Any Company Can Become a Resilient Data Champion

April 2023
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Any Company Can Become a Resilient Data Champion

Companies that truly grasp and leverage data create more value for customers, employees, and shareholders—and build stronger resilience.

They understand their customers' needs in more depth, orchestrate their partner ecosystem more skillfully, enjoy superior automation and efficiencies, deftly pivot when necessary, and outperform competitors by wider and wider margins. Yet even leaders at the most advanced companies still struggle with how to best leverage data in nearly every initiative from sustainability, customer experience, and personalization to employee strategy and supply chain transparency.

With this in mind, recent BCG research commissioned by Google surveyed business and thought leaders around the world and scored their data maturity. (See "About Our Research.") More specifically, we compared data "champions" and "laggards," the key traits necessary to succeed, the common challenges, and the practical steps that leaders of companies at every level of data maturity can take to push their organizations in the right direction.
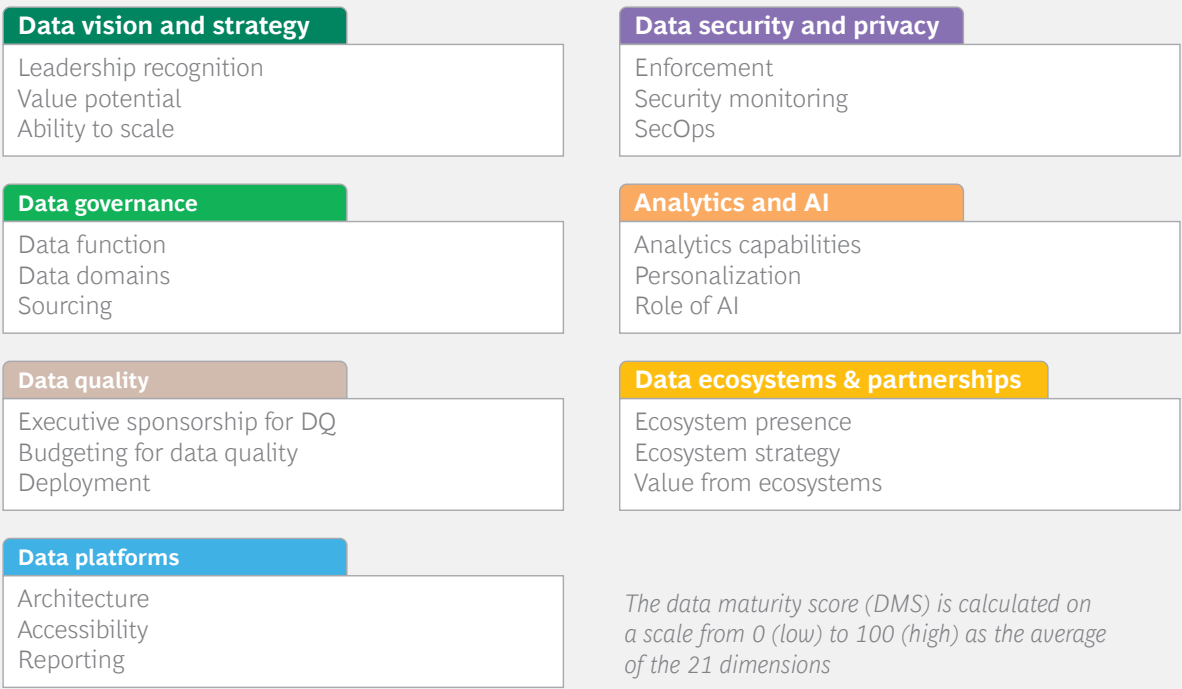
While every company can be a data champion, knowing one's starting point is important. To that end, we introduce four archetypes in this article based on a company's level of data maturity and business resilience. Each archetype will chart a distinct path to data maturity.

About Our Research

This BCG research, commissioned by Google, involved interviews with thought leaders as well as a survey of nearly 700 business leaders from nine industries across 21 countries. Discussions focused on macro trends, portfolio investment, and their organization's data challenges and capabilities. Building upon extending BCG's digital acceleration index (DAI) and data capability maturity (DACAMA) offerings, we took a deep dive into data maturity and calculated data maturity scores (DMS) across 21 dimensions from 0–100. Our research confirmed that levels of data maturity vary considerably among organizations. Based on the DMS, we split companies to compare the top 25% (data champions) with the bottom 25% (data laggards).

Data Maturity Is Measured in 21 Dimensions

Data vision and strategy

Leadership recognition
Value potential
Ability to scale

Data governance

Data function
Data domains
Sourcing

Data quality

Executive sponsorship for DQ
Budgeting for data quality
Deployment

Data platforms

Architecture
Accessibility
Reporting

Data security and privacy

Enforcement
Security monitoring
SecOps

Analytics and AI

Analytics capabilities
Personalization
Role of AI

Data ecosystems & partnerships

Ecosystem presence
Ecosystem strategy
Value from ecosystems

The data maturity score (DMS) is calculated on a scale from 0 (low) to 100 (high) as the average of the 21 dimensions
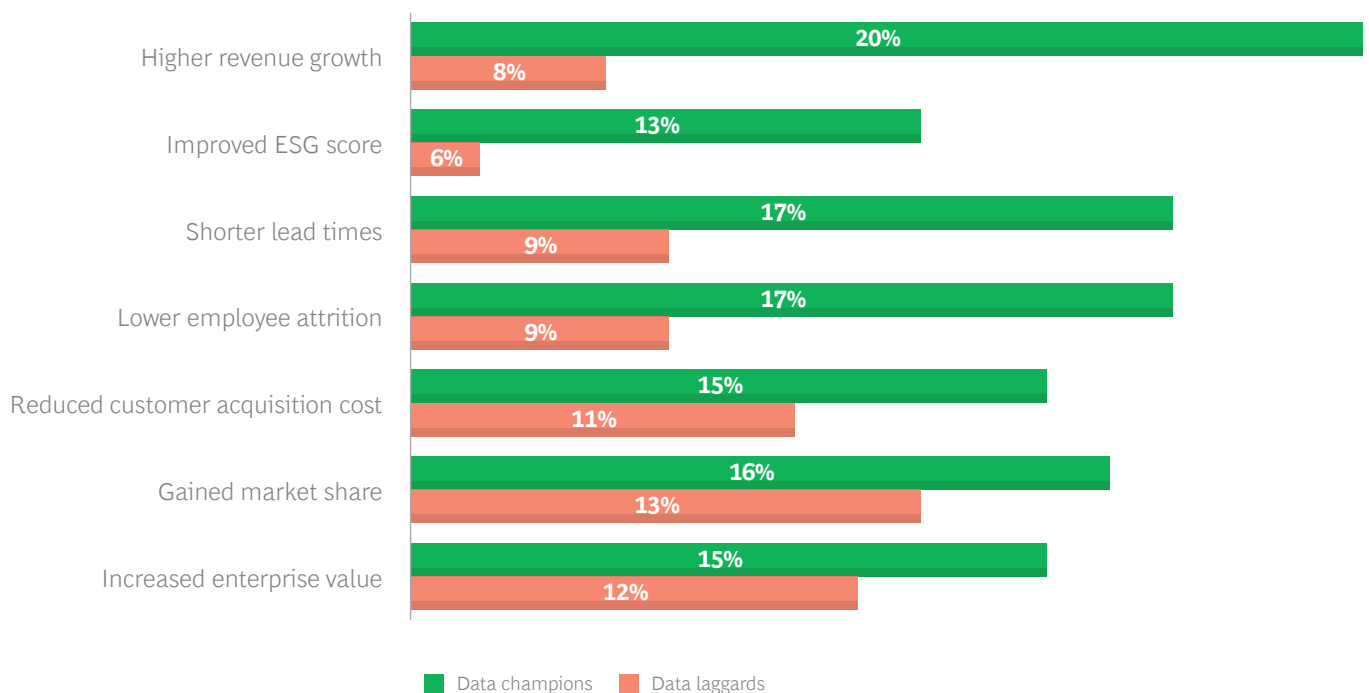
Source: BCG analysis.

Data Champions Outperform

While the road to data maturity is not an easy one, it's necessary and well worth the effort. We found that data maturity, performance, and resilience are strongly linked (See Exhibit 1). Across major indicators such as revenue growth, sustainability (ESG score), lead times, or employee attrition, data champions have outperformed their laggard peers. For example, champions grow their revenue over twice as fast as laggards.

This performance gap will continue to widen. About 30% of champions expect to increase performance in revenue growth by over 10% by the end 2024, compared to 13% of laggards. This gap is much wider than in 2022, when 16% of champions and 11% of laggards expected the same increase. Our findings support BCG and Google's previous research in March 2022, which revealed significant advantages for digital champions, including 15–20% greater revenue growth and 15–20% higher cost savings.

Exhibit 1 - Company Performance Is Linked with Data Maturity

Share of companies that have improved this KPI by over 10% in 2021 and in 2022.

	Data champions	Data laggards
Higher revenue growth	20%	8%
Improved ESG score	13%	6%
Shorter lead times	17%	9%
Lower employee attrition	17%	9%
Reduced customer acquisition cost	15%	11%
Gained market share	16%	13%
Increased enterprise value	15%	12%

Source: BCG analysis.

Five Traits Needed to Boost Performance

Any company can become a data champion. Likewise, any data champion can fall behind without continued investment and innovation. Many incumbent companies that existed before the late 20th century's push to digital have made a deliberate choice to make data a key strategic priority. Many of these incumbents have reached similar levels of maturity as first-generation digital natives. The parity is so close that they report very similar data challenges.
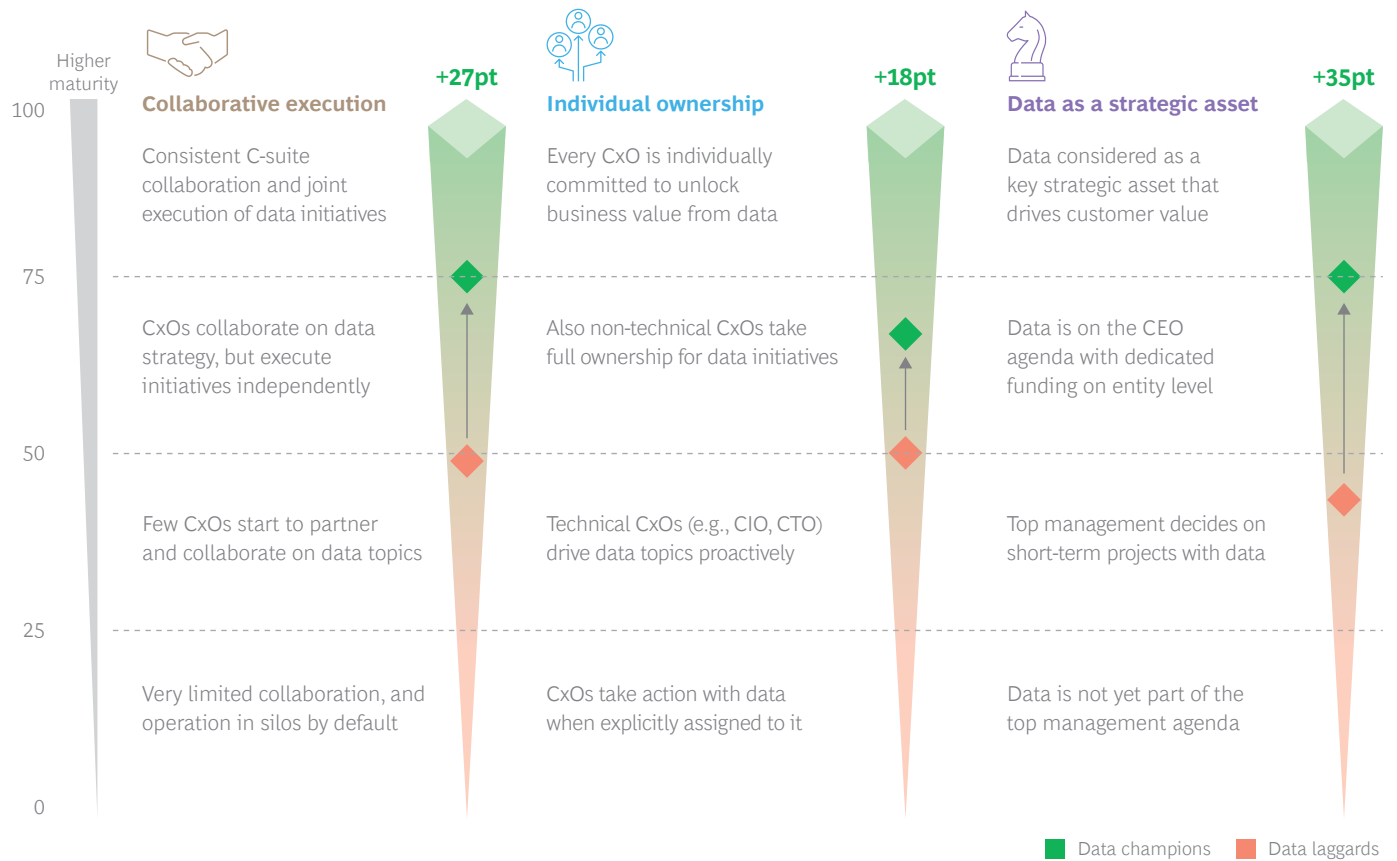
By looking closely at high-performing companies (top 25% across all performance KPIs), we identified five connected traits that boost performance.

CEOS TAKE THE DRIVER'S SEAT FOR DATA TRANSFORMATION. The CEOs of data champions are much more likely to recognize data as a strategic asset than CEOs of laggards (See Exhibit 2). These leaders are instrumental in helping translate the complexity of data transformation into a clear action plan and facilitating transformational change to unlock value. They don't do it alone but in close ally with functional CxOs (e.g., COO, CFO, CIO, CTO). Our 2022 study showed that the CEO's ability to align the C-suite to a shared agenda is pivotal to executing digital transformations and scaling digital use cases for value.

In our current study, data champions scored 27 points higher than laggards in C-suite collaboration. Members of the C-suite take ownership of their functional and business domains for data-related business outcomes. They put processes and incentives in place that empower people, and they ensure that messaging is consistent from the top of the organization down to frontline employees.
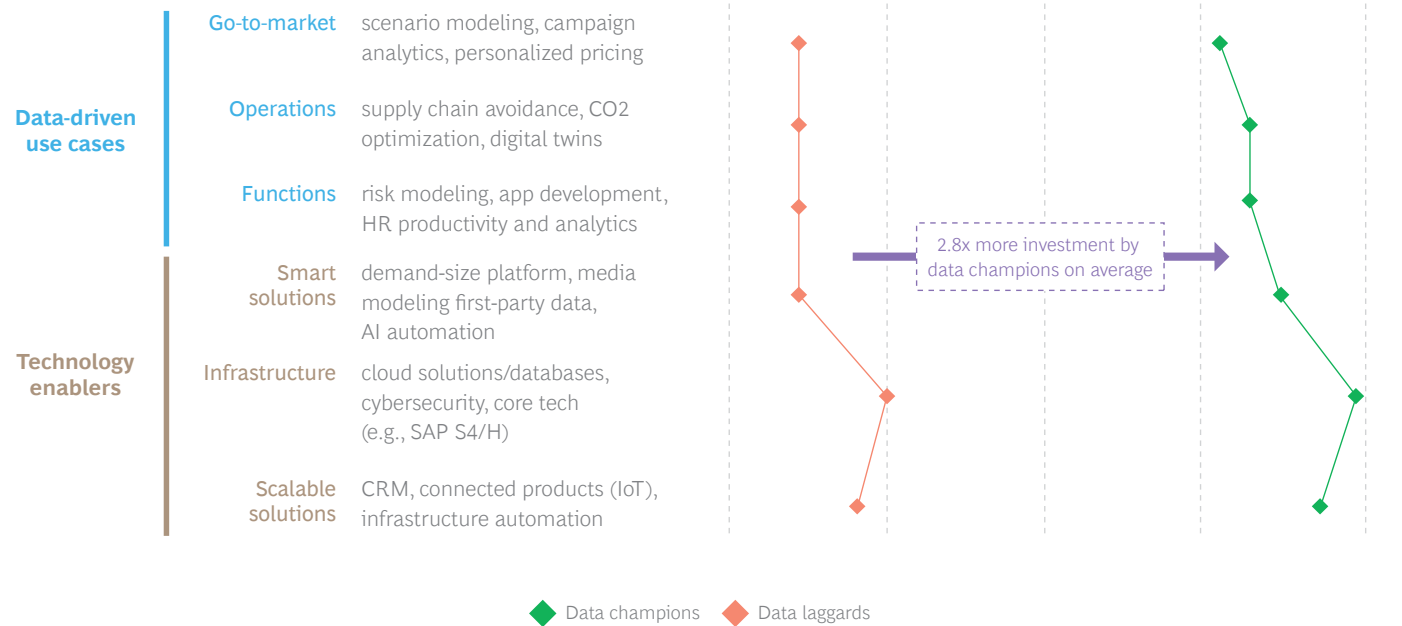
Exhibit 2 – Collaboration and Ownership Start at the Top

Collaborative execution +27pt

Consistent C-suite collaboration and joint execution of data initiatives

CxOs collaborate on data strategy, but execute initiatives independently

Few CxOs start to partner and collaborate on data topics

Very limited collaboration, and operation in silos by default

Individual ownership +18pt

Every CxO is individually committed to unlock business value from data

Also non-technical CxOs take full ownership for data initiatives

Technical CxOs (e.g., CIO, CTO) drive data topics proactively

CxOs take action with data when explicitly assigned to it

Data as a strategic asset +35pt

Data considered as a key strategic asset that drives customer value

Data is on the CEO agenda with dedicated funding on entity level

Top management decides on short-term projects with data

Data is not yet part of the top management agenda

Higher maturity

■ Data champions ■ Data laggards

Source: BCG analysis.

Exhibit 3 - Data Champions Report 4–5% Spend Increase in Data Use Cases and Tech Enablers

Planned change in data investments for 2023/24

| | | | 1% | 2% | 3% | 4% | 5% |

Data-driven use cases

- **Go-to-market** — scenario modeling, campaign analytics, personalized pricing
- **Operations** — supply chain avoidance, CO_2 optimization, digital twins
- **Functions** — risk modeling, app development, HR productivity and analytics

Technology enablers

- **Smart solutions** — demand-size platform, media modeling first-party data, AI automation
- **Infrastructure** — cloud solutions/databases, cybersecurity, core tech (e.g., SAP S4/H)
- **Scalable solutions** — CRM, connected products (IoT), infrastructure automation

2.8x more investment by data champions on average

◆ Data champions ◆ Data laggards

Source: BCG analysis.

DATA CHAMPIONS INVEST MINDFULLY, WITH A STRICT EYE ON VALUE.
Champions invest in scalable, data-driven use cases with a strict eye on value and business outcomes—knowing when to pull the plug on pilots that are not living up to expectations and when to double-down on those that drive real value. They balance the need for positive short-term ROI with longer-term bets on more innovative initiatives. On average, they plan to invest about 2.8x more than laggards in data-driven use cases across the value chain and technology enablers (See Exhibit 3). Also, 76%

of champions report having a strategy in place for generating value from data, and they measure value realization regularly. Only 46% of laggards report the same.

Moreover, champions outpace laggards by 15 percentage points in planning initiatives that will reduce IT and tech costs in the short term, particularly by optimizing service levels and sunsetting legacy systems to reduce redundancy. Laggards, on the other hand, are often stalled by multi-year IT and tech transformations that tie up key resources over a long period and don't promise near-term ROI.

Exhibit 4 - All Companies Face Severe Data Challenges

Data challenges (most severe in **bold**)	Less severe	More severe

Strategy and value

Isolated data initiatives; too many pilots but no scale

Lack of executive decision-makers for data transformation

Lack of data and AI strategy linked with business strategy

Insufficient investment in data, e.g., quality, tools, infrastructure

No visibility in ROI for data projects; not linked to outcomes

Organization

Limited business ownership; no clear roles and responsibilities

Lack of data talent, high attrition, hard to retain

Leaders afraid of change; don't build a workforce that disrupts

Non-familiarity or no availability of data tools

No data democratization due to political barriers

Analytics

Insufficient data granularity inhibits deep customer insights

Low visibility of data sources; no single source of truth

Risk of non-compliance with data privacy regulations

Lack of connectivity across siloed data domains

High use of self-built tools for siloed domains
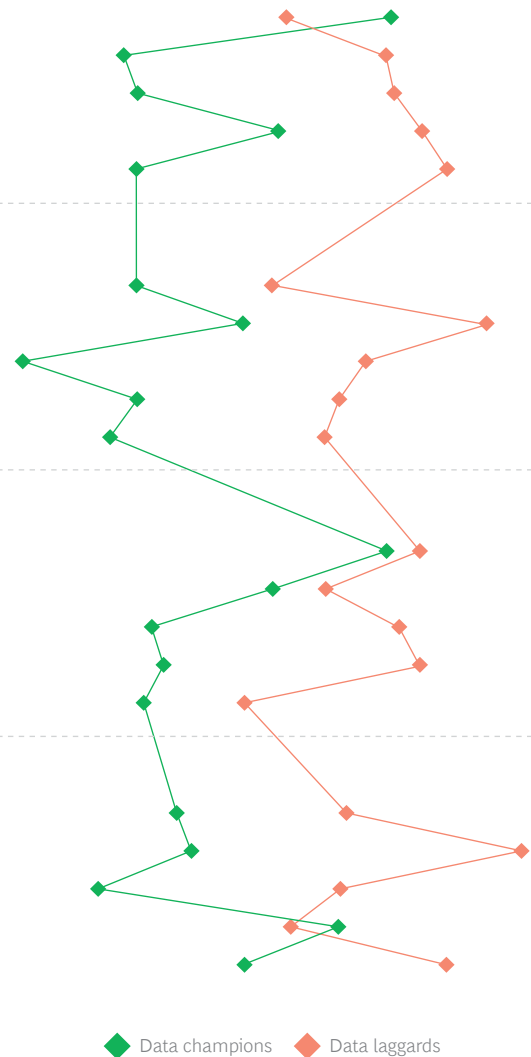
Technology

Low degree of reusability of data, tech stack, and algorithm

Tech modernization a showstopper, e.g., SAP S/4 migration

No central storage of data; no unified data layer

Very high reliance on vendor solutions, often not fit-for-purpose

Lack of security tools; insufficient cyber threat protection
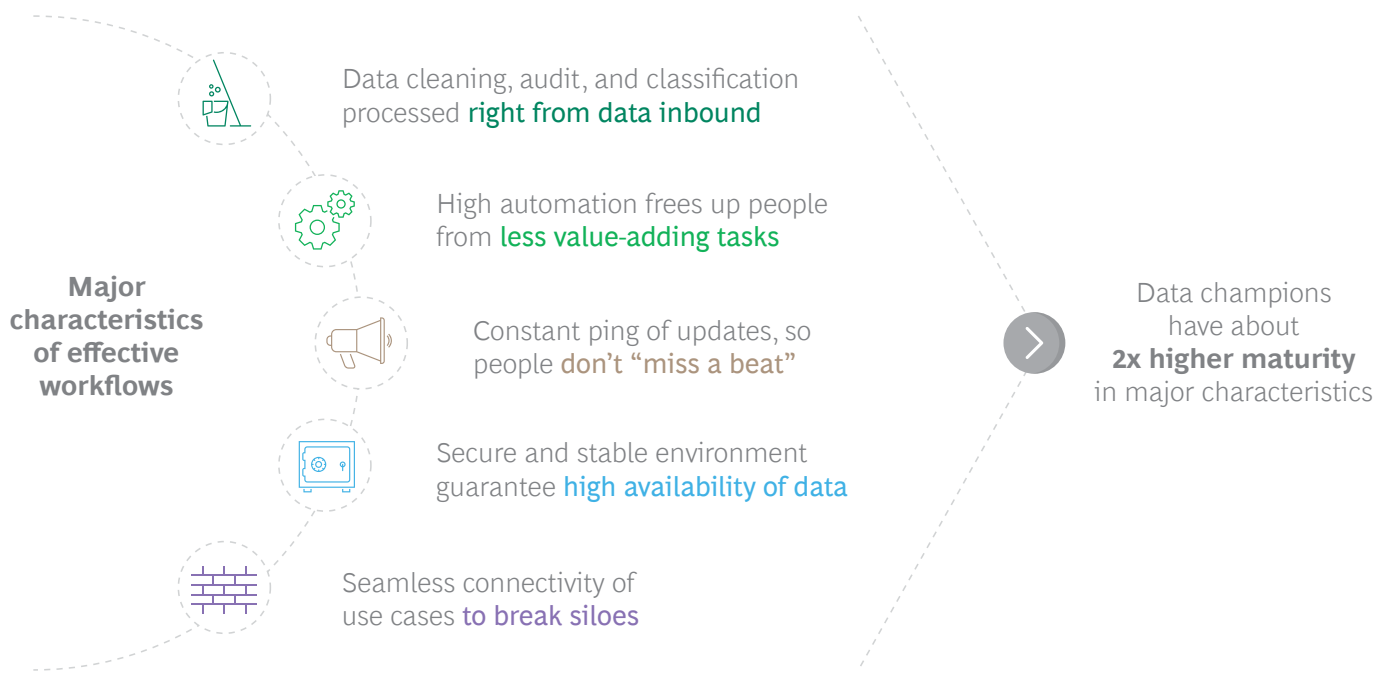
◆ Data champions   ◆ Data laggards

Source: BCG analysis.

DATA IS HIGH QUALITY AND ACCESSIBLE.
It's hard to overstate the importance of starting with clean, high-quality data. Yet every company in our study reported struggling with data challenges that span the entire data journey—from sourcing, cleaning, validating, and accessing data to sharing it internally and externally. For a vast majority (70%), the challenges are so severe they pose a threat to the success of their use cases. Unsurprisingly, data champions face significantly fewer challenges than laggards, and their struggles tend to be less severe (See Exhibit 4).

Champions have less siloed data domains and, consequently, more consolidated data storage. This improves the reusability of data objects, algorithms, and the data tech stack. Senior executives are assigned and committed to enforcing policies for data accuracy, consistency, reliability, and timeliness. These policies are continuously tracked across the organization and external partners. To back up these efforts, many champions have a dedicated data management and governance function to ensure the organization and the third parties they work with adhere to their data quality standards.

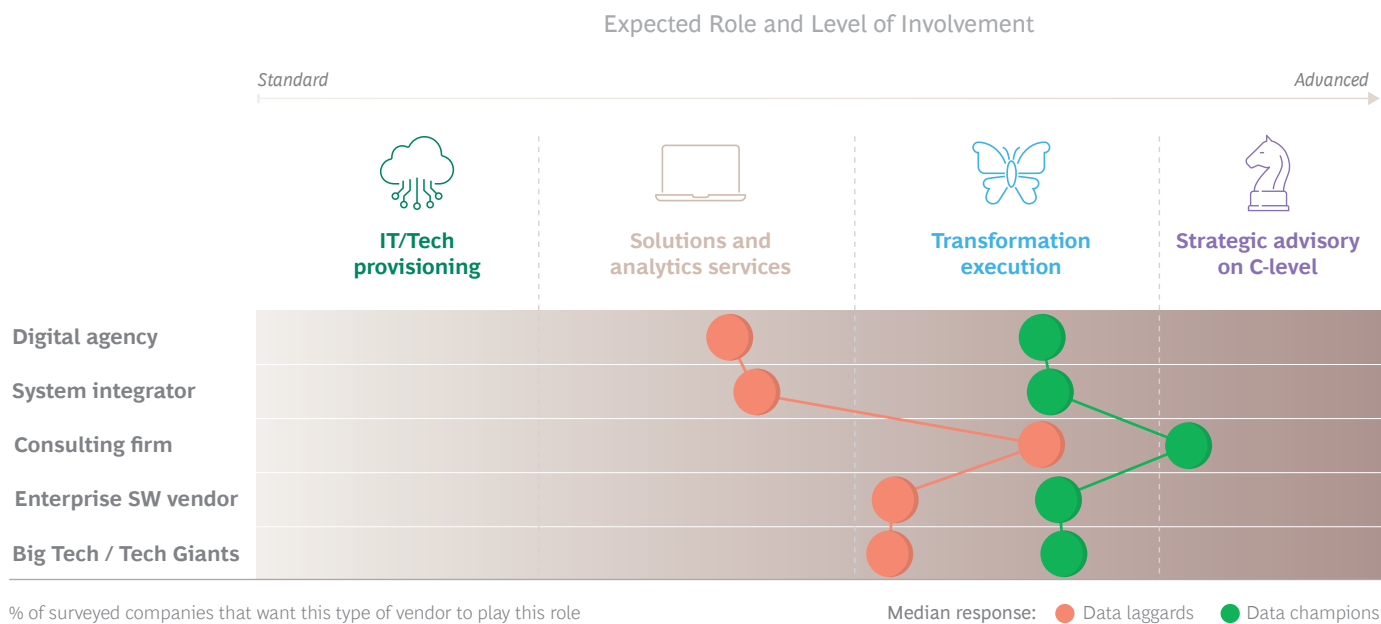# Exhibit 5 - Data Champions Have Effective Workflows in Place

Major characteristics of effective workflows

Data cleaning, audit, and classification processed **right from data inbound**

High automation frees up people from **less value-adding tasks**

Constant ping of updates, so people **don't "miss a beat"**

Secure and stable environment guarantee **high availability of data**

Seamless connectivity of use cases **to break siloes**

Data champions have about **2x higher maturity** in major characteristics

Source: BCG analysis.

WORKFORCE IS EMPOWERED AND FEELS TRUSTED. Champions know they need more talent. Another recent study shows that companies on average have about 1.5% of full-time employees working in roles related to data and AI. But champions assign 2.2% to these roles, while laggards just 0.8%. Laggards seem to realize that they are struggling on the talent front. In our study, we asked respondents to rank the 10 challenges that are top of mind for executives. Laggards ranked "Talent and employee value proposition" as the third highest priority, far ahead of champions, which ranked it second to last.

In addition to workforce size, data literacy is key. Literacy requires tools and workflows (See Exhibit 5) that give employees the opportunity to gain experience about how to use data effectively in their daily work. Champions equip their front-line teams with AI and encourage their people to experiment with modern technologies. Not surprisingly, three times more data champions than laggards report that their leadership is not afraid to build a workforce eager to innovate and disrupt. Champions are also committed to responsible AI and AI regulation—which is valued by both employees and customers—to ensure they aren't building tools that cause harm to individuals or the community.

Exhibit 6 - Companies Want Third Parties to Assist in Executing Transformations

Expected Role and Level of Involvement

Standard → *Advanced*

	IT/Tech provisioning	Solutions and analytics services	Transformation execution	Strategic advisory on C-level
Digital agency				
System integrator				
Consulting firm				
Enterprise SW vendor				
Big Tech / Tech Giants				

% of surveyed companies that want this type of vendor to play this role

Median response: ● Data laggards ● Data champions

Source: BCG analysis.

PARTNER ECOSYSTEMS ARE USED TO DRIVE SCALE.
We have studied what companies expect from their partners, such as digital agencies, system integrators, Tier 1 consulting (management and strategy), enterprise software vendors, and tech giants. It's clear that the role of partners is changing (See Exhibit 6). Data champions expect third parties to be much more than providers of IT, analytics, and other technology products and services. They want full transformation partners that can help them discover disruptive solutions and scale data offerings, and they lean heavily into the cloud to achieve these goals. In fact, spending on cloud solutions, including highly responsive databases, is expected to increase the most of any data-enabling technology in 2023 and 2024 (followed by AI, security solutions, and data analytics).

But dealing with third parties comes with complexity and cost risks. To mitigate these risks, successful companies have deliberately built capabilities in "multi-partner orchestration" that help them manage their ecosystem and steer partners toward joint value creation (by ensuring that only fit-for-purpose offerings are advanced, for example). About twice as many champions as laggards align procurement and incentive plans among third parties.
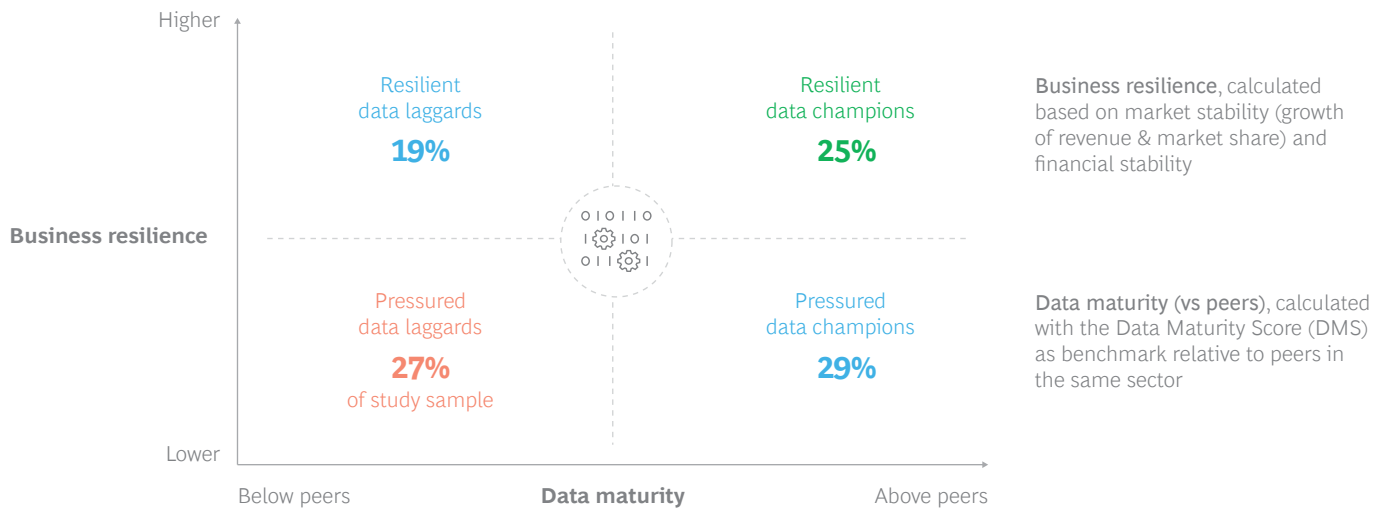
Know Your Archetype

Being a data champion does not mean a company has completely mastered data. Even champions continue to face many challenges on the road to data maturity. All companies should ask: What is our starting point, and how can we accelerate the path toward high data capabilities? The answer to these questions depends on the company's status in terms of two dimensions: data maturity and business resilience.

Data maturity. Advanced companies leverage a strong data foundation to scale data-driven use cases and disrupt peers. Less advanced companies may still need to build foundational enablers (such as data platforms, quality assurance, security enforcement, and analytical capabilities) to avoid falling further behind. It is critical to understand that a company's starting point is not only dependent on its absolute data maturity, but also on where it stands relative to peers.

Business resilience. Resilient companies demonstrate persistent financial solvency in stable markets and create advantages in moments of disruption. They can take larger (financial) risks and invest in more use cases to expand their competitiveness. Companies that are pressured by tighter budgets need to focus on cost reduction use cases.

Exhibit 7 - Data Maturity and Business Resilience Define the Starting Point

Higher

Business resilience

Resilient
data laggards
19%

Resilient
data champions
25%

Business resilience, calculated based on market stability (growth of revenue & market share) and financial stability

Pressured
data laggards
27%
of study sample

Pressured
data champions
29%

Data maturity (vs peers), calculated with the Data Maturity Score (DMS) as benchmark relative to peers in the same sector

Lower

Below peers   **Data maturity**   Above peers

Source: BCG analysis.

By considering where they fall on both dimensions, leaders can place their companies in one of four archetypes (See Exhibit 7). Knowing your archetype helps clarify strengths, weaknesses, where the company lies in the data ecosystem, and how to accelerate data capabilities.

Pressured data laggards have less financial room to maneuver, but still need to improve their low data maturity and build crucial capabilities at the core. They should prioritize a few data use cases that will support cost reduction, such as automation and efficiency, and achieve a short-term ROI.

Resilient data laggards have stable finances and markets but lag peers in data maturity. They need to immediately make data and AI a top C-suite priority. (See "AI Maturity by Industry.") These companies should prioritize 6 to 10 data/AI use cases that strengthen their data foundation and improve their cyber, risk, and compliance capabilities. Also, they should evaluate possible data solutions beyond the core that could help them outperform peers.

Pressured data champions have built strong data capabilities but are funding constrained. Even so, they must continue innovating to maintain their data advantage. This will require being surgical about short- to mid-term initiatives by prioritizing investments in one or two use cases that support IT and business cost reduction, for example. Also, there may be opportunities to leverage partner ecosystems and scale jointly, sharing the risk.
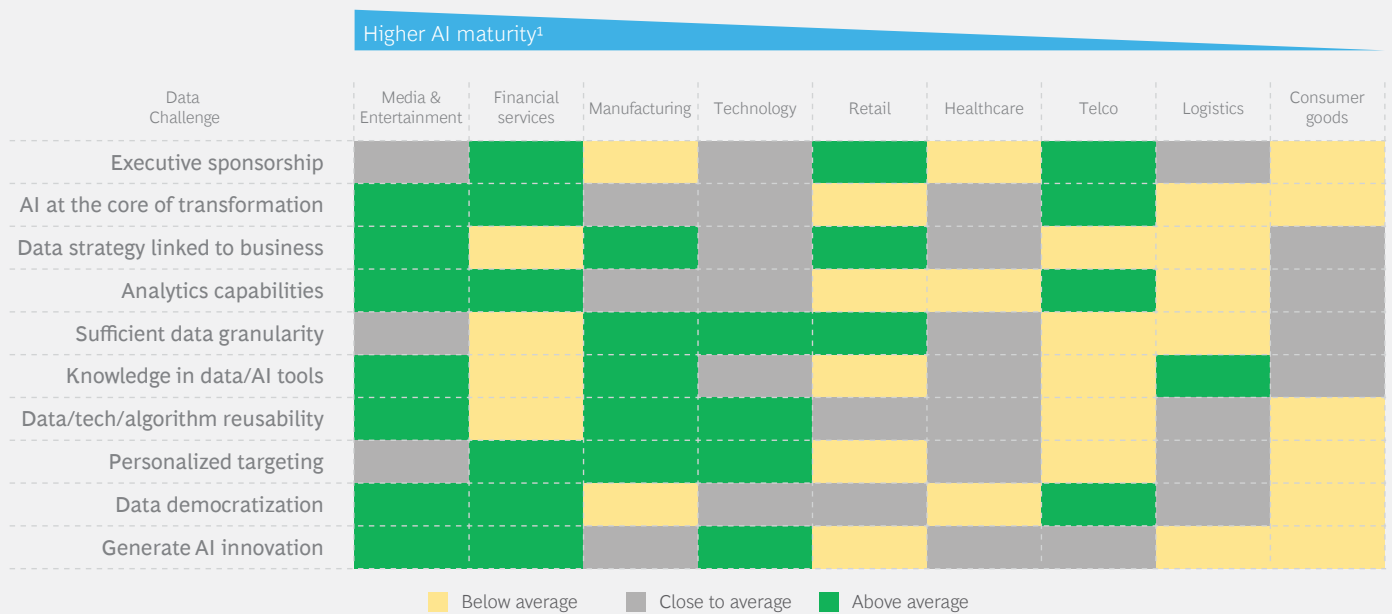
Resilient data champions are in the strongest position, benefiting from business resilience and world-class data capabilities. They should press their advantage by taking strategic risks to disrupt competitors, prioritizing initiatives that make the business future-proof (such as green tech), orchestrating partner ecosystems to improve scale, and doubling down on scaling use cases. Additionally, they should take the opportunity to break down any data silos and address remaining data challenges.

AI Maturity by Industry

Data champions across industries have put AI at the core of their transformation to improve a wide range of business functions, including supply chain, marketing, customer service, and financial analysis. But to realize these benefits, organizations must equip algorithms with high-quality data, which only the most data-mature companies can provide. Within data-mature companies, executives sponsor structured data quality programs run by dedicated data offices, integrated into cross-functional teams that orchestrate data activities. Additionally, superior analytics capabilities allow them to process large volumes of data in real time, including holistic customer views for personalized micro-segment targeting. Lastly, employees feel free to innovate and feel comfortable to experiment with emerging technologies like generative AI. They have the right elements to control risks while scaling, and they trust that AI will be deployed responsibly.

While data champions in all industries make AI a priority, the level of data and AI maturity varies by industry. Those that embraced digital transformation early, such as media and entertainment, financial services, and technology, now report above-average maturity in AI capabilities. Even these industries, however, struggle with core capabilities—namely insufficient data granularity, lack of expertise in data tools, and low reusability of data assets. Ironically, companies deeper into the journey might comprehend and report greater data challenges than laggards that have just begun their journeys and might suffer from naïve confidence.

Sectors with High AI Maturity Still Face Data Challenges

Higher AI maturity[1] →

Data Challenge	Media & Entertainment	Financial services	Manufacturing	Technology	Retail	Healthcare	Telco	Logistics	Consumer goods
Executive sponsorship	Close to average	Above average	Below average	Close to average	Above average	Below average	Above average	Close to average	Below average
AI at the core of transformation	Above average	Above average	Close to average	Close to average	Above average	Close to average	Above average	Below average	Close to average
Data strategy linked to business	Above average	Below average	Above average	Close to average	Above average	Below average	Close to average	Below average	Close to average
Analytics capabilities	Above average	Above average	Below average	Below average	Below average	Below average	Above average	Below average	Close to average
Sufficient data granularity	Close to average	Below average	Above average	Above average	Above average	Close to average	Below average	Above average	Close to average
Knowledge in data/AI tools	Above average	Below average	Above average	Close to average	Above average	Close to average	Below average	Above average	Close to average
Data/tech/algorithm reusability	Above average	Below average	Above average	Above average	Close to average	Close to average	Below average	Close to average	Below average
Personalized targeting	Close to average	Above average	Above average	Above average	Below average	Above average	Below average	Close to average	Below average
Data democratization	Above average	Above average	Below average	Close to average	Above average	Below average	Above average	Close to average	Below average
Generate AI innovation	Above average	Above average	Close to average	Above average	Below average	Close to average	Close to average	Below average	Below average

Legend: Below average | Close to average | Above average

Source: BCG analysis.

[1]Data capabilities with high relevance for AI.

Three Ways to Jump-Start the Journey

No matter a company's archetype, leaders can take three actions immediately that will help develop the traits needed to boost performance and move them decisively toward greater data maturity.

Conduct a pulse check. CEOs should assess their organization's data maturity and digital capability maturity with senior leaders to ensure everyone is aligned on a vision that reflects current economic and strategic realities. Having a clear understanding of how data and AI can advance business success is critical to aligning and prioritizing initiatives and measuring their impact. This pulse check should build enthusiasm among leaders to evangelize the vision across the organization.

Hire talent for data priorities. There is much economic uncertainty and belt-tightening today. Yet even financially pressured corporate leaders should be careful about pausing technology spending, and instead rigorously prioritize tech spend for value. This could quickly erode competitive positioning. Recent layoffs offer an opportunity to snap up tech and digital talent—data scientists, ML engineers, cybersecurity specialists, product managers, and the like. Leaders should review their data priorities and goals, assess where talent gaps exist, and start looking to fill them.

Orchestrate the partner ecosystem. A partner strategy and orchestration capability are critical to building data maturity and resilience. This is true for all companies, but for those organizations with less financial resilience, it's particularly crucial to have partners that can provide key assets fast. For example, partnerships with services providers are a way to quickly scale solutions such as AI and to optimize sourcing costs.

Macroeconomic circumstances are subject to change and sometimes-sudden pivots, but one thing will remain constant: companies must continue to improve their data maturity to tap into the rich vein of business insights that will elevate performance and ensure the company's future success. The sooner a company can define its data strategy and begin its journey, the better. The good news is that every company, regardless of its current maturity level or industry, can become a data champion.

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