FROST & SULLIVAN

DON'T SETTLE FOR A PATCHWORK DATA STRATEGY: LESSONS LEARNED FROM C-SUITE EXECUTIVES

FROST & SULLIVAN VISUAL WHITEPAPER

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CONTENTS

Executive Summary

C-suite executives are increasingly driving their organizations to become more data-centric. Their vision is to leverage insights derived from corporate and public data sources to improve decision- making and streamline operations throughout the organization. In most cases, this requires exposing the data to advanced analytics, artificial intelligence (AI), and machine learning (ML) capabilities.

However, vision and execution are often far apart. Only a few companies have sufficient knowledge and resources on-staff to plan, design, and implement a foundational data and AI strategy that is scalable across multiple departments. Instead, they may end up with a fragmented strategy, with stakeholders implementing some, but not all, components required to drive value. Essential initiatives, including governance and ongoing maintenance, may be given short shrift. This can leave the company in “data debt,” in which deferred investment drives up costs. In other words, by not implementing the data and AI strategy correctly right at the start, the company inches farther away from the goal of leveraging data insights.

In this visual whitepaper, Frost & Sullivan draws on findings from its recent survey of C-suite executives responsible for their companies’ data and AI strategies.[1] We identify the key goals they set out to achieve as well as the challenges that stood in their way. Finally, we offer their perspectives on the benefits of engaging with an expert third-party service provider.

[1] The Frost & Sullivan Data Management and AI survey was conducted via web in March-April 2022. Responses were returned by 890 IT and Business decision-makers representing a range of industries and company sizes.

Data Is Essential to Competitive Success

Most business executives agree that corporate data is a highly valuable asset that can yield important insights to help the business run more effectively. CEOs, in particular, are betting the company's competitive success on the ability to derive value from data.

Organizations expect to utilize data to achieve a range of critical business goals.

48% of all data decision-makers and 73% of CEOs agree that deriving value from data is their top priority and essential to remaining competitive.

The top-ranked business goals that C-level executives expect to achieve by leveraging data:

- Improving employee productivity
- Boosting operational and business processes
- Making faster and more accurate decisions
- Enhancing customer experience
- Boosting creativity and innovation

Source: Frost & Sullivan 2022 Data Management & AI Survey

A Seamless Data Strategy Serves Multiple Business Goals

A data and AI strategy has the ability to transform many areas of the business, with different stakeholders seeking to leverage data to meet their own objectives. While most C-level executives agree that improving data literacy among employees and increasing use of AI and ML are top priorities, stakeholders also bring their own priorities and perspectives to the data transformation initiative. For example:

Chief data officers (CDOs)

with likely the broadest purview of the magnitude of data collected by the company — are more likely than their C-level colleagues to prioritize "integrating datasets of varying formats."

Chief information security officers (CISOs)

are most concerned about "modifying and unifying our data management system."

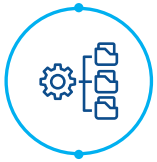
Non-technical C-suite executives

(e.g., Chief Revenue Officer [CRO], Chief Marketing Officer [CMO]) are focused on "empowering all employees to use data to drive innovations"

The disparate viewpoints may result in a patchwork strategy, with each stakeholder or department pursuing its own objectives. The company may struggle to develop and implement a holistic strategy that addresses the full range of needs.

C-suite executives' top-five objectives for their data strategy:

Improve data literacy



Increase the share of data analyzed with AI and ML

Implement predictive maintenance of operational assets

Democratize data (empower business users to easily access data and analytics without intervention from IT or analytics teams)

Empower all users to use data to drive innovations

Source: Frost & Sullivan 2022 Data Management & AI Survey

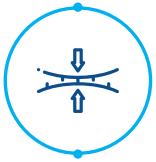
A Lack of “Data Culture” Erodes Trust in Data Initiatives

C-level executives are acutely aware of both the importance of gaining and retaining stakeholder support for their data initiatives and of the high risk of losing the goodwill through a poorly designed, executed, or communicated strategy. CEOs and CIOs are particularly attuned to organizational resistance to change, which may be exacerbated when data program owners do not have the experience or knowledge to initiate change-management processes.

Heightened expectations regarding results or return on investment (ROI) for data initiatives may also place pressure on the team. This is most likely to occur when stakeholders are not fully aligned on objectives for the initiatives.

C-suite’s top-ranked business challenges to implementing a data and AI strategy

Gaining the trust of data consumers that data is accurate



Overcoming resistance to changing role and processes

Gaining/retaining executive support

Overcoming negative perceptions of the initiative, based on a previous poor experience

Convincing stakeholders the initiative will deliver an attractive ROI

Source: Frost & Sullivan 2022 Data Management & AI Survey

Data Teams Struggle with Technical Challenges

Companies face very real technical challenges to implementing their data and AI strategies. The complexity of addressing diverse data streams, users, applications, security, and compliance requirements in a streamlined data management strategy is daunting.

In these early days of comprehensive data strategies, few organizations have sufficient on-staff experience and expertise to address the technology challenges. This can potentially cause suboptimal implementations and/or create budget and timeline overruns.

Across all C-level roles, the top technical challenge is ensuring data security and compliance. In addition, CISOs and CFOs are highly concerned with “avoiding data debt,” that is, ensuring that implementing low-cost but suboptimal processes for managing data doesn’t outweigh the value.

Top-ranked technical challenges to data and AI strategy, as reported by C-suite executives

Ensuring data security and compliance across systems

Analyzing data across degrees of recency

Building a modern data architecture

Integrating unstructured content (e.g., documents, images, social media)

Maintaining standards for data quality and integrity

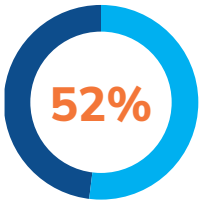
Source: Frost & Sullivan 2022 Data Management & AI Survey

C-level Executives Are Positive, but Recognize the Data Journey Is Just Beginning

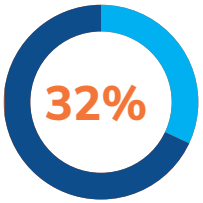
Most C-suite executives believe their data strategy is keeping pace with others in their industry, yet they are aware of the long journey ahead.

When probed, almost 60% of C-level executives say their firms have only partially implemented all key aspects of their data strategies, and 22% say they have not yet executed their strategies. Interestingly, initiatives related to governance and ongoing maintenance lag behind other steps (e.g., planning and design, implementation, advanced analytics/AI). This could lead to challenges as the initiative scales.

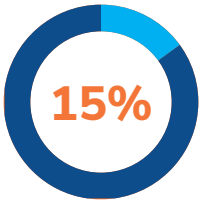
C-suite self-assessment of data strategy execution



We are ahead of others in our industry

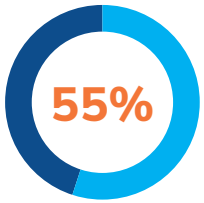


We are on track with others in our industry



We are behind others in our industry

C-suite self-assessment of AI strategy execution



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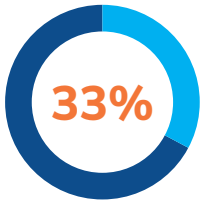

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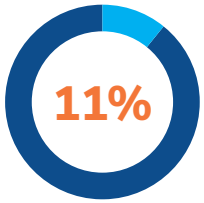


We are behind others in our industry

Source: Frost & Sullivan 2022 Data Management & AI Survey

Building an Effective Data & AI Framework

The antidote to the patchwork data initiative is a holistic, comprehensive data framework. An effective, scalable data and AI framework provides the foundation to achieving maximum value from corporate data assets. From planning and design, through governance and ongoing maintenance, the framework requires participation from a range of stakeholders, including IT, analytics, data owners, end users, and senior executives.

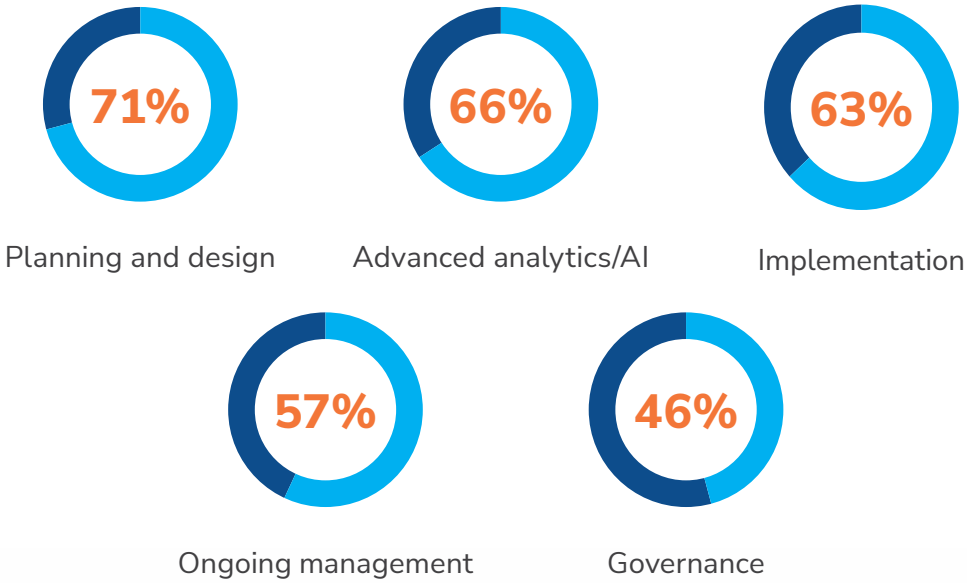
Each step and initiative is important to the overall data strategy.

Third-party Experts Mobilize Data Transformation

The complexity and importance of a data and AI strategy, coupled with the lack of experienced in-house resources, are driving businesses to seek outside expert assistance. The majority of organizations — 66% — are turning to third-party services firms for assistance with their data and AI strategies, and another 13% are considering doing so in the next 2 years.

Yet most engagements are piecemeal, with organizations using their partners to deliver specific tasks. In most cases, the primary role of these partners is to help organizations scope and jump- start their initiatives. However, other critical tasks, such as governance and management, have lower priority. The result can be a fragmented or incomplete strategy, with more energy invested upfront and less invested in latter stages.

C-suite % using third-party solution provider for each task



Source: Frost & Sullivan 2022 Data Management & AI Survey

Why C-suites Engage a Third-party Solution Provider for their Data & AI Strategy

C-level executives are looking for a partner that is willing to be accountable for the broad and complex scope of data and AI initiatives, across technology, people, and processes. They trust the partner to fill gaps in their own team’s knowledge and to drive the achievement of key goals. They also believe partners will cost them less time and money than tackling the initiatives on their own, thus providing greater value in the long run.

Top 5 reasons C-level executives choose a third-party data and AI services provider:

Provider offers a one-stop shop for a range of data and AI technologies and services

Company is unwilling or unable to commit to ongoing investments in technology and people that would be necessary to do the project on our own

Provider will resolve problems more quickly

Provider will implement initiatives faster

Provider can assure data security and compliance

Source: Frost & Sullivan 2022 Data Management & AI Survey

Benefits Realized by Engaging a Third-party Solution Provider for Data & AI

Among C-suite executives who have engaged a third-party provider, there is strong alignment between the overall objectives they cited for their data strategies and the benefits they have realized with their partners. Overall, executives cite improved data quality and faster decision-making as top benefits. They also welcome the partner’s advice regarding new technologies that are hitting the market.

Top-ranked benefits from using a third-party solution partner for data & AI strategy

Better data quality

Advice on new technology solutions

Ability to make faster decisions

Greater ability to meet compliance requirements

Making data more accessible to more employees

Source: Frost & Sullivan 2022 Data Management & AI Survey

Checklist for Choosing a Data or AI Strategy Partner

Organizations have a long checklist of criteria for selecting an effective data or AI partner. They expect proven expertise in AI and data technology as well as processes. They want superior help desk support. They expect experience in various industries and use cases. They require state-of-the-art security solutions. And they require value for the investment.

But they also look at the provider as a trusted partner that can help raise the organization’s knowledge level, thus helping it prepare for the data-centric future.

“Must-have” partner selection criteria related to effectiveness of data/AI solutions

Practical data framework to implement incrementally

Industry-leading data availability SLAs

Designs data solutions for my unique business

“Must have” partner selection criteria related to advisory and knowledge transfer

Excellent technology support/helpdesk

Advisory services to augment in-house knowledge

Offers training/knowledge transfer to my team

Source: Frost & Sullivan 2022 Data Management & AI Survey

The Last Word: Avoiding a Patchwork Strategy to Maximize Data Value

With a firm commitment to the transformative power of data and analytics, C-suite executives are spearheading their companies’ data initiatives. Yet in these early days of data frameworks, few companies have sufficient expertise and experience on staff to build, implement, and manage a fully comprehensive, scalable data strategy that will enable them to leverage the value of data across the organization.

Instead, they may focus primarily on the components where they have existing knowledge or strength, for example, data integration, protection, or visualization; or different stakeholders may drive parallel initiatives, creating pockets of expertise that are not scalable across the business. The result is a fragmented data strategy that cannot support the company’s needs.

To maximize value and ensure long-term success, C-level executives need to build a data culture, one that supports a cohesive and comprehensive data framework that can grow with the business. For assistance with the task, C-suites are seeking a partner with a transformative mindset, proven methodology, and deep expertise in leading data technologies and business processes.

With the right partner by their side, C-suite executives feel confident they can avoid the patchwork data approach. Instead, they can implement a holistic data strategy that will extend to every role and department, enabling all organizations, processes, and employees to leverage data for business success.

APPENDIX: 5-STAGE DATA FRAMEWORK

Data and AI Framework: Planning and Design

The planning and design stage gets the project started and establishes parameters.

Planning and Design

- Strategy/roadmap development
- Use case identification and prioritization
- Architectural blueprint
- Data sourcing/ discovery
- Business case and ROI/ TCO calculations
- Success metrics establishment
- Technology evaluation and recommendations

Data and AI Framework: Implementation

The data and IT teams may be most comfortable with the implementation phase, which involves technology purchases and data integrations.

Implementation

- Data cleansing/ preparation
- Integration/operability of disparate data formats
- Data architecture building
- Data replication
- Master data management/ metadata management
- Content/document management
- Data management/visualization technology implementation
- Data process/policy documentation
- Provision of access to authorized users
- AI/ML model training
- Data cleansing

Data and AI Framework: Governance

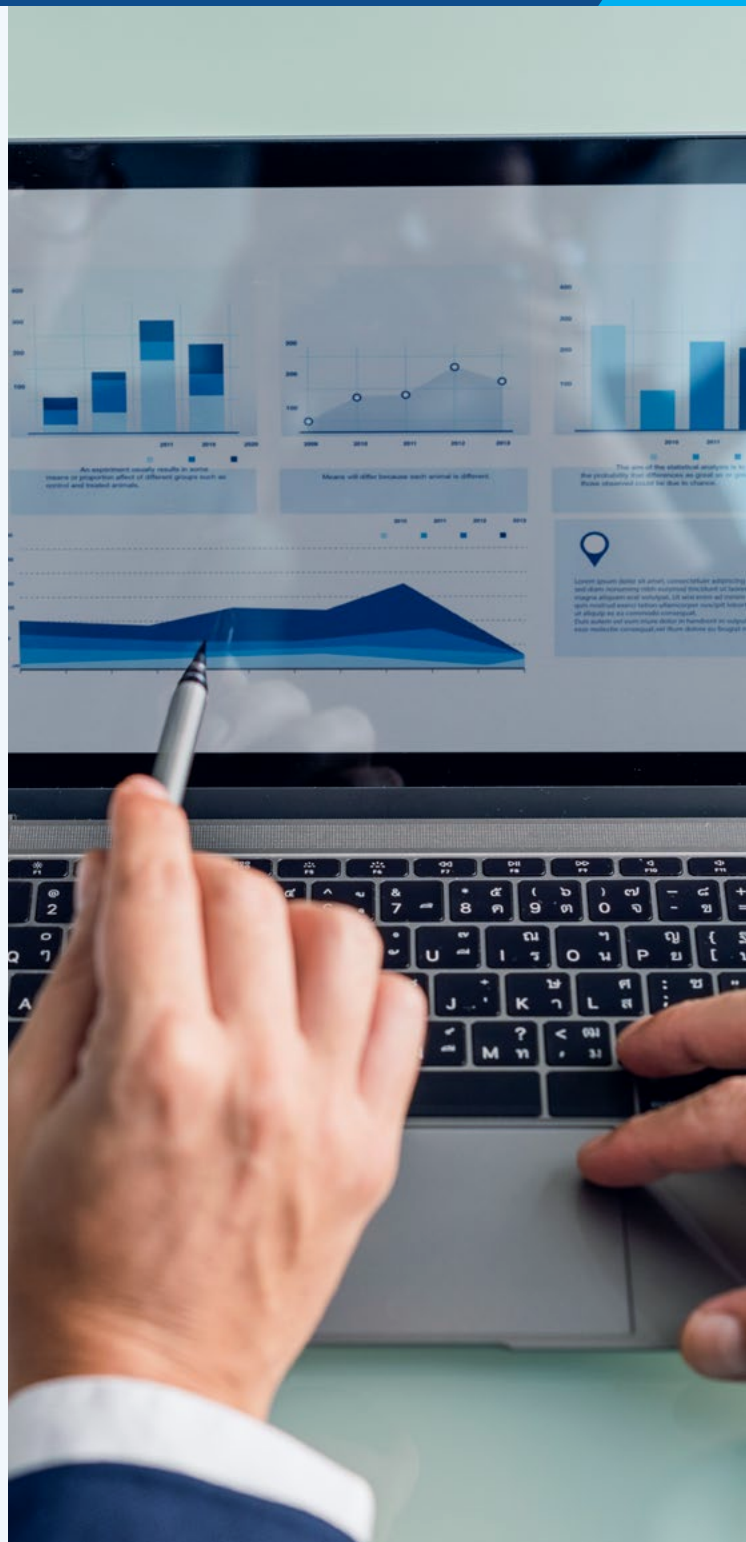
Too often, the governance phase is under-resourced. Governance ensures the integrity of the data as it scales.

- Establishing governance committee; assigning roles & accountability
- Establishing data quality standards
- Implementing data compliance assurance/audits
- Establishing data lineage requirements (ensuring a clear line-of-sight of original and replicated data sets)
- Establishing data protection/availability policies
- Performing impact analysis of changes to data
- Establishing data access policies (who has access to which data, under which circumstances)

Data and AI Framework: Advanced Analytics and AI/ML

Data analysts may clamor to be part of the AI and ML phase, to deliver highly-anticipated business outcomes.

- Ensuring data management and AI strategies are cohesive
- Recommending/implementing AI technology
- Maintaining data quality
- Establishing/monitoring success metrics for AI-enabled workloads
- Using data visualization tools
- Deploying AI solutions
- Training ML models
- Identifying internal and public data sources
- Generating synthetic data
- Offering on-demand analytics access for data consumers



Data and AI Framework: Ongoing Management

Implementing the framework is only the start. Organizations must ensure sufficient resources for ongoing management tasks to scale and support the data framework.

- Data lifecycle management
- Data quality improvement
- Ongoing security and audits
- Access management
- Data catalogue and observability
- Feedback loops

For more information on Kyndryl's Data Management and AI services, click here

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