

Enterprise Data Management:

The ChainSys Advantage



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1. Executive Summary

In today's data-driven world, enterprises face challenges in managing vast amounts of structured and unstructured data. ChainSys Enterprise Data Management (EDM) Solution offers a comprehensive approach to data consolidation, governance, transformation, and analytics, ensuring high-quality data for better decision-making. This whitepaper outlines the structured methodology of ChainSys EDM, covering data collection, transformation, governance, storage, and analytics.

ChainSys EDM Success



40-70%

Reduction in Time & Cost of Managing Enterprise Data

2. Introduction

Enterprises operate across multiple systems, applications, and databases, leading to fragmented and siloed data landscapes. A robust Enterprise Data Management (EDM) solution is essential to streamline data integration, enhance data quality, enforce governance, and leverage Al-driven analytics. ChainSys EDM provides a seamless, metadata-driven, and Al-powered approach to consolidating and managing enterprise data.

2.1. What is Enterprise Data Management?

Enterprise Data Management (EDM) is a strategic approach to managing, integrating, governing, and securing data across an organization to ensure accuracy, consistency, accessibility, and compliance. It involves processes, policies, and technologies that help organizations handle data from various sources—ERP, CRM, cloud, on-premise, and third-party applications—while ensuring data quality and integrity.

2.2. Challenges Organizations Face in Data Management

- Data Quality Issues Over 70% of organizations cite poor data quality as a major barrier to digital transformation, leading to inaccurate reporting and flawed decision-making. (Gartner)
- Data Silos & Integration Complexity More than 80% of enterprises struggle with fragmented data across multiple systems, making real-time integration and accessibility a challenge. (Forrester)
- Regulatory Compliance & Security Risks Global data privacy regulations impact over 90% of businesses, requiring strict adherence to laws like GDPR, HIPAA, and SOX, with non-compliance leading to multi-million dollar fines. (IDC)
- High Cost of Data Management Organizations spend an average of \$12.9 million per year on resolving data management inefficiencies, including storage, processing, and compliance efforts. (IBM)
- Lack of Al & Automation in Data Governance Only 30% of enterprises utilize Al-driven automation for data governance, resulting in manual, error-prone processes that delay insights and increase operational overhead. (McKinsey)

2.3. Why EDM is Critical

1. Ensuring Data Accuracy & Consistency

- Data is generated from multiple sources—ERP, CRM, IoT, and third-party applications—leading to inconsistencies.
- EDM helps standardize and validate data, ensuring reliability for analytics, reporting, and business operations.

2. Eliminating Data Silos & Redundancies

- In large organizations, different departments store data in isolated systems, leading to **duplicate and conflicting records.**
- EDM consolidates data across the enterprise, providing a single source of truth.

3. Improving Decision-Making with High-Quality Data

- Poor-quality data leads to inaccurate insights, impacting business strategies, sales forecasts, and operational planning.
- EDM ensures that executives and Al-driven systems have access to **real-time**, **high-quality data for better decision-making**.

4. Enhancing Compliance & Security

- Industries like finance, healthcare, and manufacturing must comply with strict regulations such as GDPR, HIPAA, and SOX.
- EDM enforces role-based access, audit trails, and policy-based governance, reducing compliance risks.

5. Optimizing Storage & Reducing Costs

- Storing large amounts of unstructured, duplicate, or outdated data increases cloud and on-premise costs.
- EDM applies data archiving, purging, and compression techniques to optimize storage utilization.

6. Facilitating AI & Advanced Analytics

- Al and machine learning models rely on clean, structured, and labeled data for training and predictions.
- EDM ensures data integrity, enabling businesses to leverage predictive analytics, automation, and Al-driven decision-making.

2.4. Real-World Impact of EDM

- Retail Industry: An e-commerce company uses EDM to unify customer profiles, preventing duplicate records and improving personalized marketing.
- **Healthcare Sector:** EDM ensures **accurate patient data** across hospitals, reducing errors in treatment and ensuring HIPAA compliance.
- **Financial Services:** Banks use EDM to **detect fraud**, improve risk assessment, and meet regulatory requirements.

3. ChainSys Enterprise Data Management Solution

The ChainSys Enterprise Data Management (EDM) Solution is designed to eliminate these challenges by offering a metadata-driven, Al-powered, and automation-first approach to data integration, transformation, governance, storage, and analytics. It enables organizations to:



With automation at its core, ChainSys EDM simplifies enterprise-wide data management, ensuring scalability, security, and compliance while unlocking the full potential of business data.



Comparative Analysis

Feature	ChainSys EDM	Microsoft Azure	palantir Foundry	Informatica IICS	Talend
Data Integration	Prebuilt connectors for 200+ enterprise apps	Strong integration with Microsoft ecosystem	Strong in unstructured data	ETL, ELT, iPaaS	Open-source, API-driven
Data Governance & Compliance	Al-driven profiling, lineage, and cataloging	Azure Purview for governance	Advanced security, limited governance automation	Industry leading governance	Good governance, requires setup
Scalability & Performance	High-volume processing, in-memory computing	Scalable cloud-native architecture	Large-scale analytics, complex deployment	Cloud-native, high-cost scaling	Scales well, some big data performance issues
AI & Automation	AI-driven data quality, auto-mapping	Al and ML models with Azure Cognitive Services	Strong AI analytics, limited automation	Al-powered cataloging, cleansing	AI-driven data quality, limited automation

Security & Compliance	SOC1 Type2, SOC2 Type2, HIPAA, Cybersecurity, PCI, ISO 27000, ISO 27001, ISO 9001, CMMI Level 5 compliant	Microsoft Defender and Azure Security Center	Government grade security	Comprehensive cloud-native security	Good security, lacks enterprise compliance
Ease of Implementation	No-code/ low-code, rapid deployment	Requires Azure expertise and customization	Complex, requires expertise	Moderate complexity, cloud-based	User-friendly, but needs development expertise
Total Cost of Ownership	Cost-effective, flexible licensing	Pay-as-you-go, may lead to higher long-term costs	premium analytics	Expensive, add-ons needed	Affordable, but requires integrations
Cost & Time Savings	Reduces integration time by 50%, cost savings up to 40%	High operational costs with Azure cloud services	Expensive for real-time analytics, increased operational costs	Requires additional licenses for full automation, adds significant cost over time	Open-source but requires extensive development effort, leading to higher long-term costs

3.1. World's leading Brands Trust Our Data Solutions





































World's leading Brand



GE Healthcare





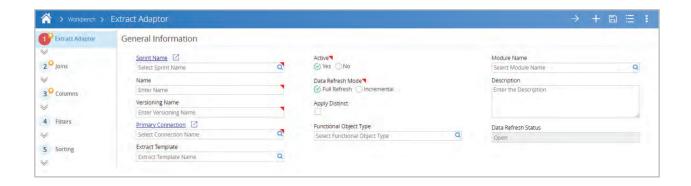






3.2. Key Components of ChainSys EDM Solution

3.2.1. Data Collection (Endpoints)

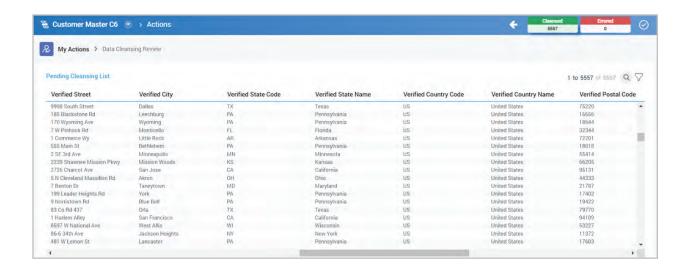


Efficient data management starts with collecting data from diverse sources:

- Structured Sources: ERP, CRM, and enterprise applications like SAP, Oracle, Salesforce, Workday, and Microsoft.
- Unstructured Sources: Includes emails, documents, web data, IoT sensor data, social media feeds, and APIs.
- ChainSys ensures seamless data extraction from both structured and unstructured environments.

3.2.2. Data Assessment & Transformation

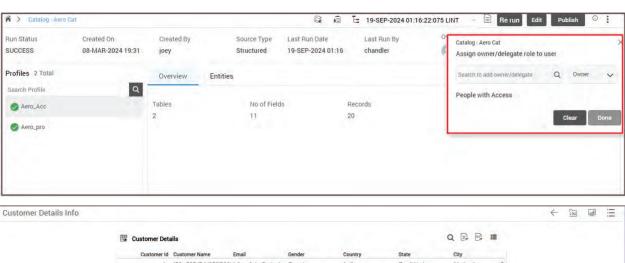


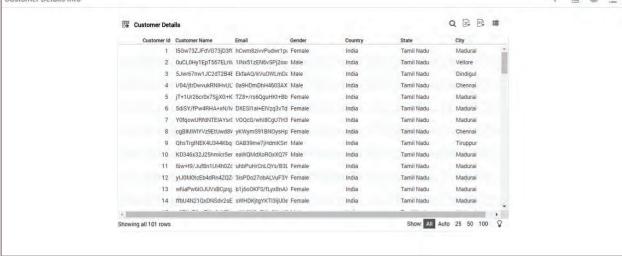


To ensure high-quality and standardized data, ChainSys EDM applies:

- Data Ingestion: ETL & streaming pipelines, schema matching, and data profiling.
- **Rule-Based Transformation:** Standardization, formatting, masking, encryption, and AI/ML-based enrichment.

3.2.3. Data Security

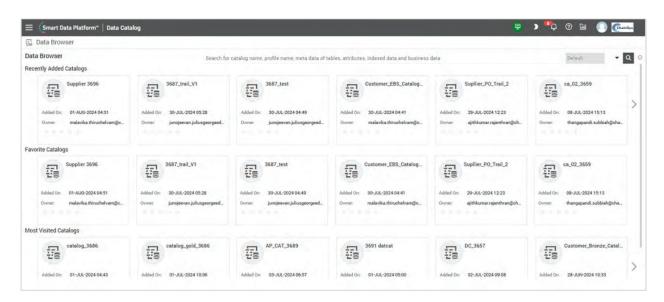


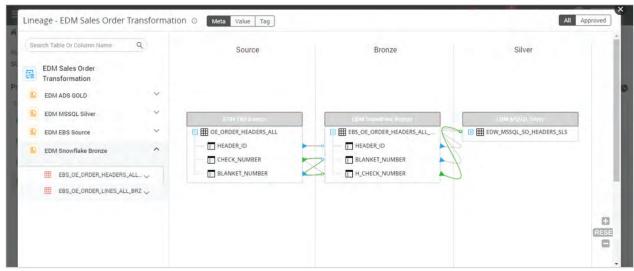


Protecting enterprise data from breaches and unauthorized access:

- Role-Based Access Control (RBAC): Managing permissions based on user roles.
- Encryption & Masking: Safeguarding sensitive data both at rest and in transit.
- Regulatory Compliance: Adhering to GDPR, HIPAA, and other industry standards.

3.2.4. Data Catalog

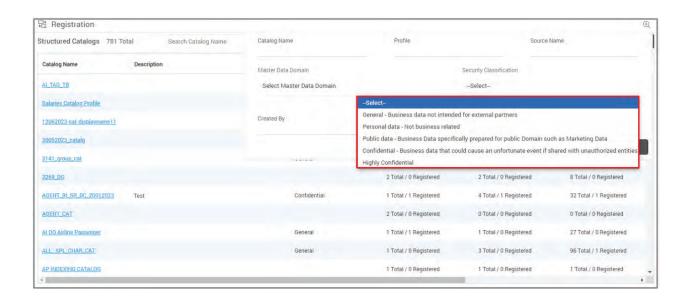




Organizing and making data easily accessible:

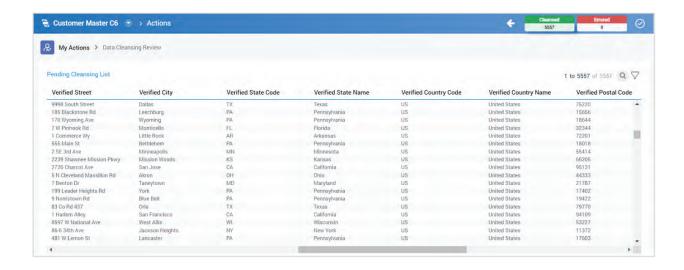
- Metadata-Driven Discovery: Enabling users to find and classify data efficiently.
- Data Lineage Tracking: Understanding data movement and transformation.
- Self-Service Data Access: Empowering business users with governed access to critical data assets.

3.2.5. Data Governance & Quality



- Governance & Compliance: Metadata management, regulatory compliance, and policy enforcement.
- Data Stewardship: Establishing responsibility for maintaining data quality.
- Audit & Logging Mechanisms: Ensuring transparency and traceability of data.

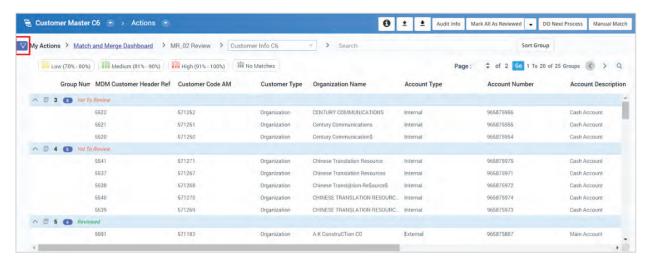




Ensuring data accuracy, completeness, and consistency:

- Data Profiling & Validation: Identifying inconsistencies and anomalies.
- Automated Cleansing & Deduplication: Improving data reliability.
- Continuous Monitoring & Alerts: Detecting and correcting data quality issues in real time.

3.2.6. Master Data Management (MDM)



Creating a single, trusted source of truth for key business entities:

- Unified Data View: Consolidating customer, supplier, and product data.
- Data Standardization & Enrichment: Ensuring consistency across all business units.
- **Multi-Domain MDM:** Supporting various domains, including finance, HR, and operations.

3.2.7. Data Lake Consolidation



ChainSys facilitates scalable, high-performance data storage:

Scalable Data Storage & Consolidation:

• Supports **cloud-based data lakes** and **on-premise data warehouses** for flexible storage.

Data Access & Management:

- Multi-source data consolidation: Merges data from various business applications and platforms.
- Data Partitioning & Optimization: Organizes large datasets for faster query processing.
- Real-time Data Synchronization: Ensures continuous data updates and availability for analytics.



3.2.8. Advanced Analytics & Dashboarding

ChainSys enhances data intelligence with Al-powered analytics and visualization:





AI-Driven Insights:

- Uses AI/ML-based predictive analytics for forecasting and pattern recognition.
- Supports automated reporting & decision support with data-driven recommendations.
- Provides real-time operational insights to enhance business agility.

Interactive Dashboarding & Business Intelligence:

- **Custom Dashboards & Visualization:** Enables users to create and interact with real-time reports and metrics.
- **Cross-Department Collaboration:** Ensures **data democratization** by enabling teams to **share insights across departments.**

Each of these components works together seamlessly within ChainSys EDM, ensuring efficient data management, governance, analytics, and business intelligence.

4. Key Components of the Smart Data Platform:

Foundation Smart Data Platform **Smart Business Platform** Security (dataZap™ dataZen™ dataZense™ Smart BOTS™ Smart App Builder™ Authentication / Data Masking **Smart BOTS** Smart ChainSys Authorization / · Data Integration Data Quality is a BPA PaaS makes Crypto Management · Data Profiling (Business process Application Data Migration automation) Development **User Management** Master Data · Data Compliance • Enterprise Data and QA automation Simplified and Governance User / Groups Management Affordable Low/No tool for any Unstructured Roles / application Code Automation Analytics MDM data processing Setup Migration Responsibility Platform for creating (Customer 360, Access Manager • (PII, GDPR, CCPA, Used for any application Supplier 360, Test data Prep 0100) **Autonomous** Product 360) Rapid Application Regression **Base Component** Development (RAD) · Big Data Ingestion Data Cataloging Testing Framework Workflow Data Archival Versioning Data Analytics · Used for Load and Visual Development Notification Performance Approach · Data Reconciliation Logging Data Visualization Testing Drag and Drop Scheduler · Historical Data Design Tools Object Manager Data Security Patch Analysis Mass DataLoading Functional · Data Visualization Gateway Components into Visual Workflow Component **API Gateway**



Provides seamless data migration and integration with a metadata-driven approach, ensuring data consistency and efficiency during the consolidation process.



Enhances data quality through robust validation, cleansing, and governance capabilities, making it a vital tool for maintaining accuracy and reliability.



Enables deep insights with powerful data discovery, profiling, and visualization tools, empowering organizations to analyze and understand their data comprehensively for better decision-making and strategic planning.

Differentiators

Prebuilt Enterprise Connectors	Reduces integration time and cost.
Al-Driven Data Quality & Governance	Ensures higher data accuracy with minimal manual effort.
Flexible Deployment Models	Supports on-premise, cloud, and hybrid architectures.
No-Code/ Low-Code Interface	Empowers business users and reduces IT dependency.
Cost-Effective Licensing	Transparent pricing without hidden add-ons.
Comprehensive Security & Compliance	Certified with SOC1 Type2, SOC2 Type2, HIPAA, Cybersecurity, PCI, ISO 27000, ISO 9001, CMMI Level 5.
Significant Cost & Time Savings	Reduces data integration time by 50% and offers up to 40% cost savings compared to Azure's long-term operational costs.

Exclusive Expert Support & Training	ChainSys is the only company offering services with a strong team of data professionals who are highly knowledgeable in our platform.
Strategic Partnerships	We have excellent relationships with multiple SI partners and are open to a flexible training model.
Customer-Centric Enhancements	Our dedicated customer experience team continuously reviews customer needs, ensuring platform improvements are addressed quickly.

5. Case Studies

5.1 ChainSys Supercharges leading financial advisory service's Enterprise Data Strategy & Governance, Unlocking Limitless Potential

Project Scope:

Enhance Data Ecosystem:

• Build a unified, governed data environment to support advanced analytics and business operations.

Data Extraction:

- Consolidate 200 million data from various sources, including PDFs and templates, into a unified repository.
- Ensure data quality with checks, controls, and corrections.

Master Data Management (MDM):

- Centralize, de-duplicate, enrich, and validate Client and Company data.
- Enable automated data enrichment using trusted external providers.

Data Governance:

- Implement policies and standards for data privacy, ownership, and governance.
- Define clear operating guidelines for data management processes.

Digital Transformation Support:

- Support migration to MS Dynamics and seamless integration with Salesforce.
- Provide a single source of truth for Client and Company data.

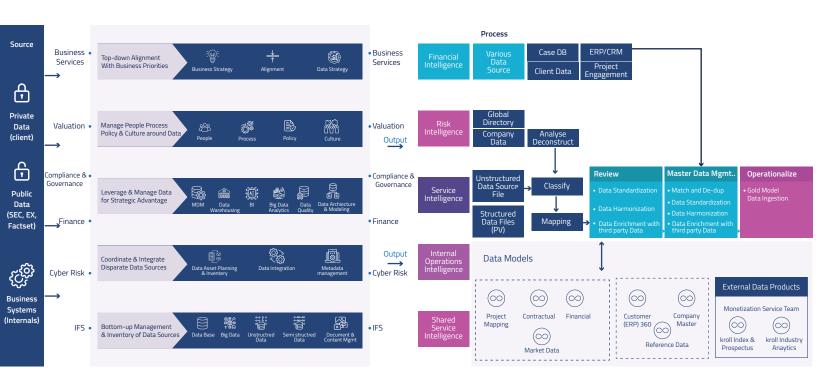
Key Benefits

- **Streamlined Data Management:** The centralized platform reduces the complexity of managing multiple data sources and systems.
- Faster Decision-Making: With over 200 million of consolidated and high-quality data, Kroll can generate reports and insights faster, enabling better decision-making.
- **Governance and Compliance:** ChainSys ensures that Kroll adheres to data governance best practices, protecting sensitive information and meeting regulatory requirements.
- **Enhanced Operational Efficiency:** Automation and low-code/no-code tools reduce manual data management efforts, leading to significant cost and time savings.

Illustration

Fully Connected Ecosystem

EDS Data Journey



5.2 Transforming Enterprise Data with ChainSys: Powering a Global Leader in Designing, Building, and Servicing Critical Infrastructure to the Cloud!

Project Scope:

Extensive Data Migration:

 The project required the migration of data from over 35 legacy systems and 10 new platforms into a centralized Hadoop Data Lake and an integrated Oracle Cloud environment. This encompassed critical business data across Vertiv's global operations.

Multi-Region Data Cleansing:

 Executed a thorough data cleansing process across 17 countries, ensuring compliance with regional regulations such as GDPR. The initiative involved meticulous data profiling and governance for over 2,000 databases.

Cross-Platform Integration:

Integrated data seamlessly from 40+ legacy systems, including SAP, Oracle EBS, and Mainframes, i
nto the new cloud ecosystem using over 1,000 pre-built adaptors. This integration ensured
compatibility and smooth transitions to the Oracle Cloud platform.

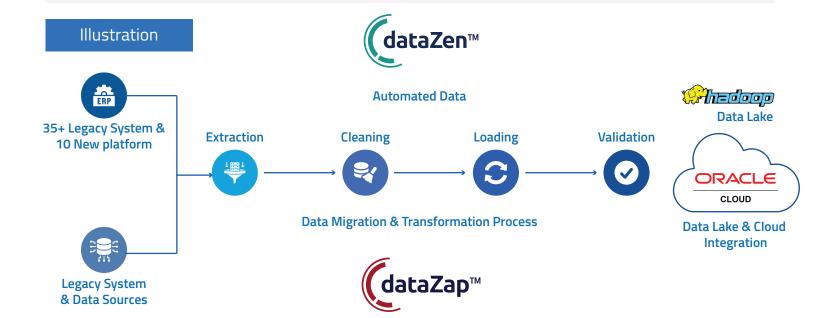
Compliance Focus:

• Managed the sensitive migration of data, ensuring strict adherence to GDPR across EMEA, Asia, and North America, supporting Vertiv's global operational standards.

Key Outcome

- **Superior Data Accuracy:** Successfully migrated over 50 critical data objects, including Material Masters, BOMs, and Customer Master data, with an accuracy rate exceeding 99.9%, ensuring data integrity post-migration.
- Faster Rollouts: Reduced migration timelines by 60% through the use of 240+ pre-configured templates, streamlining complex data transformations and minimizing manual intervention. Operational Excellence: Enabled advanced operational reporting and analytics, enhancing Vertiv's ability to make data-driven decisions with integrated Customer 360, Spend Analytics, and C-Suite reporting across the new cloud platforms.
- Enhanced Predictability: Delivered a highly reliable and repeatable migration process, ensuring predictable outcomes across multiple phases of migration. This was supported by real-time dashboards for data validation and reconciliation.

Global Data Governance: Maintained global data quality standards through rigorous data cleansing
and governance protocols, significantly improving the integrity of Vertiv's transactional data across
its newly integrated cloud platforms.



6. Take Control of Your Enterprise Data Today!

Managing enterprise data effectively isn't just an option—it's a necessity. Poor data management can lead to inefficiencies, compliance risks, and missed opportunities. But with the right strategies and tools, you can turn your data into a powerful asset that drives business success.

This eBook equips you with the knowledge and best practices of ChainSys to build a robust Enterprise Data Management strategy. Now, it's time to take action!

What's Next?

- Assess your current data management practices.
- Identify gaps and opportunities for improvement.
- Implement the strategies outlined in this eBook to future-proof your data landscape.

Need expert guidance? Reach out to us today to accelerate your data transformation journey. Your data, your future—manage it wisely!

Schedule Demo

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One Platform for your

End to End

Data Management needs





Data Migration Data Reconciliation Data Integration



Data Quality Management Data Governance Analytical MDM



Data Analytics
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