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MARKET &
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Data, Analytics & AI

The Strategic Imperative of Data Maturity and Quality

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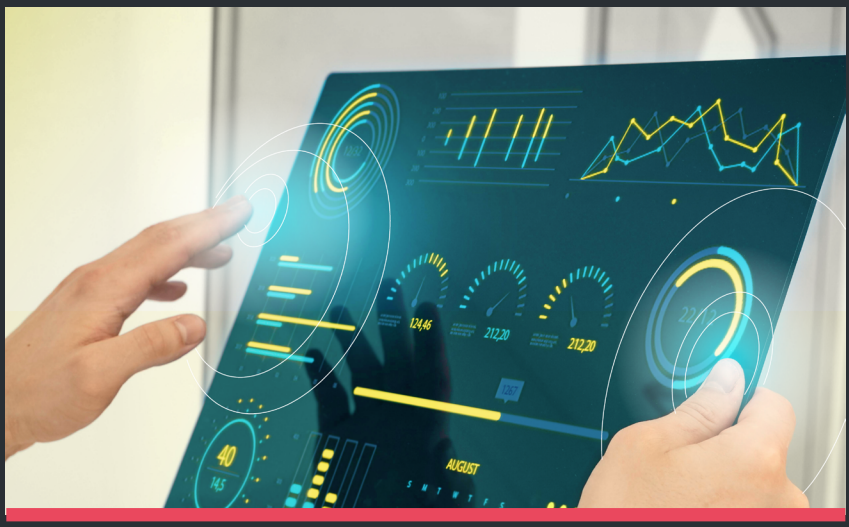

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Market and Buyer Brief: The Strategic Imperative of Data Maturity and Quality

01 Executive Summary

The Cost of Data Neglect

This GigaOm Market and Buyer Brief commissioned by SAP.

IMAGINE A BUSINESS THAT GENERATES vast amounts of data every day–petabytes of information flowing through systems, scattered across applications, and stored in various formats, yet ultimately untapped. The potential for competitive advantage is staggering, but instead of fueling growth, this data remains locked away, buried in silos, plagued by inconsistencies, and rendered unreliable by poor quality. AI initiatives stall. Decision-making slows to a crawl. Compliance risks mount. All the while, competitors who have mastered their data environments surge ahead, transforming their businesses with insights that drive revenue and efficiency.

This isn't a hypothetical. It's the reality for the vast majority of enterprises today. Our latest research confirms that most organizations recognize the strategic value of data but struggle to wield it effectively. The numbers tell a sobering story:

- **31%** of enterprises struggle with data fragmentation across multiple platforms
- **41%** cite poor data quality as their #1 barrier to effective AI adoption
- **39%** say data silos actively hinder real-time decision-making

In contrast, the companies that have invested in data maturity are telling a different story. They are unlocking business value, moving faster, and delivering no better customer experiences. Those who treat data as a strategic asset rather than an IT problem are already reaping the rewards:

- **1.8x** more likely to see revenue growth from data-driven insights
- **28%** more likely to understand the data assets in use across the enterprise
- **28%** higher AI rate of adoption, driving tangible business outcomes
- **22%** more likely to have data-driven decision making as a core part of business

The difference between leaders and laggards isn't just about technology; it's about mindset, commitment, and the willingness to put data at the heart of business strategy.

02 The Case for Data Maturity

Why It Matters Today

DATA HAS ALWAYS BEEN IMPORTANT, but today, it has become the foundation of business strategy. It shapes customer experiences, informs innovation, and increasingly dictates market leadership. However, most enterprises find themselves grappling with fundamental challenges that prevent them from realizing their full potential.

For many, data remains an untamed resource. Companies are drowning in information, yet only a fraction of it is accessible in a way that enables real-time, informed decision-making:

- **47%** of enterprises store 1+ petabytes of data, yet only 45% have full visibility into their assets
- **41%** of companies report that bad data is limiting AI effectiveness, leading to flawed predictions and unreliable automation
- **83%** of enterprises juggle two or more cloud data platforms, creating integration nightmares
- Slightly **less than half** of the respondents see their organizations as operating at the managed or optimized levels of maturity

Companies that have prioritized data maturity aren't just avoiding these issues–they are thriving because of it. They are harnessing AI effectively, making faster decisions, and reducing operational costs through better automation and governance. In an era where speed and adaptability define competitive advantage, those who hesitate will be left behind.

The cost of waiting is significant:

- Regulatory pressure is mounting with new data privacy and AI governance laws increasing compliance burdens
- Customer expectations continue to evolve, demanding personalization, predictive insights, and seamless digital experiences
- Competitors who have embraced data maturity are enjoying a significant first-mover advantage in AI and automation

03 The Maturity Divide

Where Does Your Organization Stand?

ACROSS INDUSTRIES, ORGANIZATIONS fall into distinct categories based on their approach to data maturity. While concepts like reactive, proactive, predictive, and prescriptive have been around for a while, the arrival of AI is accelerating the transition toward more sophisticated stages of data maturity.

The **prescriptive** stage is now increasingly achievable due to AI-driven capabilities, but many organizations remain in the early stages of this evolution.

Our research reveals striking differences between organizations at different maturity levels **(Table 1)**.

Table 1. Maturity Levels

MATURITY LEVEL	CHARACTERISTICS	BUSINESS PRIORITIES
Default/Ad hoc	Reactive, anecdotal data use, no governance	Cost reduction, operational firefighting
Reactive/Developing	Basic analytics, fragmented ownerships	Enhancing customer experience, problem-solving
Proactive/Defined	Standardized processes, executive buy-in (CDO, CIO)	Data integration, early AI adoption
Predictive/Managed	Advanced analytics, real-time insights	Business growth, automation
Prescriptive/Optimized	AI-led decision-making, full democratization	Industry leadership, continuous innovation

However, there's a more pressing challenge

Beyond the maturity levels, many organizations today face a lack of agility. The pace of decision-making and the ability to act on data is often hindered by slow, cumbersome processes, fragmented data, and siloed systems. In response to these challenges, AI and ready-to-use analytics as a service are key to helping organizations become more agile, enabling faster decisions and more responsive actions.

- Organizations in the predictive and prescriptive groups have a **28%** higher AI rate of adoption than lower maturity groups, driving tangible business outcomes
- Organizations in the predictive group are seeing **80%** higher business effectiveness from mature data practices
- Organizations in the predictive group are also **three times** more likely to leverage multi-lake architectures to optimize data strategy

By focusing on agility first and foremost, while investing in data maturity and AI, organizations can overcome bottlenecks and set the stage for scalable, long-term success.

The crucial insight

More mature organizations aren't necessarily different because they have more resources. They're different because they've prioritized agility and laid solid data foundations that allow them to focus on business outcomes rather than getting bogged down by infrastructure issues. By integrating AI and enhancing data access, these organizations are able to act faster, adapt to change, and ultimately gain a competitive edge.

04 Quick Wins

Steps You Can Take Today

IMPROVING DATA MATURITY may seem like a massive undertaking, but progress doesn't have to be slow. Instead of boiling the ocean, focus on quick, high-impact wins:

Find and Fix Your Worst Data Problem

WHY IT MATTERS

Every organization has one data problem that disproportionately impacts the bottom line—whether it's inconsistent customer information crippling sales personalization or unreliable financial data delaying quarterly reporting. 41% of companies report that bad data is limiting AI effectiveness, highlighting the immediate business impact of addressing data quality issues.

30/60/90 DAY PLAN

FIRST 30 DAYS	Conduct a rapid assessment across departments to identify your *million-dollar data problem*—the single data quality issue causing the greatest business impact. Quantify its cost in both direct expense and missed opportunities. This is a critical first step in treating data as a **product** with clear business value. Understanding the ROI of addressing this problem will help shift the mindset from viewing data creation as a cost to recognizing it as an asset that directly contributes to business outcomes.
60 DAYS	Implement a targeted fix with clear metrics for success. Focus resources on this single issue rather than diffusing efforts across multiple problems. Create a dashboard that tracks improvement metrics weekly. Ensure that the fix addresses both data quality and **data product usability**, aligning with the needs of end users. This is where **business data capability (BDC)** can play a pivotal role in ensuring that the solution aligns with user needs and delivers measurable results.

90 DAYS	Document and communicate the business impact of the fix. Use this success to secure executive sponsorship and resources for the next highest-priority issue, creating momentum for your broader data quality program. Highlight the return on investment from improving data as a product, reinforcing the idea that data, when treated with care and attention to detail, can serve as a key enabler of business success. This success story can help shift the broader organizational mindset toward treating data as a high-value asset rather than just a cost.

Establish Clear Ownership

WHY IT MATTERS

Data initiatives without clear ownership inevitably fail. Organizations with executive data leadership report significantly stronger governance practices, while those lacking clear ownership struggle with fragmented approaches.

30/60/90 DAY PLAN

FIRST 30 DAYS	Either appoint a chief data officer or create a cross-functional data stewardship council with executive sponsorship. Define clear authority, responsibilities, and success metrics for this role or body.
60 DAYS	Develop and communicate a data governance charter establishing clear ownership boundaries between centralized and departmental data users. Implement a RACI matrix for key data decisions.
90 DAYS	Launch at least one high-visibility project under this new governance structure that demonstrates its value. Report results to senior leadership, highlighting efficiency gains from clearer decision rights and accountability.

Get Quick Wins with Automation

WHY IT MATTERS

Manual data processes are the invisible profit killers in most enterprises, consuming valuable skilled labor hours while introducing human error. Our research shows that decision-making speeds up with proper data integration and access. Additionally, leading organizations report lower data management costs through automation and improved governance. Every hour your analysts spend preparing data is an hour they're not generating the insights that drive competitive advantage.

One of the most powerful solutions for automating these processes is the use of **data pipelines**. By setting up automated workflows to move, transform, and prepare data, organizations can free up analysts to focus on higher-value tasks, such as generating actionable insights and driving business strategy.

30/60/90 DAY PLAN

FIRST 30 DAYS	Inventory your most time-consuming manual data processes. Focus on high-frequency, low-judgment tasks that consume significant analyst time, particularly around month-end reporting or customer data updates. Identify key areas where data pipelines could be implemented to automate data movement, transformation, and integration across systems, eliminating bottlenecks and reducing reliance on manual intervention.
60 DAYS	Implement automation for your top three manual data processes with measurable time-saving goals. Start with quick wins like setting up data pipelines for automated data validation, report generation, or standard data transformations. Ensure the pipelines are built to handle high-volume tasks with minimal oversight. The goal is to reduce the time analysts spend on preparing data and eliminate error-prone manual processes.

90 DAYS	Document the time saved and reduced error rates. Quantify the value of both direct labor savings and the impact of faster access to critical business information. Reallocate freed analyst time to higher-value analytical work. Highlight the efficiency gains from data pipeline automation and track the improvements in both data accuracy and decision-making speed.

Democratize Data Access

WHY IT MATTERS

When data access requires IT intermediaries, business innovation grinds to a halt. Organizations with democratized data access experience higher customer satisfaction due to better data accessibility. Our research reveals that data-driven companies are 2.1x more likely to see revenue growth from strategic AI investments, as self-service analytics transforms data from a back-office resource into the fuel for frontline innovation.

30/60/90 DAY PLAN

FIRST 30 DAYS	Identify a pilot business unit with high data needs and implement a self-service analytics platform with access to their most critical data sets. Ensure proper data governance and security guardrails are in place.
60 DAYS	Provide targeted training on the self-service tools and establish a “data champions” program within the business unit. Track usage metrics, time saved from IT request elimination, and new insights generated.
90 DAYS	Document business wins from democratized data access, including faster decision-making and newly identified opportunities. Create a rollout plan for additional business units based on lessons learned from the pilot.

Start Small with AI

WHY IT MATTERS

Organizations that approach AI as a massive enterprise-wide initiative typically fail, while those targeting specific, high-value use cases see much higher implementation success rates. When they take a focused approach, data-mature enterprises can use AI-powered data processes to drive business outcomes. Additionally, operational costs are reduced by AI-powered data processes when organizations start with targeted, well-defined use cases rather than attempting enterprise-wide deployments.

30/60/90 DAY PLAN

FIRST 30 DAYS	Identify 1-2 specific business problems where AI could deliver significant value with existing, clean data. Prioritize areas like forecasting, customer segmentation, or operational anomaly detection, where results can be clearly measured.
60 DAYS	Implement a narrowly scoped pilot with well-defined success metrics. Ensure the pilot leverages existing data assets rather than requiring new data collection and focuses on business outcomes rather than technical elegance.
60 DAYS	Measure and communicate the business impact, not just the technical performance. Use these results to secure funding for scaling successful use cases while maintaining focus on business value rather than technology for its own sake.

Enterprises can break down data maturity into manageable, actionable initiatives by taking small, strategic steps. Success in these areas builds credibility, making it easier to secure buy-in for larger transformation efforts.

05 The Future of Data-Driven Enterprises

Building on Data Maturity

DATA MATURITY IS NO LONGER OPTIONAL. It is the defining factor between companies that thrive in the digital era and those that struggle to keep pace. The leaders of tomorrow will be those who take action today–those who recognize that data is not just an asset, but the foundation upon which every strategic decision must be built.

Our research clearly shows that mature organizations approach data differently:

- **They prioritize business outcomes over technical metrics:** While less mature organizations focus on infrastructure stability and data consolidation, mature organizations focus on democratizing data access and enabling business innovation.
- **They make AI a strategic priority:** data-mature enterprises have woven AI into daily operations, not as an experiment but as a core business capability.
- **They clear the path to innovation:** By solving data quality and integration issues early, they create space for strategic initiatives rather than constant firefighting.

For business leaders responsible for modernizing data strategy, the message is clear: the technical aspects of data management exist to serve business outcomes, not the other way around. More mature organizations have solid data foundations that free them to focus on innovation, growth, and competitive advantage.

EXECUTIVE ACTIONS TO TAKE TODAY:

- ✓ Assign a single owner for data governance
- ✓ Demand a dashboard of trusted business metrics
- ✓ Prioritize a data quality audit
- ✓ Identify a high-impact AI use case that can deliver value immediately
- ✓ Set clear milestones to measure progress

The path forward is clear. The only question that remains is: What will you do today to move your organization toward data maturity?

06 About

SAP Business Data Cloud brings together the world's most comprehensive and mission-critical data with the leading data platform. Access curated data products across your most important business processes, keeping its business context and semantics intact and fully governed. SAP Business Data Cloud also delivers transformational insights for advanced analytics and planning with prebuilt intelligent applications across all lines of business. It unifies all your SAP and third-party data with fully managed capabilities for business data fabric, BW modernization, planning, data engineering and ML/AI.

About Howard Holton

Howard Holton is an analyst at Gigaom. He has worked in IT for three decades, the last half in executive leadership, as a CIO and CTO. He has been an engineer, an architect, and a leader in telecom, health care, automotive, retail, legal, and technology.

In the last decade, Howard focused on cloud technology and economics, data analytics, and digital transformation. As CTO of Hitachi Vantara, he spent his time developing digital transformation, IT, and data strategies for Fortune 1000 companies and global governments.

His years at Rheem Manufacturing, Hitachi Vantara, and others provided the experience that helped him develop a mind for leadership—the successful execution of vision and culture to inspire. Successful leadership is all about maximizing your team's potential, as Howard has demonstrated over the course of his career.

Howard is also a technologist at heart; passionate about how data science and new technologies can be used to accelerate time-to-market and better serve the customer, now and in the future. Howard has been a trusted advisor and agent of change to a number of organizations, bringing vision and successful execution to internal and external customers alike.

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About GigaOm

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GigaOm works directly with enterprises both inside and outside of the IT organization to apply proven research and methodologies designed to avoid pitfalls and roadblocks while balancing risk and innovation. Research methodologies include but are not limited to adoption and benchmarking surveys, use cases, interviews, ROI/TCO, market landscapes, strategic trends, and technical benchmarks. Our analysts possess 20+ years of experience advising a spectrum of clients from early adopters to mainstream enterprises.

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