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The **Gartner** Data Insights you need to know to kick-off 2025 successfully

EXCLUSIVE INSIGHTS
Explore the latest insights and strategies from top data and analytics conferences with our exclusive eBook.

Introduction

This e-book provides a comprehensive overview of our key insights and strategies inspired by the discussions and trends highlighted during the latest Gartner Data & Analytics events.

Gathered from leading industry experts, these insights provide valuable guidance on exploring the current data landscape and maximizing the potential of data and analytics within your organization.

Here, you'll explore critical themes such as:

- **Data Democracy and Data Citizenship**: Approaches to fostering collaboration and empowering individuals to contribute to data-driven success.

- **Achieving AI-Readiness**: Essential steps for building an AI-ready culture and ensuring responsible implementation.

- **Data Governance for Business Outcomes**: Effective governance practices that drive innovation and performance.

- **The Power of Metadata and Data Fabrics**: Strategies for leveraging metadata and data fabrics to create a sustainable data ecosystem.

- **Data & Analytics for Good**: Using data and analytics to support Environmental, Social, and Governance (ESG) initiatives.

Generate value together

Generate value together

1. DATA DEMOCRACY AND DATA CITIZENSHIP: TOWARDS A RESPONSIBLE AND BENEFICIAL MODEL FOR ALL.

Data Democracy and Data Citizenship: Towards a Responsible and Beneficial Model for All
The growth of data democracy and data citizenship signals a paradigm shift, moving from a passive data consumption model to one where individuals are engaged as active participants in managing and using data. This is becoming increasingly relevant as businesses and organizations incorporate data and artificial intelligence (AI) into their operations and decision-making processes.
The concept of co-creating value is at the heart of this transformation. It is no longer sufficient to use data to enhance operational efficiency. Instead, businesses must leverage the collective intelligence and skills of individuals to generate shared value for businesses, society, and the environment.

2. GENERATING VALUE FOR ALL.

To achieve this ambition, it is essential to empower data citizens by:

1. Strengthening their culture and skills on data and AI-related topics, enabling them to move beyond an execution role and take control.
2. Empowering citizens to access the right data at the right time. Current limitations often prevent people from accessing crucial data due to regulations. By connecting individuals with the data they need, we can unlock its true value. This requires empowering people to find and share data effectively.
3. Encouraging collaboration and knowledge sharing, breaking down silos and creating an environment conducive to collective innovation.

3. EMPOWERING DATA CITIZENS.

Empowering data citizens goes beyond improving business performance. It offers a transformative path to a fairer and more sustainable future. By promoting a culture of continuous learning and exploration, we empower individuals to develop the new skills they need to cope with technological change and to experiment and create innovative solutions. This fosters a true data democracy, where everyone can participate in shaping a better future, driven by data-driven insights.
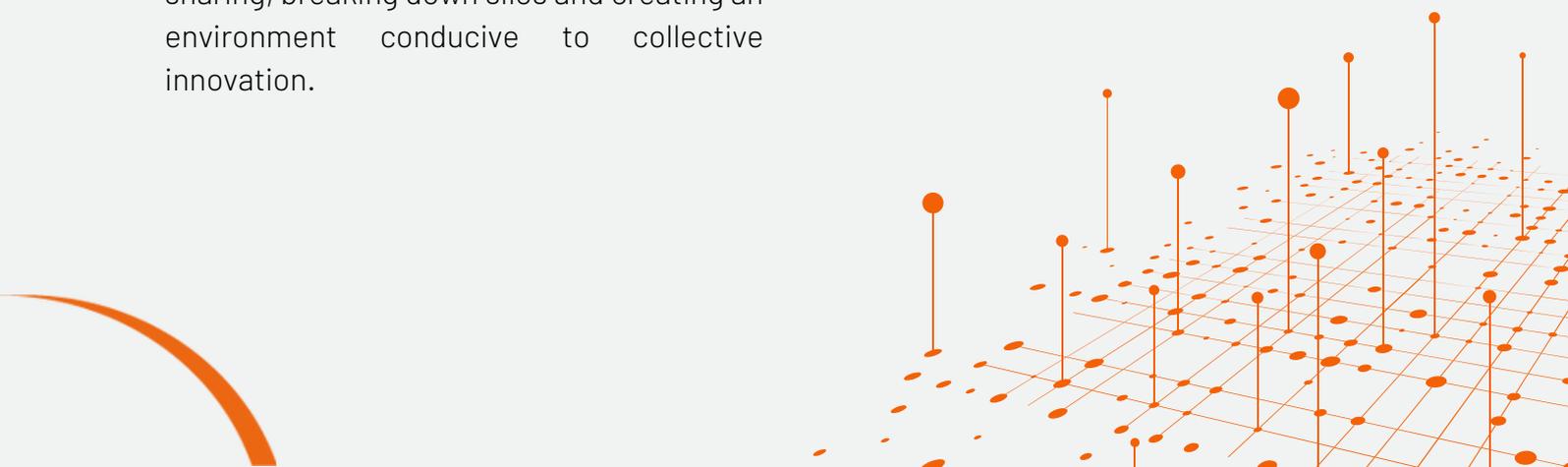
# Achieve AI-readiness through best practices

AI-readiness paves the way to AI excellence

FROM TECH EXPERTS TO TECH SAVVY: CULTIVATING AN AI-READY CULTURE.

In today's AI-driven world, organizations can no longer escape its transformative impact and potential. So, the best thing to do is to be ready. The journey toward AI readiness is unlike any other data and analytics endeavour. Achieving this readiness is as much about people as it is about technology. It starts by designing and launching AI literacy programs to ensure that all individuals and teams, not just technical experts, at the organization are equipped with the necessary knowledge that guarantees a seamless transition and aids in the development of an AI-ready mindset.

Knowing and learning that data is the foundation for effective AI systems is not enough because not any data can be used in building these systems, the bedrock is having quality data. Ensuring accuracy, consistency, and reliability in the data is non-negotiable and with solid data governance practices and metadata management practices, such quality can be attained over time.
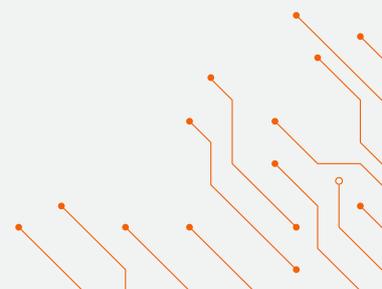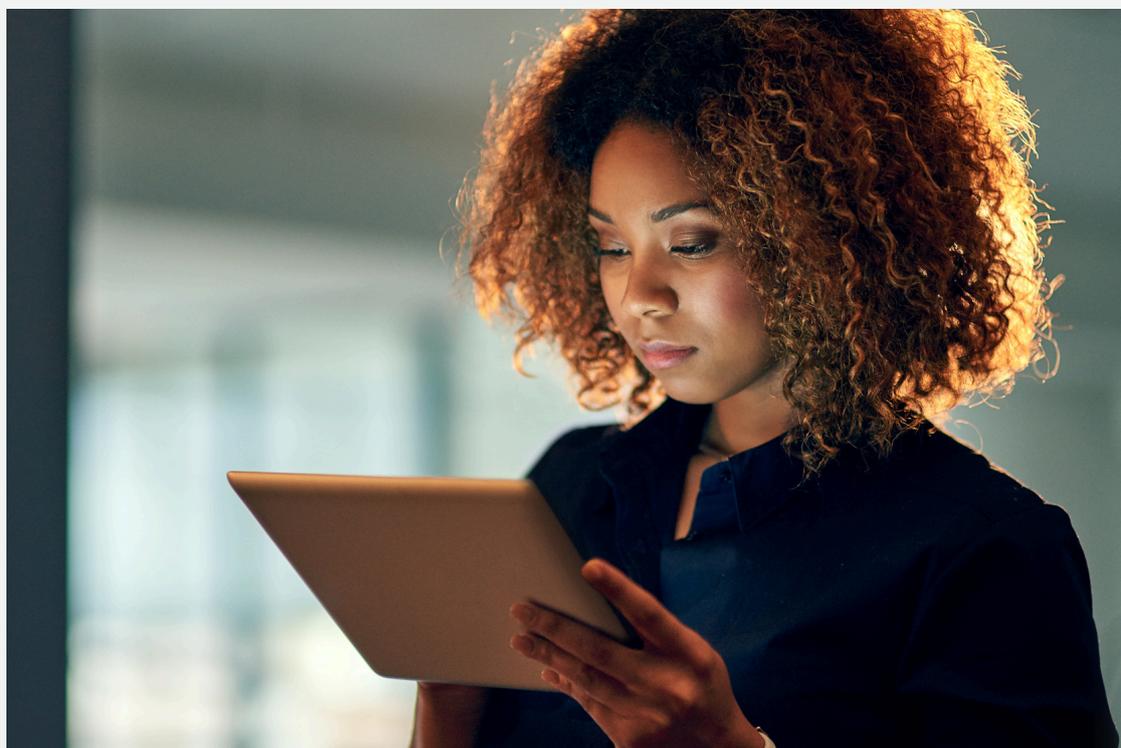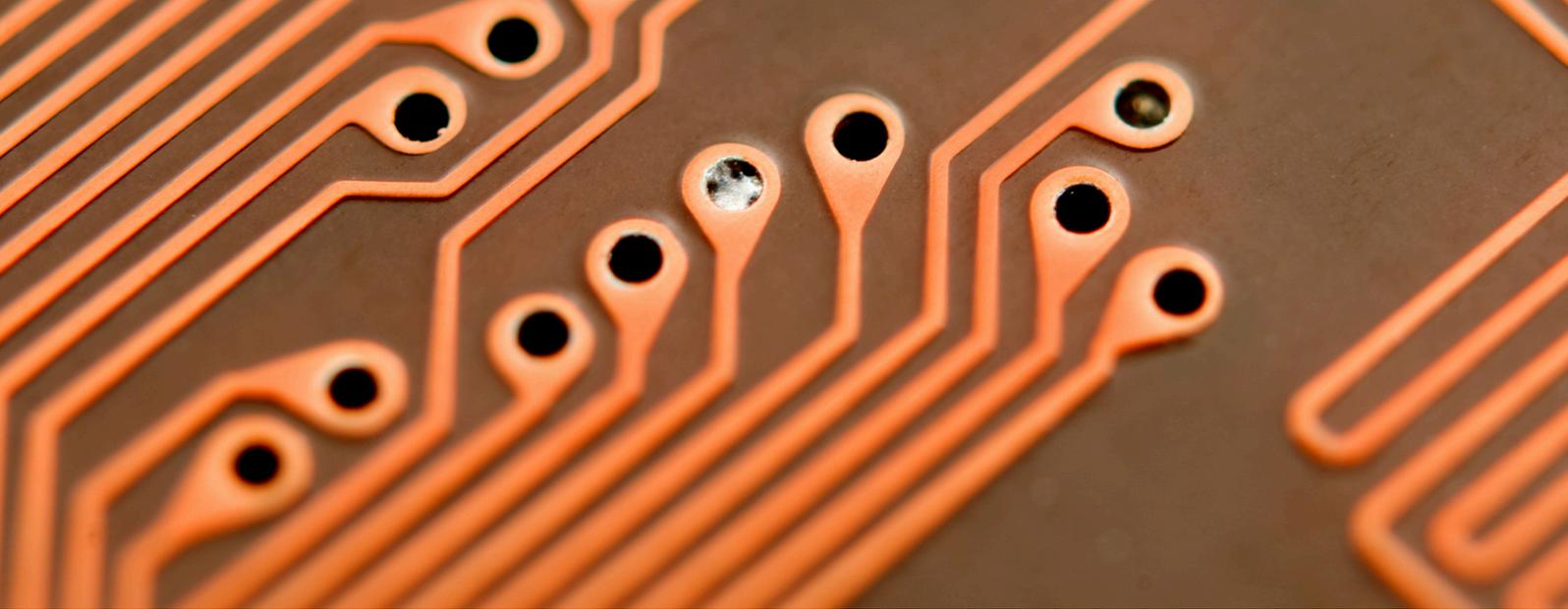
ETHICAL AND RESPONSIBLE AI IMPLEMENTATION.

With the significant leap in AI capabilities that Generative AI (GenAI) has shown, more privacy and ethical concerns were raised when integrating GenAI systems into business processes compared to traditional AI systems. Privacy policies should comply not only to global regulations but also to organizational and cultural policies. Compliance with regulatory requirements is a dynamic challenge. Staying informed of the latest legal standards and ensuring that AI systems adhere to all relevant laws, including industry-specific rules, is imperative. Data security is another cornerstone of AI readiness. AI systems should remain resilient against evolving cyber threats, and this is achieved through implementing robust security measures to safeguard the data assets. Ethical AI practices demand transparency and the ability to explain the AI decision-making processes and to determine the accountability in the AI operations.

Reaching a high level of data maturity and quality is a continuous and long-term process, thus, to build trust and deliver equitable outcomes, it is crucial for organizations to address bias, often implicit, revealed in the data through AI models and to ensure fairness in AI systems.

Organizations strive for innovation, and being AI-ready paves the way toward excellence. This readiness goes beyond technology; it involves augmenting human intelligence to achieve collaboration with advanced AI technologies and successful integration and application of robust data practices.
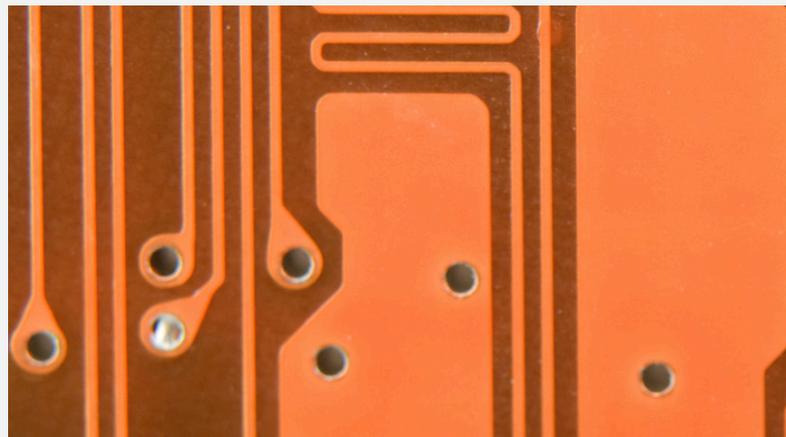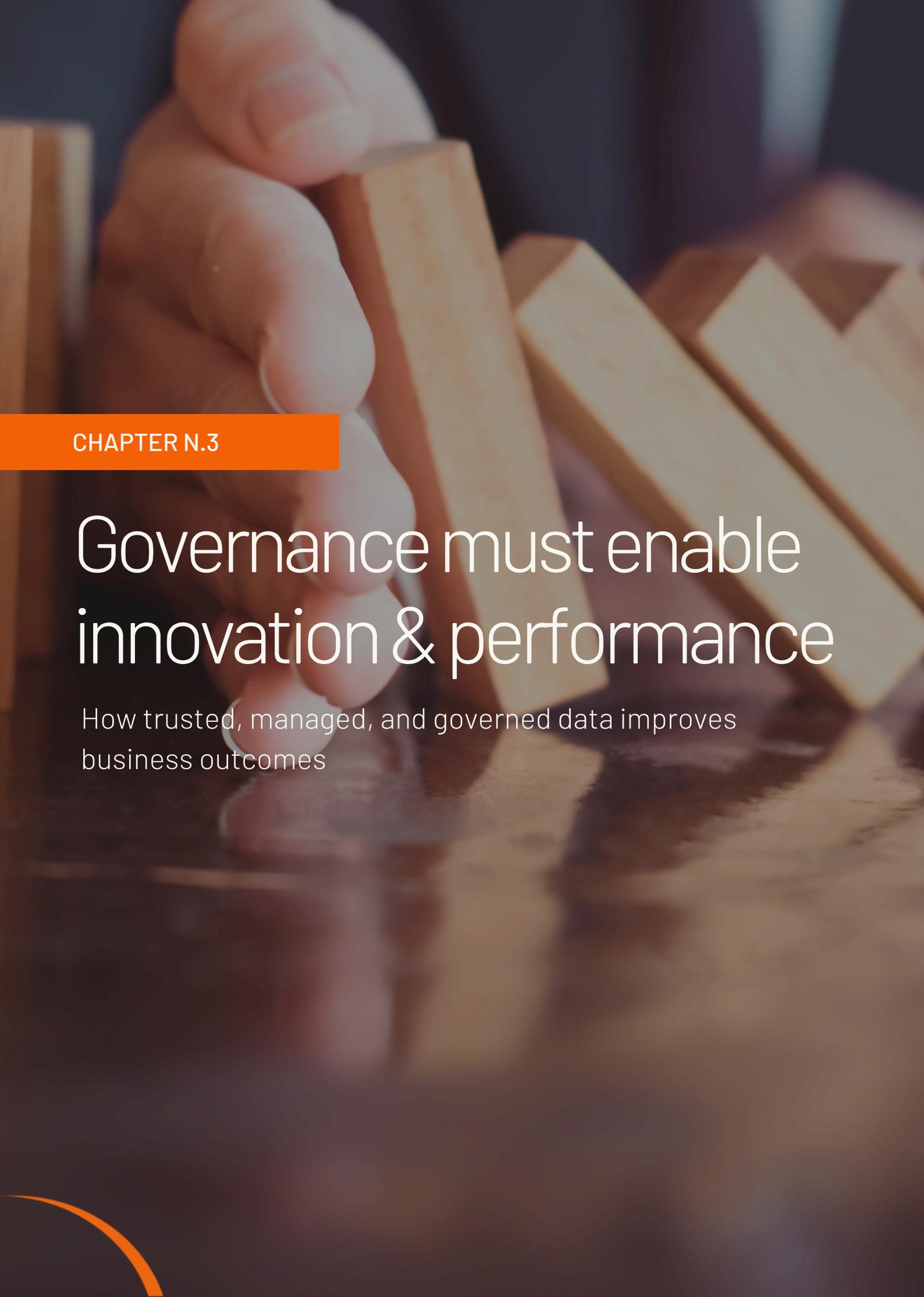
Governance must enable innovation & performance

How trusted, managed, and governed data improves business outcomes

Governance must enable innovation & performance

HOW TRUSTED, MANAGED, AND GOVERNED DATA IMPROVES BUSINESS OUTCOMES.

Governance is often perceived as a bureaucratic directive more than an enabling and collaborative initiative, improving performance and encouraging innovation. It shouldn't be the case.

A common mistake is asking the Company leadership to get "data owners" to manage all the data, or trying to assign data stewards to all data assets. Governance approaches need to evolve from the top-down, one-size-fits-all approach to meet an approach that relies more on people's competencies, skills, attitudes, and ways of working. Governance must **trust and empower users**, foster a culture of accountability, be transparent, and be based on a decision-making process and ethical foundations that would stand up to internal and external scrutiny. People are watching.

To overcome reluctance and engage people's hearts and minds, Data and Analytics leaders must leverage advocates from across the organization, encourage participation from diverse teams, and appeal to individual motivations. You have to find your champions. Learn more about them, find out what stories they tell their peers and teams about their role in organizational success, and identify where and how effective data governance is part of their story.

When an organization tries to govern and manage data as if it is all equal, it fails. Instead, Data and Analytics leaders should **isolate the specific data assets** that are used in the key performance indicators (KPIs) and key risk indicators (KRIs) that directly support the key decisions of business process owners. These assets are the ones that must fall within the scope of data governance. Master data, as the core data of the enterprise, is still an obvious candidate (i.e. customers, employees, suppliers, locations, assets, or products). Think Master Data Management Is Dead? It's time to think again.

Most business decisions in a data-driven organization rely on data. Artificial Intelligence and Analytics fully rely on data. Without **trusted data**, even the best business leaders, AI models, and algorithms will likely make a wrong decision.

> **"** Governance is not a bureaucratic directive; it's an enabling initiative that not only ensures compliance and risk management, but also fuels performance and fosters innovation. It's time to change the mindset.

Empowering Data Strategies with Metadata and Fabrics

Harnessing Metadata Maturity and Data Fabrics for Sustainable Data Ecosystems

Empowering Data Strategies with Metadata and Fabrics

As the quantity, diversity and velocity of data continue to grow, the efficient management and use of data assets has become increasingly complex. Organizations must adopt advanced data management strategies that not only address current needs, but also future-proof their data and analytics (D&A) capabilities to stay ahead. Gartner Analysts emphasize that building metadata maturity is essential for shaping the future of D&A, whether it involves adopting data fabrics as the foundation of data ecosystems or preparing for Generative AI with AI-ready data. If your organization lacks metadata maturity today, now is the time to start.

DATA FABRICS VS. DATA MESH: A HYBRID APPROACH.

There are two main principles in data architecture: while Data Fabrics focuses on ingesting and managing centralized data across different environments to create a unified data layer, consolidating data from all business areas into the same location with uniform rules, management, and constraints, Data Mesh emphasizes decentralized data ownership and domain-specific data management.

This distinction between data fabrics and data mesh highlights the hybrid approach that many organizations will adopt, as even decentralized organizations are likely to require a hybrid strategy that takes into account their unique organizational structure and tool set.

This hybrid approach allows organizations to tailor their strategy to their specific context, thereby acknowledging the diverse data management needs of the modern business.
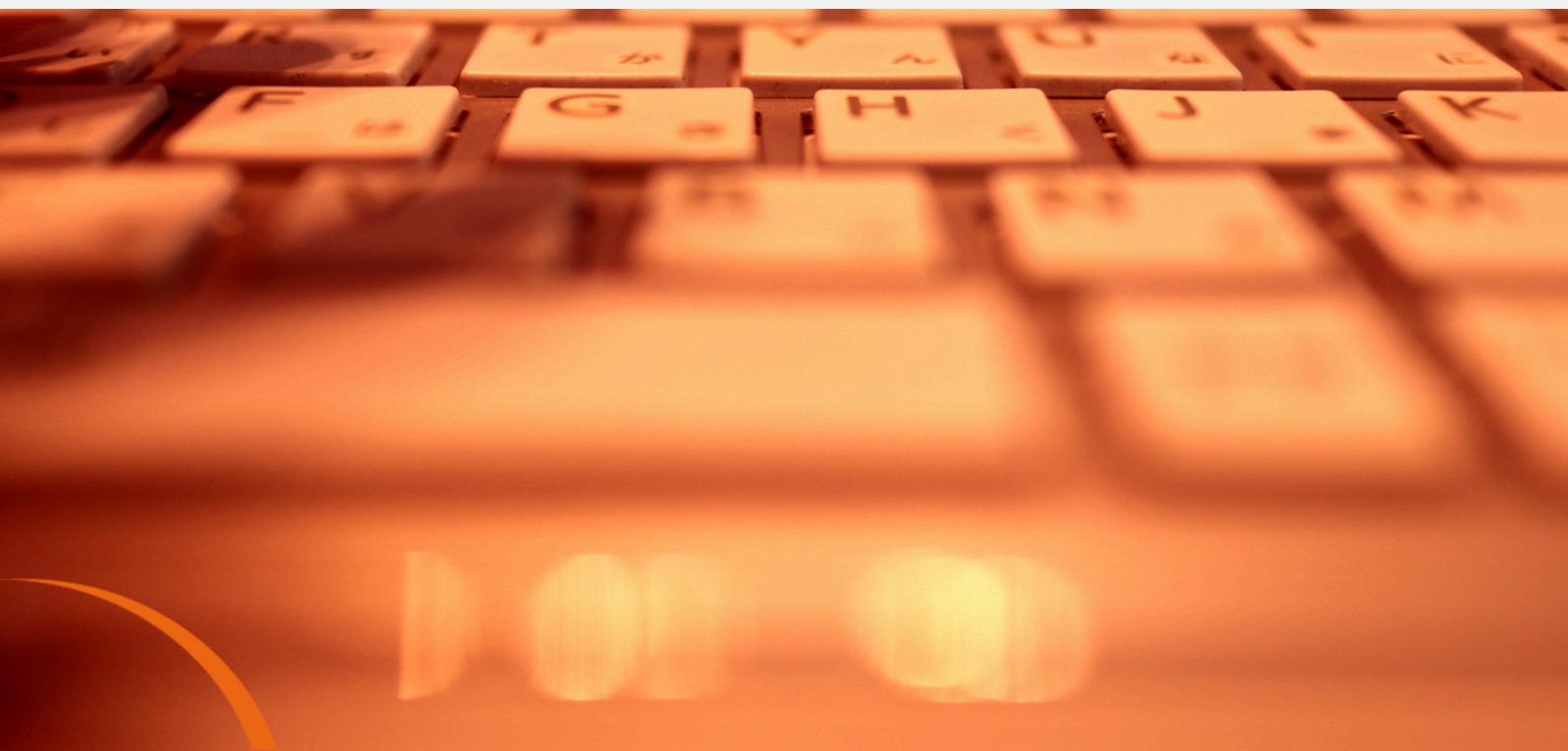
THE ROLE OF AUTOMATION IN DATA OPERATIONS.

Automation plays a pivotal role in advancing data observability and operational capabilities. Moving towards enhanced data operations implies automating the transport and deployment of diverse data commodities, including datasets, AI algorithms, learning sets, and complete pipelines. Establishing lab sandbox environments for data scientists, and adhering to DevOps guidelines, fosters iterative improvement and collaboration. Automation not only increases efficiency but also reduces the risk of human error, ensuring more reliable data operations.

BRIDGING PASSIVE AND ACTIVE METADATA.

To truly capitalize on the potential of augmented data platforms, organizations must bridge the gap between passive and active metadata. Passive metadata includes static information such as data schemas and glossaries, whereas active metadata is dynamic and includes real-time data about data usage and lineage. Leveraging observability and other components is crucial to detect and proactively address potential data failures or system overload. This process can be similar to monitoring the control centre of critical infrastructure like dams or subways, where continuous oversight is essential for smooth operation.

MASTER DATA: THE BACKBONE OF DATA MATURITY.

Master data plays a critical role as the backbone of this journey, easing the start by naturally facilitating the mapping between definitions and technical metadata. This process ultimately aids in the overall metadata maturity of the organization. Master data management ensures consistency and accuracy across all data assets, providing a solid foundation upon which more advanced data capabilities can be built.
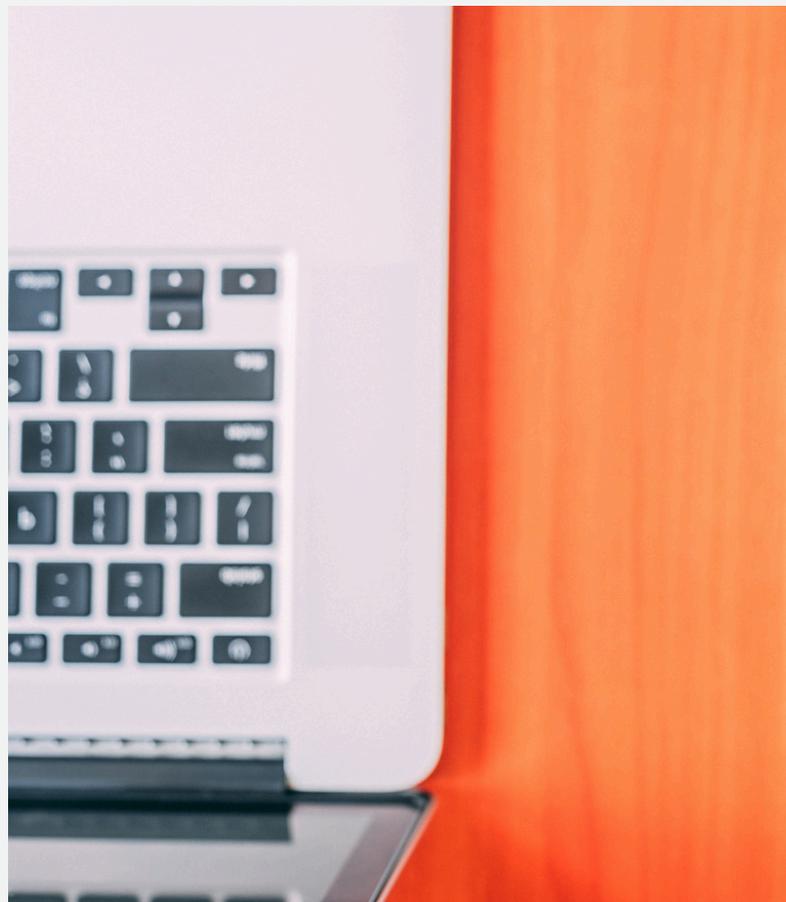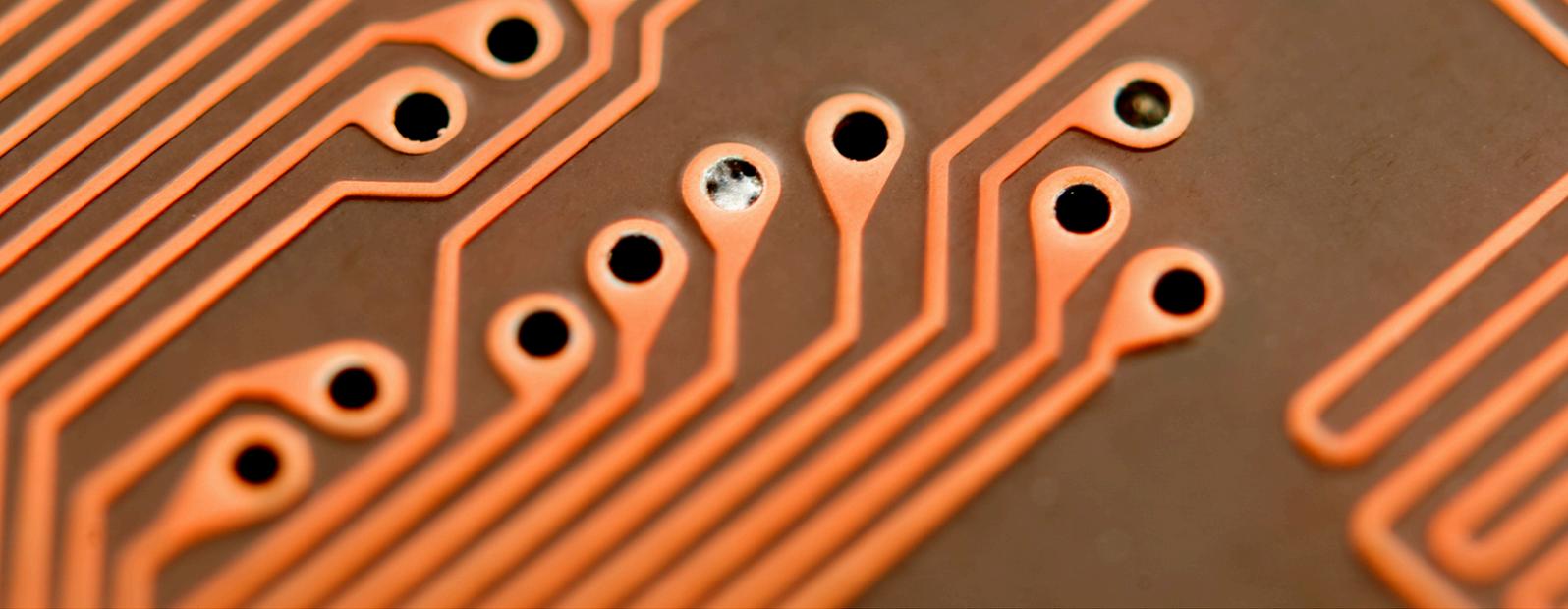
FUTURE DATA PLATFORMS: THE NEED FOR METADATA.

Looking ahead, future data platforms will require not only data but also associated metadata to facilitate usage propositions and pipeline development. Augmented data management, integrating AI within data tools, will be essential to meet evolving data management demands and unlock the full potential of data assets. AI-ready data and advanced metadata capabilities will enable organizations to leverage AI and machine learning technologies more effectively, driving innovation and competitive advantage.

CENTRALIZED METADATA INTERACTION.

Metadata interaction will be central to a composite data platform, integrating portfolio metadata, data metadata, process metadata, and compliance metadata. This integrated approach is crucial for ensuring data accessibility, governance, and compliance across the organization. By having a centralized view of metadata, organizations can more easily manage and use their data assets, driving better decision-making and operational efficiency.
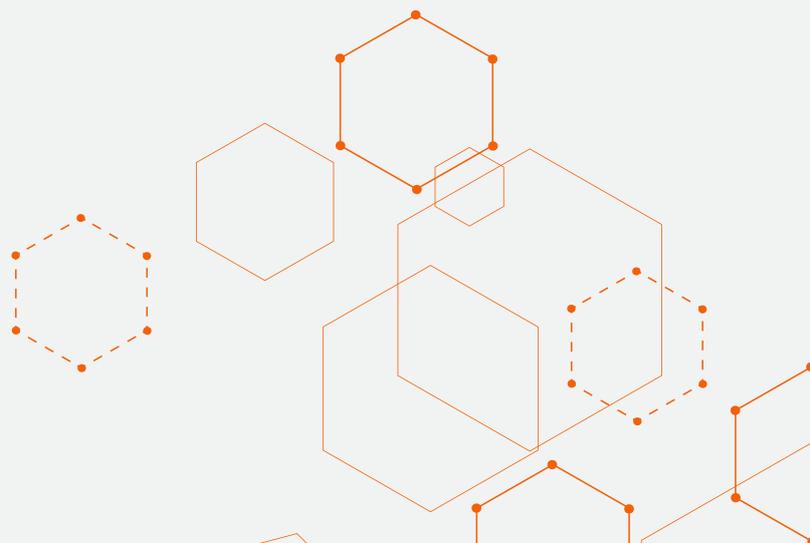
Use Data & Analytics for Good Reasons

Data Should Reduce Organizations' Environmental Impact

Use Data for good reasons

Data for good embraces an immediate imperative for individuals and organizations to break through social and cultural barriers, harnessing data, analytics, and artificial intelligence to support the transition to sustainable economic, social, environmental models for a better Society.

HARNESSING DATA TO ACHIEVE SUSTAINABILITY GOALS

We can use Data and Artificial Intelligence to increase the efficiency of business processes and decrease their energy consumption and carbon emissions.

For instance, we can identify the best moment and duration to pre-heat a turbine, whether an hour or just 30 minutes before use, to improve the efficiency of the turbine and avoid any waste of energy. This knowledge can lead to significant financial savings and reduce energy consumption, contributing to sustainability goals.

Moreover, data can help organizations better understand their production and consumption patterns. A food service company will take benefit on understanding the number and type of menus produced and the amount left unused to define strategies to minimize food waste, promoting both economic efficiency and environmental responsibility.

Beyond saving energy & carbon emission, the optimization of business operations will also enable employees to reorganize a part of their time for activities in direct connection with the Social purpose of the company, which will develop their appetite for meaningful actions.

TAKING ADVANTAGE OF ESG REPORTING

Smart data governance and architecture will help generate and automate the creation of ESG reporting to comply with ESRS standards in Europe. It will also facilitate the use of collected data to analyse the efficiency of business processes and identify improvements.

Companies leading the way will attract more customers looking for sustainable supplier, more employees looking for impactful jobs, more investors, looking for ethical investment (Green Financing).
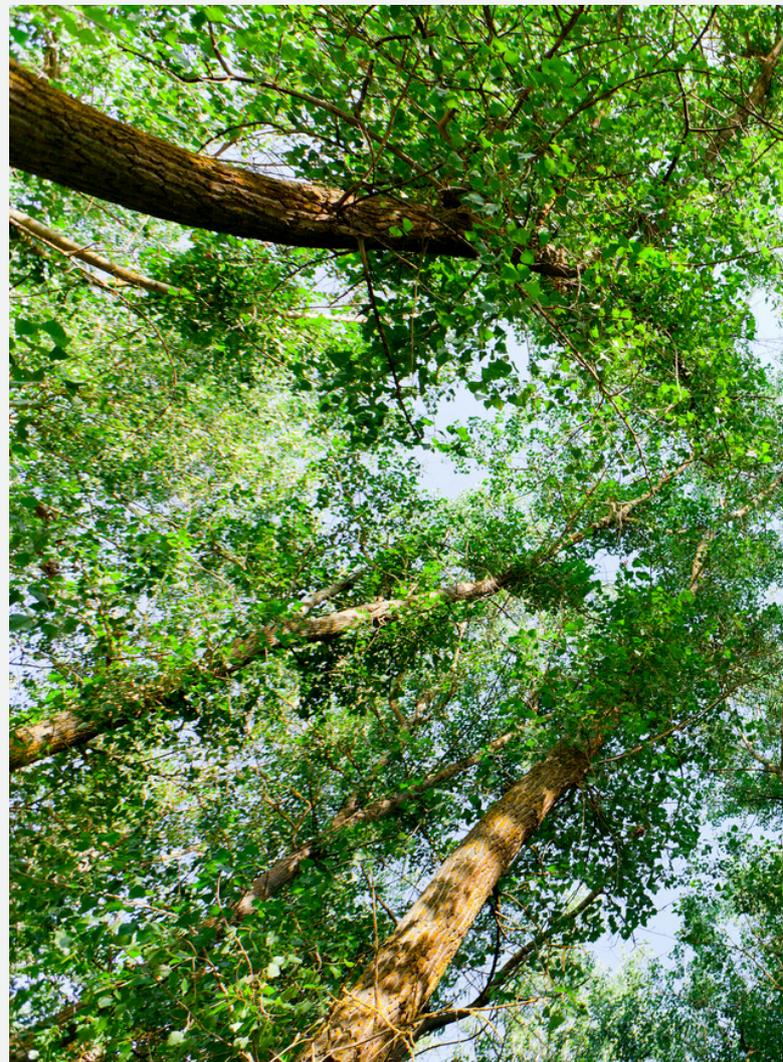
ETHICS AND COMPLIANCE BY DESIGN

While Data & AI activities are providing tremendous new opportunities for companies to perform, it will require governance and discipline to comply with regulations (data privacy, data security, AI act, ...) to remain Ethical.

In the meantime, analysing data for "good reasons" should not become an excuse to duplicate data into new persistence layers, increase the use of resources to execute dedicated algorithms.

This is why modern data architecture will need to embrace these new patterns to balance efficiency, ethics and sustainability benefits and reach their sweet spot.

DATA FOR GOOD REQUIRES GOOD DATA

However, leveraging data for ESG initiatives requires organizations to have AI-ready data. This implies that the data must be precise, complete, and well organized in a way that facilitates analysis or in other terms is "fit for the purpose / use case". If an organization lacks such data, it may need to invest in data collection and management systems.

Data will play a crucial role in supporting sustainable & social initiatives. Data for Good is a concept that embodies the use of data to achieve a positive social change. By improving business processes, providing both financial and non-financial benefits, and enabling more sustainable practices, data can serve as a powerful tool to making a positive impact on society and the environment.

If Data can care about us, we should also care about data! To maximize the benefits identified above, we must put strong data governance principles in place, improve data collection and reconciliation efficiency and generate Trustworthy data sets.

Empowering Sustainable Change Through Data & AI

Empowering Sustainable Change Through Data & AI

At Apgar, "Data for Good Reasons" is more than a buzzword; it's a core principle that guides our commitment to making a positive and lasting impact on society and the environment. We believe Data & AI can provide great opportunities for businesses to contribute to the building of a better world.

CORPORATE SUSTAINABILITY REPORTING

Historically, companies' success was measured by financial outcomes only. At Apgar, we're changing that narrative by helping companies redefine efficiency, not just in terms of profit but also in the ways they do have a positive impact. We do leverage our expertise in data architecture to industrialize CSR (Corporate Sustainability Responsibility) reporting while making sure we do reuse existing data platforms as much as possible. Just as financial reporting has been automated for accuracy and speed, we enable businesses to automate their sustainability metrics to meet regulatory standards like the European CSRD (Corporate Sustainability Reporting Directive).

By automating CSR reporting, companies can track their environmental, social, and governance (ESG) performance with the same accuracy as financial data. They can go further than compliance and demonstrate true accountability - turning intentions into measurable, impactful actions.

AI-DRIVEN BUSINESS PROCESSES OPTIMIZATION

Beyond reporting, we want to take actions. At Apgar, we leverage the power of AI to drive efficiency in business processes, while simultaneously reducing environmental impact.

Our AI-driven technologies optimize daily operations across various industries by enhancing production planning, resource allocation, and scheduling. Leveraging real-time data and advanced analytics, these solutions minimize downtime, reduce waste, and maximize resource efficiency, enabling businesses to operate more sustainably while creating value.

Ultimately, by reinvesting part of this value to sustainability practical actions, companies can foster positive social change, uniting their team around meaningful and impactful projects.

BUSINESS RECOMMENDATIONS FOR SUSTAINABLE PERFORMANCE

Having CSR data & operational data in a same place is a true opportunity to understand how business operations impact the sustainability footprint of a company. At Apgar, we elaborate AI models to link the dots and find recommendations to adjust business processes which elevate their sustainable performance to the next level. As a result, Companies enter into a continuous improvement approach to make positive impacts.

Our purpose is to support deeper and more sustainable societal change. By helping companies increase their productivity, we enable them to invest more time and resources in high-impact initiatives. This approach reinforces companies' commitment to corporate responsibility and employee's empowerment to dedicate their time and talent to meaningful missions.

Apgar strives to partner with companies that share our vision of a data-driven, environmentally and socially responsible future. Together, let's harness the power of data and analytics and AI to create a better world using data for good reasons!

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ABOUT APGAR

APGAR is a services and advisory company that assists companies aiming for data and AI to be at the heart of their strategy.

With more than 220 consultants working daily around Data Management and AI topics and operating across several countries and industries, APGAR covers a whole range of services including consultancy, implementations, change management, managed services, and training.

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