



DATA READINESS

Unlocking Manufacturing
Data for Operational
Efficiency and Digital
Transformation

A White Paper by



OneCityGlobal

CONNECTING YOUR FUTURE

Executive Summary

Data is the cornerstone of modern manufacturing. When harnessed effectively, it drives operational efficiency, reduces costs, and unlocks innovation that keeps businesses competitive in an evolving digital economy.

This white paper highlights:

- **The Hidden Data Problem:** Why unstructured and underutilized data costs manufacturers time and money.
- **The Importance of Data Readiness:** A 3-step process to understand, organize, and optimize your data.
- **The Opportunity Ahead:** How clean, actionable data unlocks operational efficiencies and future-proofing technologies like AI and Digital Twins.

Whether you're looking to reduce costs, streamline production, or take the first steps toward digital transformation, this guide will help you turn your data into a strategic growth engine.



'Data is the lifeblood of the digital transformation in manufacturing. Harnessing its full potential enables us to optimize operations and drive innovation.'

Roland Busch, CEO of Siemens AG

THE ROLE OF DATA IN MODERN MANUFACTURING

In today's digital economy, manufacturers are realizing that **data isn't just information—it's the fuel for transformation.**

At a global scale, advanced technologies like AI, IoT, and predictive analytics are delivering unmatched value to manufacturers. However, small-to-medium businesses (SMBs) face significant challenges:

- **Fragmented Systems:** Disconnected silos of data across departments.
- **Underutilised Assets:** Business-critical insights remain hidden in ROT (Redundant, Obsolete, and Trivial) or “dark” data.
- **Lost Opportunities:** Inefficient use of data slows operations, increases costs, and reduces agility.

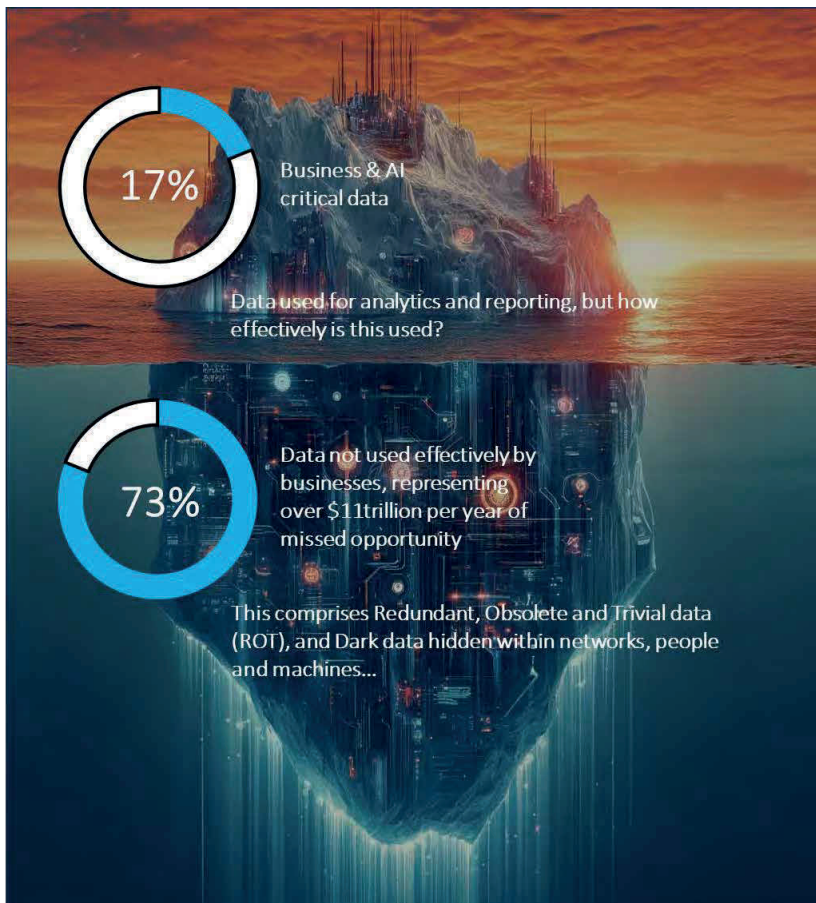
For manufacturers, the challenge is clear: harnessing their data is no longer optional—it's essential to remain competitive and efficient in a changing landscape.

THE HIDDEN COST OF UNTAPPED DATA

According to the World Economic Forum and Boston Consulting Group, nearly 74% of manufacturing executives consider advanced analytics critical for success, yet many struggle with data silos that impede data-driven operations

Beneath the surface of every business lies a wealth of untapped potential—data that remains unused, hidden across networks, systems, and processes. While some data is actively used for analytics and reporting, the challenge lies in ensuring it is fully optimised and aligned with strategic goals.

The larger issue, however, is the vast volume of unused or underutilised data that represents missed opportunities for efficiency, innovation, and growth. Without addressing both the visible and hidden layers of the data landscape, businesses risk falling short of their true potential. This disconnect is the critical challenge—and opportunity—that data readiness seeks to solve.



- Unlock hidden value by optimising unused, underutilised data.
- Transform your data into a strategic growth engine.
- Bridge the gap between insights and missed opportunities.

The Cost of Inaction

Manufacturers who ignore the problem face:

- **Rising Costs:** Storing unused data wastes resources and inflates operational expenses.
- **Poor Decisions:** Incomplete or poor-quality data undermines decision-making.
- **Security and Compliance Risks:** Dark data exposes businesses to cyber vulnerabilities and regulatory penalties.
- **Limits Future Innovation:** Poor-quality or unorganised data makes it impossible to adopt AI and other advanced technologies, restricting opportunities for predictive maintenance, process automation, and real-time decision-making.

The opportunity lies in turning this untapped data into a strategic resource.

By addressing the entire Databerg—both visible and hidden layers—manufacturers can unlock efficiencies, reduce risks, and lay the groundwork for innovation.

WHY DATA READINESS MATTERS

Data fuels innovation. Ensuring data readiness is more than a technical requirement—it's a strategic imperative. At the macro level, industries are increasingly reliant on data to drive competitiveness, with advanced analytics unlocking efficiencies and enabling smarter, faster decisions. However, the full potential of these innovations is only accessible when businesses have a solid foundation of well-structured, accessible, and high-quality data. At the micro level, this foundation transforms operations, breaking down silos and turning raw information into actionable insights. For manufacturers, data readiness isn't just about improving current processes—it's about building a platform for exponential growth and innovation, paving the way for technologies like AI, Digital Twins, and predictive analytics to redefine what's possible

Data readiness is the process of understanding, organising, and optimising data to ensure it is clean, actionable, and strategically valuable.

The Benefits of Data Readiness

1. **Operational Efficiency:** Eliminate redundancies, improve workflows, and save costs.
2. **Faster Decision-Making:** Empower leadership with reliable, real-time insights.
3. **Cost Savings:** Identify and remove ROT data to reduce storage and management expenses.
4. **Improved Compliance & Security:** Streamline governance and protect sensitive information.

Without data readiness, advanced tools like AI and Digital Twins cannot deliver their full value. Structured, high-quality data is the **foundation for all future innovations**.

Achieving data readiness involves taking a strategic approach to organizing, cleaning, and integrating data across the organisation. The benefits are substantial:

- **Improved Decision-Making:** Having a clear view of your data ensures you can make informed decisions quickly, whether it's optimising production schedules, managing inventory, or forecasting demand.
- **Cost Reduction:** By eliminating redundant data and optimising data storage, manufacturers can reduce costs associated with data management and storage.

- **Foundation for Digital Transformation:** Data readiness is the first step toward leveraging advanced technologies like AI, predictive analytics, and digital twins to drive long-term growth.

Without a strong foundation in data readiness, manufacturers may struggle to implement digital initiatives effectively, resulting in missed opportunities for efficiency gains and innovation.

HOW ONE CITY GLOBAL'S DATA READINESS SERVICE OPTIMISES YOUR DATA LANDSCAPE

One City Global's data readiness service focuses on helping manufacturers gain full visibility into their data landscape, optimise existing data, and prepare for future digital initiatives



1. Data Discovery & Mapping:

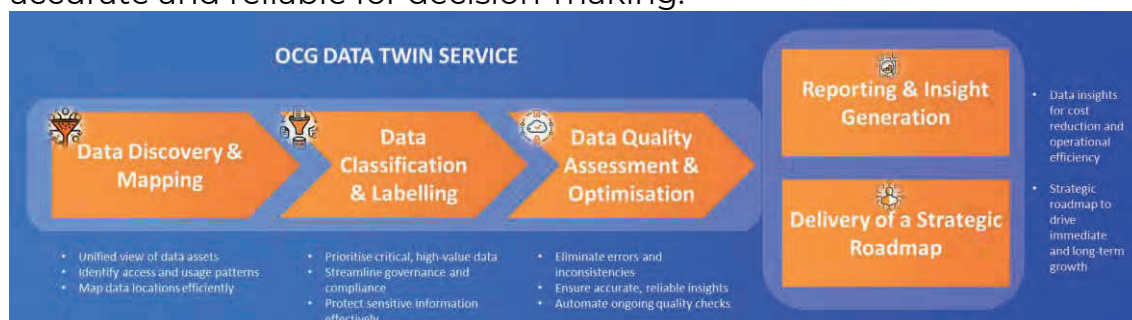
We begin by conducting a comprehensive data inventory, identifying where data resides, who has access, and its current usage. This creates a unified view of your data assets.

2. Data Classification & Labelling:

We categorize data based on sensitivity, business value, and usage, ensuring that critical information is easily accessible while protecting sensitive data. This process helps streamline data governance and compliance.

3. Data Quality Assessment & Optimisation:

Using automated tools, we identify and resolve data quality issues, such as duplicates, inconsistencies, and missing values. This ensures data is accurate and reliable for decision-making.



'When you change the way you look at things, the things you look at change...'

CASE STUDY: ACHIEVING DATA READINESS FOR COST REDUCTION

A mid-sized manufacturer of electronic components faced rising data storage costs and inefficiencies due to fragmented data across departments. After partnering with One City Global, they achieved:

- **20% Reduction in Data Storage Costs:**

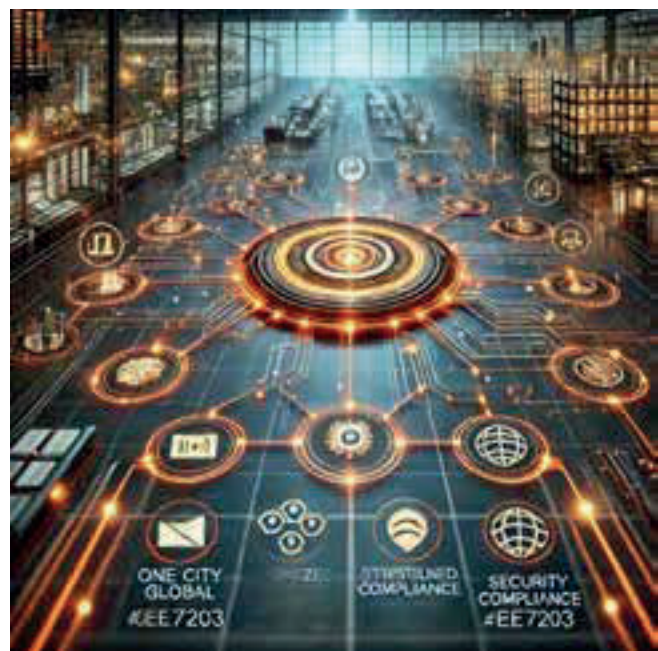
By identifying redundant data and optimising data storage, the company significantly reduced overhead costs.



■ Data Storage ■ Cost Reduction

- **Improved Decision-Making:**

A centralised, indexed view of data assets allowed for faster, data-driven decisions, reducing lead times and improving production efficiency.



- **Streamlined Compliance:**

The implementation of structured data governance ensured compliance with industry regulations, reducing risk and enhancing data security

The business cut operational waste, improved production planning, and laid the groundwork for adopting predictive maintenance and Digital Twin simulations.

These results demonstrate how investing in data readiness can deliver immediate and tangible benefits, setting the stage for digital transformation.

'When you change the way you look at things, the things you look at change...'

THE FUTURE OF MANUFACTURING: AI AND DIGITAL TWINS

Once data readiness is achieved, manufacturers can build on this foundation to adopt advanced technologies like AI and Digital Twins, unlocking exponential opportunities:

- **AI-Powered Insights:** Predictive analytics for forecasting demand, automating workflows, and optimizing maintenance.
- **Digital Twin Technology:** Virtual simulations of production processes to improve efficiency, reduce downtime, and enhance quality.

Data readiness is the enabler. Without clean, structured data, these technologies cannot perform. By starting now, manufacturers ensure they are future-ready and positioned to innovate, compete, and grow.

NEXT STEPS: TAKE ACTION TODAY

Your data holds the key to operational efficiency, cost savings, and transformative growth. Don't let it remain hidden or underutilised.

Here's how to get started:

1. **Assess Your Data Landscape:** Identify challenges and opportunities.
2. **Prioritise Data Readiness:** Transform your data into a strategic resource.
3. **Prepare for the Future:** Build the foundation for AI and Digital Twin adoption.

The future of manufacturing is data-driven. Take the first step today.

👉 **Contact One City Global to unlock your data's full potential.**

**Are you ready to transform your data into a strategic asset?
Contact One City Global to learn how we can help you achieve data
readiness and drive your digital journey forward.**



About Us


OCG has market leading competences within the internet of things, smart data, artificial intelligence, simulation and digital twinning technologies.

We are a Data & Digital Innovation Company, founded on a desire to remove complexity and deliver collaborative, value-driven solutions; to deliver change that matters: We help our clients improve profitability, reduce risk and deliver innovation by bringing Data to life...

We drive towards Digital Excellence by aggregating Data, integrating processes and technologies, collaborating on solutions and innovating to add value.

For more information

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