

DynaTech's

Modern Master Data Management with Microsoft Fabric + AI

From fragmented data to intelligent, trusted business insight

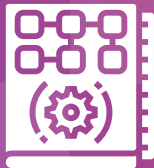


What is MDM?

 **DynaTech** | Systems

Each stores related information about the same customers or vendors, but details often differ — names, addresses, and IDs rarely align.

This trusted data foundation ensures every team and application works with the same reliable information.



Modern organizations rely on many business systems — from ERPs and CRMs to accounting and support tools like QuickBooks, GP, or Dynamics.

Master Data Management (MDM) connects these systems, cleans and merges their records, and creates one centralized, accurate “golden record.”

The Data Reality

Today's Data Challenge:

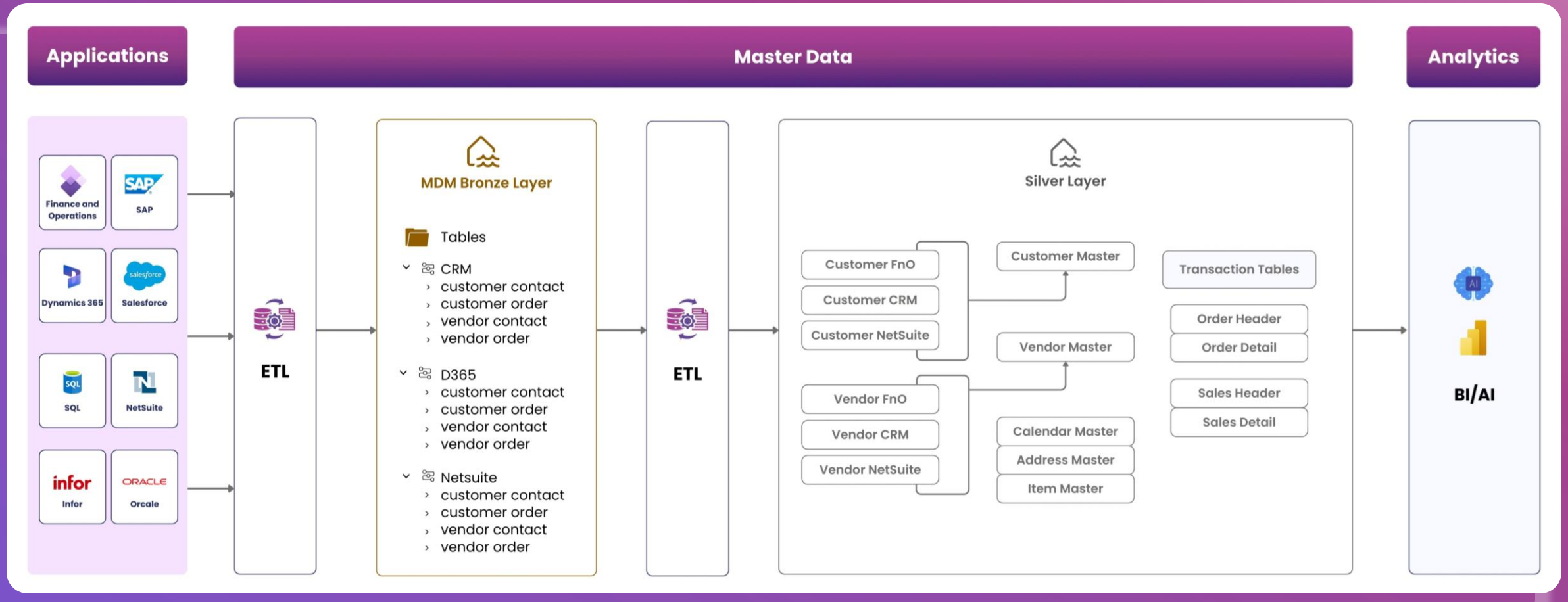
- › Across the enterprise, data is duplicated, inconsistent, and constantly changing. A single customer or product can appear in several versions, depending on where it's stored or who updated it last.
- › Frequent manual edits, third-party integrations, and address corrections make it even harder to maintain accuracy.

The result: reporting delays, integration errors, and compliance risks.

- › Clean, connected data enables better analytics — and better analytics lead to smarter decisions.



Architecture of MDM



How DynaTech does MDM?



- › Fabric integrates 145+ sources via Dataflow Gen2 & Data Factory.
- › **Databases:** SQL, PostgreSQL, SAP, Oracle, MySQL, Redshift, BigQuery, Snowflake, etc.
- › **Storage:** Azure Blob/Data Lake, S3, GCS, Oracle Cloud
- › **Apps:** Dynamics, Salesforce, ServiceNow, SharePoint, Dataverse
- › **Protocols:** FTP/SFTP, HTTP, REST, File System
- › **Benefit:** Unifies all your siloed data in one place.

- › AI-powered rule suggestions, metadata-driven validation, and BI dashboards for data quality review.
- › **Benefit:** Errors fixed, duplicates removed — your data is now analysis-ready.

- › Ensure uniformity by standardizing data (e.g., employee names in CRM using SAP master).
- › **Benefit:** Enables consistent, shareable data—no more duplicate entries like 'USA', 'United States', and 'The US'.

- › Distribute consolidated master data to all required systems for consistency.
- › Enable real-time data sync from MDM to connected applications and analytics platforms.
- › **Benefit:** Keeps downstream systems continuously updated — ensuring data is always accurate, accessible, and ready for business use.
- › Delivers insight-ready information for faster reporting and better decision-making.



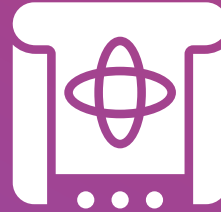
DynaTech Advantage

 **DynaTech** | Systems



Traditional MDM

- › Manual
- › Reactive
- › Disconnected



Modern MDM

- › Fabric foundation + AI automation + Purview governance.

Why It Matters:



Creates one trusted version of every entity (Customer, Vendor, Product).



Enables AI readiness and predictive analytics.



Ensures compliance and auditability by design.



What is DynaTech's MDM with Fabric & AI?



- › DynaTech's **Master Data Management (MDM)** tool with Fabric and AI is a unified platform built to simplify and strengthen enterprise data management within the **Microsoft ecosystem**.
- › It's designed to ensure that every business function — from Finance to Operations — works with **clean, consistent, and connected data**.

The Tool Is Capable Of:



Master Data Management: Consolidates and governs critical business data (customers, vendors, products, COA) across all systems.



Data Quality Validation: Automatically checks data accuracy, completeness, and consistency using pre-defined business rules and AI assistance.



Data Migration: Seamlessly transfers and transforms data from legacy or external systems into Microsoft Fabric with full traceability and control.

Step 1: Ingest - Bring All Data Together

What Happens

- › All your data — from ERP, CRM, and other systems — is brought into one place inside **Microsoft Fabric**.
- › Instead of scattered sources, everything now flows into a single, secure environment.

Business Outcome

- › You can finally **see everything in one place**.
- › No more juggling files or disconnected systems.
- › A strong foundation for accuracy and governance.



Step 2: Profile – Understand Your Data

What Happens

- › By leveraging **Azure OpenAI services**, the system intelligently scans and classifies your data into **master** (customers, vendors, products) and **transactional** (orders, invoices) categories.
- › It applies natural language understanding to generate **clear, human-readable** descriptions, helping business users easily interpret complex data structures.

Business Outcome

- › Clear visibility into what data exists and how it's used.
- › Easier collaboration between business and technical teams.
- › Confidence that your data is well understood before cleanup begins.



What Are Validation Rules in Data Cleaning

- › Validation rules define the conditions that your data must meet to be considered accurate, complete, and reliable.
- › They help identify when information is missing, incorrect, or inconsistent — ensuring data is cleaned in a consistent, repeatable, and auditable way.

Examples

- › “Email address must follow a valid format.”
- › “Customer ID should not be blank.”
- › “Product price must be between defined limits.”

Why It Matters

- › Prevents bad data from entering the system.
- › Ensures accuracy across all records before they’re used for reporting or AI.
- › Builds trust in business decisions based on clean, verified data.

DynaTech’s Data Cleaning Process with 39 Validation Rules

What Happens

- › In the Clean step of MDM, DynaTech applies a library of 39 pre-defined validation rules that automatically detect and fix issues like missing, duplicate, or invalid data.
- › These rules check everything — from column values and data types to patterns, ranges, and relationships — ensuring every record meets business and data quality standards.

How It Helps

- › Automates data validation: AI uses these rules to flag and correct errors instantly.
- › Ensures consistency: The same standards apply across all systems and regions.
- › Saves time: Reduces manual reviews by 60–70%.
- › Improves trust: Clean, verified data is ready for operations, reporting, and analytics.



Category	Validation Rule	Description
Completeness	expect_column_values_to_not_be_null	Field must not be empty
Accuracy	expect_column_values_to_match_regex	Email or phone number must match a valid pattern
Consistency	expect_column_values_to_be_in_set	Payment terms must match approved list
Integrity	expect_multicolumn_values_to_be_unique	Customer ID + Location must be unique
Validity	expect_column_values_to_be_between	Price must fall within defined range

Step 4: Enrich - Add What's Missing

What Happens

- › The system fills in missing details — like verified addresses or regional data — using trusted external sources and APIs.

Business Outcome

- › Complete records without manual entry.
- › Better accuracy for reporting and insights.
- › Time saved for teams who rely on complete information.



Step 5: Standardize

What Happens

- › All data is aligned to the same naming and format standards — for example,
- › “US,” “U.S.,” and “United States” are standardized to “USA.”

Business Outcome

- › Everyone works with the same format and language.
- › Reports become faster, cleaner, and more reliable.
- › No confusion caused by inconsistent data.



Step 6: Consolidate

What Happens

- › AI compares and merges similar records across systems — picking the most accurate details to form one single version of truth called the Golden Record.

Business Outcome

- › One trusted record for every customer, vendor, or product.
- › Duplicates eliminated across systems.
- › Simplified reporting and faster access to correct data



Step 7: Distribute & Stream - Share Clean Data Everywhere

What Happens

- › Once the master data is ready, it's automatically shared back with your connected systems — like ERP, CRM, and analytics tools.

Business Outcome

- › Every department always works with the latest, most accurate data.
- › No more conflicting reports or mismatched entries.
- › Decisions are faster, aligned, and data-driven.



Typical Outcomes



**Reduction in
Reconciliation Effort.**



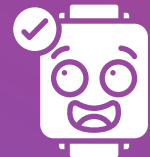
**Faster
Reporting & Analytics.**



**Improvement in
Compliance Scores.**



**Improved Data Accuracy
for Master Domains.**

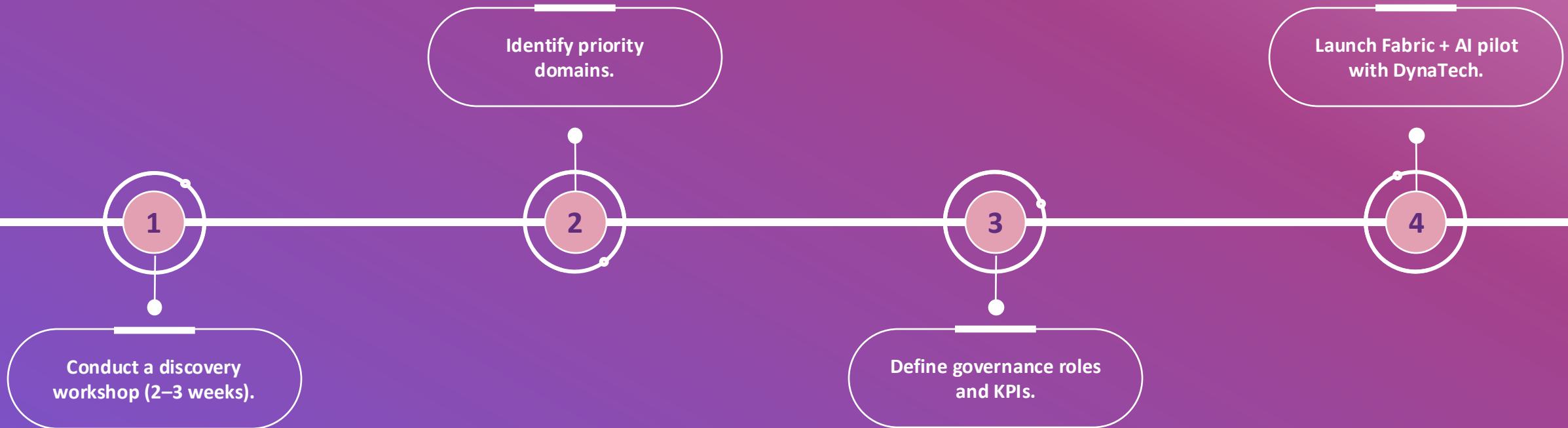


**Real-time AI-readiness
for Copilot and BI.**

Next Steps



Start Your MDM Journey



“Let’s build your intelligent data foundation together.”

AI Use Cases

AI-Powered Financial Insights

Get real-time visibility into balances across customers, vendors, inventory, banks, and GL with simple Copilot prompts in D365 Finance.

AI Chatbot for Customer Interaction

Deliver human-like, guided experiences from product discovery to order placement using Copilot-powered chatbots.

Membership Services with Chatbots

Automate application status checks, document generation, and member FAQs—no human intervention needed.

Data Transformation with Copilot in Dataflow

Clean, merge, and shape datasets using natural language—no code required.

Code-Free Exploration in Notebook

Query, debug, visualize, and convert SQL to Python seamlessly with Copilot in Microsoft Fabric Notebooks.

Effortless Report Building with Fabric Copilot

Generate interactive Power BI reports by simply describing your data needs.

Instant Insights in Report View

Ask questions and get live, contextual summaries directly from Power BI dashboards—no digging required.

Smarter DAX Queries with Copilot

Learn, write, and optimize DAX measures faster using AI-powered assistance in DAX Studio.

Campaign Automation with Copilot in Marketing

Build and launch hyper-personalized, multi-channel campaigns in minutes using prompt-based journey creation.

Customer Service Efficiency with Copilot

Empower agents with summarized case details, suggested responses, and relevant knowledge—automatically.

Conversation Summarization with Audio Analyzer

Automatically transcribe, summarize, and extract insights from recorded meetings or consultations in seconds.



Next-Gen Industry Accelerators

Associations & Memberships

- › Nonprofit Organizations
- › Foundations & Grantmakers
- › Associations and memberships
- › Workforce & Continuing Education

Project & Services

- › Architecture & Engineering Services
- › Energy & Utilities Contractors
- › Clinical research Organizations
- › Facility Management Providers

Healthcare & Life Sciences

- › Healthcare Providers
- › Life Sciences & Pharma
- › Home Health & Long-Term Care
- › Laboratory Services

DynaTech | Systems

Manufacturing

- › Automotive Components
- › Chemicals Processing
- › High-Tech/Electronics
- › Heavy Machinery & Industrial
- › Furniture & Fixtures
- › Medical devices
- › Paper, Packaging & Printing
- › Food & Beverage

Associations & Memberships

- › Grocery & Supermarkets
- › Health & Beauty
- › Electronics & Appliances
- › Home Goods & Furniture
- › Wholesale / Distribution
- › Apparel & Footwear
- › Office Supplies & Stationery
- › Retailers
- › Pharmaceuticals



**Smarter Data.
Stronger Governance.
Scalable Growth.**

**Contact Us For More
Information**



Phone Office :
+1 844 787 3365



Our Website :
www.dynatechconsultancy.com



Address Office :
1547 B Finnegan Ln,
North Brunswick, NJ 08902



Our Email :
sales@dynatechconsultancy.com