs its own consideration in your strategy and even, possibly, its own tools that are still compatible with other parts of the business to ensure good communication and avoid silos. With a balanced approach for each department or team, they can go at their own pace, which will ensure longer buy-in and a more effective strategy.

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How to Launch & Maintain a Data Strategy

Once you have all the necessary building blocks in place, it's time to execute, maintain, and continuously improve your data strategy. This shouldn't be difficult if your team has prepared adequately; it should simply become a natural way of working. If your data strategy is making people's jobs harder, something has gone wrong, and it's time to go back a few steps and reevaluate.

Selecting the Right Platform

While it is crucial to set up your data strategy properly, you also need to select the best tools to realize that strategy.

A platform that does this consistently well is Microsoft's analytics and business intelligence platform, Azure. According to Gartner's Magic Quadrant, Microsoft has a completeness of vision and an ability to execute that far exceeds that of its competitors. This is why ProArch's Dataware Accelerated Data Platform builds on Microsoft's reference architecture to manage and visualize data and reveal actionable insights.

Create Advocates for the Platform

With the right tools in place, the next step is to ensure that people in your organization are willing to persevere and change their habits. A suggestion is to have early adopters become evangelists to show their coworkers the benefits being achieved and provide support and know-how. The benefits soon start to outweigh the learning process

Ensuring a **Positive ROI**

To ensure you get a return on your investment, sequence matters. It's a mistake to implement technology first and then try to make it fit the needs of the business. Instead, your data strategy must start by focusing on business needs.

What is the organization struggling with the most? What are your competitors doing better than you? What are the employees' and each departments' pain points? Talk to the staff and key decision makers and get their perspective on these questions. You might find that there's a lot of shadow IT already in place. Once you better understand the needs of the business and your people, identify the capabilities you need, then apply the relevant technology.

Strive to take no longer than one to three months to define your data strategy and implement the supporting technology. You may even strive for less than a month if you consult a specialist organization like ProArch that can expedite with their experience and accelerators. If it takes longer, the information you're gathering may become stale and outdated, and the business may have moved on. The velocity of your strategy needs to match the velocity of the business.

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Putting Data to Work

When a data strategy is built thoughtfully and maintained expertly, everyone benefits, and every part of the business improves. Executive and entry-level jobs become easier. Reports are more valuable, they drive actionable insights, and workflows are more efficient. Here are a few examples of companies that worked with ProArch to put a solid data strategy into action.

A Commercial and Industrial Electricity Retailer

This company's commission structure and data are spread across an electronic data interchange system, internal systems, and Salesforce. That meant that the process of calculating commissions and notifying brokers took up to two weeks and could only be done monthly due to resource constraints. The company wanted a way to pull their data together automatically, calculate commissions, and communicate them with their broker network.

ProArch automated this commissions process end-to-end using their data platform, Dataware. ProArch deployed Excel and Salesforce connectors, structured and organized the client's data, and refined the data correlation between systems. Now, the commissions calculations are updated daily, and the reporting process is fully automated, saving the company significant resource time.

Food Life Cycle Analysis Company

This company tracks the environmental impact of individual food products, from farming the raw ingredients to selling final products to the end customer. With data coming from many different suppliers, farmers, and retailers, the work of manually organizing and analyzing the data was a big undertaking. To remedy this challenge, the company used Dataware to gather and store data, build AI, and analyze and present the data. ProArch accelerated the program, and the new platform became their go-to location to store and process.

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Create a Data Strategy that Turns Data into Dollars

Don't let an immature data strategy—or a lack of data strategy—hold your business back. A data strategy is key to maximizing the potential of your business and technology and differentiating you from the competition. **Plan strategically, assemble a dependable team, and be ready to pivot when you need to.** Follow the guidelines in this whitepaper to stay on the right course. With a thoughtfully built and expertly maintained data strategy, every part of your business gets better.

KEY TAKEAWAYS

To get started, reach out to ProArch's data strategy consultants or consider taking advantage of our Dataware platform to accelerate your journey.

→ A modern data strategy is a dynamic roadmap that drives your business to a future where data becomes a core asset to the organization.

→ If your current data operation has an imbalance between processing and benefiting from data, it is time to invest in a data strategy.

→ Getting buy-in from executives is crucial. Understand their perspective, illustrate the benefits of a data strategy, and invest in training, employing a team, or bringing in a partner.

→ Building an internal team for your data initiative allows more convenience and control, while an external team can typically do the job faster and more reliably.

→ Launching and maintaining a data strategy shouldn't be difficult if your team has prepared adequately; it should simply become a natural way of working.

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ProArch reveals insights and creates transparency by breaking down data silos and connecting data in new ways.

Our team can help you evaluate your current data environment, reveal business opportunities, map out missing capabilities, and plot a clear, strategic plan to deliver sustainable competitive advantage.

Contact us today to unlock insights that propel business expansion.

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