
Golden Records 2.0
The AI-Native MDM Advantage
Tamr

Do you know your customers?

It’s a simple question, right? But can you answer it? Confidently?

If your business is like most businesses, odds are, you can’t. At least not entirely. And you want to know why? **It’s because your data is fragmented.**

Today’s proliferation of data sources is causing inconsistencies and inefficiencies to run rampant in organizations worldwide. This data fragmentation poses a significant barrier to creating golden records—the most accurate, complete, and authoritative representations of your data—and achieving true 360-degree views, critical for delivering transformative benefits to the business.

The ripple effects are everywhere:

- **Operational inefficiencies** are prompting inventory discrepancies, inaccurate forecasting, and poor customer service.
- **Missed market opportunities** result from the failure to identify trends, personalize offerings, or target the right customers.
- Inconsistent data across systems presents significant hurdles and introduces serious **risks when it comes to regulatory compliance**.
- Inaccurate, incomplete, or unreliable data leads to **flawed outputs and biased predictions from AI models**.

Fixing these challenges is difficult, but not impossible. Doing so requires the adoption of a new approach. In the words of Albert Einstein,

“Problems cannot be solved with the same mindset that created them.”

For years, organizations have employed rules-based master data management (MDM) solutions in an attempt to rein in the data chaos. But to be frank, they just can't keep up.

- They're rules-based, requiring **countless rules upon rules** that often contradict one another and don't scale.
- They require **extensive manual effort** to configure, curate, and maintain the rules.
- They rely on **centralized control for governance** and management.
- They're **built for static data**, and if there is one thing we can all agree on, it is that data is anything but static!

That's why data-savvy organizations are making the pivot to modernize their data management systems and embrace **AI-native master data management**, the fastest and most-effective method for ensuring that every system and decision-maker has access to accurate, comprehensive, and trusted golden records. These golden records are crucial for identifying new business opportunities, gaining operational efficiencies, managing risks, and fueling downstream AI applications—benefits that collectively drive business value and lead to meaningful results.

What is a Golden Record?

A golden record represents the pinnacle of data management: a single, authoritative, accurate version of a business entity's data across multiple data sources and datasets. This hard-to-achieve level of data integrity and comprehensiveness is now possible through an AI-native approach. By leveraging artificial intelligence (AI) and machine learning (ML) to create golden records, companies can achieve faster time to value, enabling them to sell more effectively, enhance marketing outcomes, uncover new opportunities, reduce operational costs, and make more informed decisions. Essentially, golden records streamline data management, leading to more accurate insights, improved decision-making, and stronger business performance.

Golden records are the cornerstone for organizations striving to gain a competitive edge and secure their leadership position in an increasingly complex, dynamic marketplace.

SPOTLIGHT ON SUCCESS

Global Life Sciences Company: Mastered Customer Data Improves Data Quality by 31%

The Challenge: A global Fortune 500 life sciences firm with 15+ operating companies had customer data scattered across a myriad of CRM, marketing automation, and services solutions, making it difficult to gain a holistic customer view and identify upsell and cross-sell opportunities.

The Solution: By adopting Tamr's AI-native MDM solution as part of a modern data architecture with Snowflake and Salesforce Data Cloud, the life sciences company unified and mastered data across 17 internal and external sources to deliver a 360-degree view of customers and contacts and publish trusted golden records back into Snowflake for use across the enterprise.

The Result: By deduplicating 10M+ contact records, the life sciences company reduced duplicates by 50% and increased overall data quality by 31% within six months. And because they now had holistic, 360-degree customer views in place, the company was also able to implement AI-driven use cases, including marketing personalization and customer journey analytics.

Read **this company's story** to discover how they used Tamr to transform their data from a barrier to a valuable asset that drives growth, fuels AI, and accelerates innovation, delivering greater value to their customers.

> ***"With Tamr, once the data is connected, records are mastered in a day or less—fast, automated, and accurate. Having a trusted golden record is a huge unlock. For the first time, we can confidently say, 'Here's who we're working with—and here's how to better serve them.'"***
>
> **Data & AI Executive**
> Global Life Sciences Company

Why Traditional MDM Falls Short

For years, companies have relied on traditional MDM solutions to solve their data mastering needs. With the intent of creating golden records, traditional MDM employs rules to drive the standardization, validation, and governance of data across systems and silos within an organization.

But while data has evolved, traditional MDM has not. And that's because MDM was originally built for static data. As data sources grow and become more diverse, traditional MDM simply can't keep up.

The rules-based approach that traditional MDM solutions rely on, once considered innovative, is proving to be a liability. Writing, modifying, and maintaining rules is time-consuming for data teams because as data changes, the rules must change, too. And that requires significant manual effort, making it difficult for these solutions to scale. That's why companies who invest in traditional MDM fail to realize the promise of golden records.

To make matters worse, implementations are costly, time-consuming, and complex, relying on teams of professionals to ensure project success. And because traditional MDM solutions have limited flexibility and scalability, they often become a data silo themselves, exacerbating the very issue they are trying to solve.

When your data changes, the rules in your traditional MDM solution break.

CASE IN POINT

Old Mutual

Old Mutual, a 180-year-old financial services group that supports retail and corporate customers across 12 countries in Africa and Asia, was on a mission to digitize their customers' journeys in order to improve the accuracy and quality of customer experiences. But in order to do so, they needed to unlock valuable customer data that was trapped in three separate master data management solutions. Without a holistic, 360-degree customer view, Old Mutual quickly realized that they couldn't scale to meet modern customer demands.

In addition, the firm was moving to the cloud. But their existing MDM solutions were not compatible with their cloud-based approach, making the need to accelerate the modernization of their existing MDM solutions even more acute.

That's where Tamr came in. By adopting Tamr's AI-native MDM solution, Old Mutual saw immediate improvements in their data.

The firm:

- **Improved data accuracy by 69%** in just six weeks, resulting in golden records
- **Fully decommissioned legacy MDM solutions** within nine months and saved millions of dollars in costs
- **Simplified their IT landscape**, reducing complexities in data integration and eliminating data silos

And they accomplished all of this on-time, on-budget, and without hiring new resources.

In addition, **Old Mutual adopted Tamr's real-time capabilities**, which enabled them to support operational use cases by accessing real-time, mastered views of their data across systems and silos.

These advancements have not only fortified Old Mutual's position as a stronger, more agile, and financially healthier organization, but they have also provided profound benefits to Old Mutual's customers. By delivering a more holistic and accurate view of each customer in real time, the firm can now offer more personalized, efficient, and responsive services, enhancing customer satisfaction and loyalty.

Old Mutual's prior data challenges aren't unique. In fact, many businesses worldwide are finding themselves in the same predicament: Data is trapped in silos, legacy MDM systems can't scale, and customer experiences suffer.

Escaping these age-old challenges requires organizations to break down data silos and rethink their approach to providing accurate, consistent customer data at scale so they can deliver the exceptional experiences customers expect.

AI-Native MDM:
A New Paradigm for Data Management

Managing the complex, ever-growing deluge of data not only requires a new way of thinking, but also a new approach to technology that will break down data silos once and for all. That means embracing an AI-native approach to accelerate the discovery, enrichment, and maintenance of trusted golden records—while still giving human experts a critical role in validating and refining the results.

AI-native MDM delivers all the value and benefits that rules-based MDM simply cannot achieve.

- **AI offers great results out of the box.** By combining embedded similarity with human feedback, it achieves best-in-class match rates with external data, ensuring data accuracy and reliability.

- **AI is tailored to the consumer.** AI integrates every identifier in the system of record with human validation, creating a personalized, single view of each customer. This approach ensures that customer interactions are informed and relevant.

- **The effectiveness of AI-native solutions increases with use.** AI and AI agents continuously learn and improve from machine-generated feedback, making data management more efficient and adaptive over time. This learning capability ensures that the system evolves to meet changing business needs and data landscapes.

- **AI operates in real time.** By employing real-time APIs, an AI-native solution provides a deeper, more immediate understanding of critical business entities across disparate systems and silos.

While AI can handle a lot of the heavy lifting, it's not infallible. AI agents might struggle with data that is exceptionally noisy, ambiguous, or complex. That's why human feedback is critical.

Humans apply judgment and domain expertise to review and refine the AI, including making judgment calls on ambiguous cases or providing additional context that an AI agent might not have considered. And because this refinement process requires businesses to leverage both AI capabilities and human expertise, it underscores the need for solutions that are sophisticated yet user-friendly to manage and utilize AI-enhanced data effectively.

Said differently, AI-native MDM combines the best of both worlds: AI's efficiency and scalability with human intuition and expertise.

AI-native MDM provides the advanced AI capabilities you need to create **golden records**. Not only is AI-native MDM dynamic, but it also enables agility and iterative development based on use cases that are important to the business. And when those use cases or the data that supports them changes, AI-native MDM can adapt, ensuring that the golden records it creates always reflect the most current and accurate version of your data.

Tamr's AI-native MDM solution gives businesses what they need to deliver consumption-ready sets of high-quality, reliable, and accessible data that people across the business can use to solve business challenges. By employing **the right AI/ML models at the right point in the process**, Tamr masters the entities that matter most to your business in real time, ensuring that everyone has immediate access to your company's best data.

Further, using pre-designed schemas, configurable data quality workflows, and pretrained models and AI agents, Tamr provides everything you need to deliver the **best version of your data** for a specific entity, packaged in a way that both humans and machines can consume. We call these data products.

Data products are built to address specific business needs.

Customer Data Product for B2B and B2C customers: includes comprehensive customer profiles, key attributes, and preferences that enable a company to better support their customers and personalize their communications.

Contacts Data Product: Unifies fragmented data to deliver a connected, contextualized view of how contacts relate to accounts, industries, or locations to improve targeting and uncover cross-sell and upsell opportunities.

Suppliers Data Product: Encompasses supplier profiles, performance metrics, and compliance information, enabling procurement teams to assess supplier reliability, manage risks, and optimize their supply base.

Healthcare Provider Data Product: Offers organizations access to comprehensive profiles of medical providers, including specialties and affiliation networks. This information enhances decision-making processes related to network management, referral strategies, and research into healthcare delivery and outcomes.

Healthcare Organizations Data Product: Consolidates hospital, clinic, and group practice records, and enriches these records with external data to show a complete view of ownership, affiliations, and operational information.

Products Data Product: Unites complex product details such as SKUs, variants, bundles, and naming conventions across ERPs, spreadsheets, and operational systems to deliver accurate, consistent product information for downstream workflows.

Locations Data Product: Combines data from geocoding and enrichment providers to deliver reliable insights for use in planning, logistics, customer reach, and strategic operations.

Each of these data products serves as a template for mastering critical entities, equipped with tailored schemas, prebuilt data enrichment capabilities, and pretrained AI models to ensure the data is consumable and actionable for both humans and machines. Further, data products can create connected views of your data in an **enterprise knowledge graph** to deliver a holistic view of your key business entities.

> ***"The best version of your data doesn't mean it's 100% correct. Perfect data is difficult, if not impossible, to achieve. Instead, the best version of your data means that it's been standardized, matched, and enriched against proven and trusted internal and external sources."***
>
> **Anthony Deighton**, CEO, Tamr

CASE IN POINT

Toyota Motors Europe

The Challenge: With a goal of boosting business across Europe, Toyota Motors Europe (TME) launched an initiative to put the customer closer to the center of their activities. However, with 30 national marketing and sales companies (NMSCs) operating across 50 countries, each with their own source systems and approaches to integration, gaining a consolidated view of customers across NMSCs proved challenging. Customer data, varying in quality, remained trapped in silos, hindering TME's ability to innovate, collaborate, and scale.

The Solution: **TME partnered with Tamr** to eliminate data silos and improve accuracy and efficiency in a cost-effective way. Tamr's AI-native MDM solution provided a unique combination of AI and human intelligence that enabled TME to consolidate data across silos and easily add new sources as their data grew. TME was also able to clean, standardize, and track changes and improvements to data, which eliminated errors and increased reliability. And using Tamr's collaborative capabilities, TME employed human intelligence to validate results and capture input, which, in turn, improved trust and accuracy in the data.

The Result: Using Tamr, TME achieved their goal of gaining a unified view of customers, providing the scalability, flexibility, and collaboration TME needed to deliver exceptional customer experiences. TME also optimized upsell opportunities and reduced duplicate customer records by 40%, which improved overall marketing and sales efficiency and effectiveness.

"Toyota is intensely focused on innovation and customer satisfaction. We want to deeply understand our customers and provide them with the best products and services we have to offer in a very innovative way. We saw a more integrated approach to unifying customer data as a core component of this."

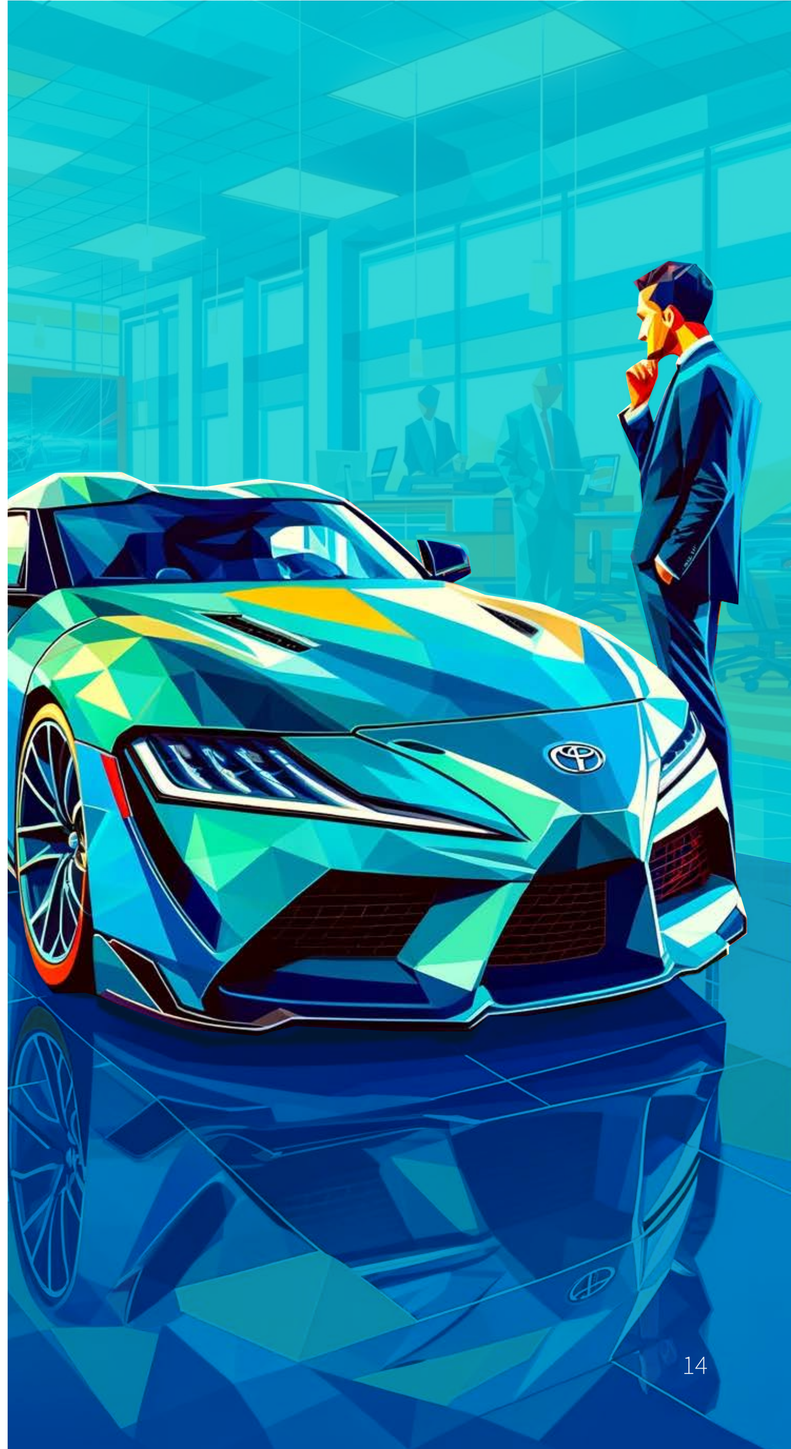
Matt Stevens, General Manager, Toyota Motors Europe

TOYOTA

Achieving Golden Records

AI-native MDM makes the difficult task of achieving golden records and delivering 360-degree views of key business entities possible. Just look at the customer examples provided. Their results speak for themselves.

Using Tamr, Toyota Motors Europe, Old Mutual, and the global life sciences company achieved what they couldn't with legacy rules-based solutions: golden records and a 360-degree view of their customers that's accurate, reliable, and trustworthy. That's the power of Tamr.



Comparing AI-Native MDM with Rules-Based MDM

Not sure which solution is right for you? Let's look at a comparison of AI-native MDM and traditional rules-based MDM to see how each approach stacks up.

Speed & Costs	Tamr AI-Native MDM	Rules-Based MDM
Time-to-value	Fast outcomes—Time-to-value achieved in days or weeks	Slow returns—Takes months to years to reconcile and create trustworthy data
Upfront costs	30% cheaper with AI-driven automation	High costs due to extensive manual intervention and specialized teams required
Ongoing maintenance	Pre-trained AI models help you "start" faster without significant upfront modelling	Rules-based systems require ongoing tuning and manual rule-writing
Operational costs	Lower infrastructure, licensing, and personnel costs	Higher governance, policy, and process-driven operational costs

Accuracy		
Deduplication and matching	Proven, patented referential matching delivers unmatched deduplication results and better entity resolution	Manual rules and preparation risk inconsistencies and data errors; rules-based logic struggles with ambiguous data
Automation and efficiency	AI-driven automation reduces data curation needs by 90%, boosting accuracy	High dependency on manual intervention and processes that are laborious, time-consuming, and error-prone
Trustworthy insights	Golden records reduce report and dashboard creation time by 80% or more and build stakeholder trust	Extensive manual data manipulation means less timely and less justifiable insights
Measurable progress	Move beyond basic metrics like fill rates to better understand the state of your data and track its improvement over time	Lack of visibility into how data evolves makes it impossible to reliably measure the data quality progress

AI-native MDM overcomes the limits of rigid, rules-based MDM solutions by providing the flexibility to adapt to the needs of modern, data-driven businesses. Decentralized governance, coupled with an intuitive interface and seamless integration, puts the management and control of data into the hands of the people who need it to drive business growth, even as data changes.

Comprehensiveness	Tamr AI-Native MDM	Rules-Based MDM
Data quality and completeness	Unifies data across systems and silos; proven machine learning models ensure comprehensive and complete high-value data	Requires manual development of data-quality logic; gaps and inconsistencies persist
Verified match	Your data, refined with AI and verified against a massive master database for accuracy, improves trust and outcomes	No out-of-the-box, third-party data verification
Third-party enrichment	One-click, third-party enrichment enhances data and adds context	Often requires custom development or data reformatting to use external sources
Scalability across domains	Purpose-built data products with domain-specific schema speed up data onboarding and curation	Built for static data—struggles to scale across business units or regions

Durability	Tamr AI-Native MDM	Rules-Based MDM
AI-powered search	Keeps data clean and prevents duplicate records with intelligent “search before create” and entity resolution capabilities	Traditional search struggles with multi-system, multi-domain entity identification
Onboarding of new data sources	Connects and reconciles new data sources in hours using AI-driven automation	Requires manual updates—limiting adaptability to changing data
Real-time APIs	Resolves entities while the data is still in motion and instantly delivers the best data to operational systems	Monolithic platforms require complex efforts to maintain data accuracy
Data governance and stewardship	Empowers data teams with intuitive tools for ongoing data curation and governance	Heavy reliance on manual processes increases the risk of errors and delays

AI-Native MDM

- Speed & Savings
- Accurate
- Comprehensive
- Durable

Rules-Based MDM

- Slow & Costly
- Imprecise & Inconsistent
- Siloed
- Complex & Less Adaptable

Build vs. Buy

The Strategic Choice for Data-Driven Success

By now, we hope you agree that AI-native MDM is the way to go. And once you've made this decision, the next step is deciding between building a custom data management solution or purchasing a pre-built one off-the-shelf. Both options have their pros and cons, prompting organizations to evaluate solutions across a number of factors ranging from business requirements and budget constraints to time-to-market and long-term strategic vision. As you evaluate which approach is right for you, consider the following:

Build

Building a bespoke solution is advantageous if your organization has a number of highly unique requirements as well as plenty of spare time, money, and resources. But builder beware: Custom builds have a myriad of hidden challenges—and hidden costs. So when evaluating your options, consider the full impact on your organization, both short-term and long-term.

⊕ Pros

- **Customized:** Develop unique functionality and tailor it to your business's unique needs.

⊖ Cons

- **Time-consuming:** Building a solution takes time, slowing down time-to-insight, and making it difficult to deliver against expedited timelines.
- **Costly:** Upfront development, additional staff, and on-going upgrade and maintenance costs add up.
- **Inaccurate:** Custom solutions often struggle to integrate disparate data into a single, reliable source of truth.
- **Inaccessible:** These systems are typically walled off from the business, making it challenging for them to access data.
- **Risky:** Intimate knowledge of "how it works" is trapped in a few resources' heads, causing disruption when they leave.

Buy

Buying a pre-built master data management solution offers many benefits for organizations, especially those with aggressive timeframes and limited resources. Businesses benefit from lower costs, increased data accuracy, and the scalability needed to achieve golden records.

⊕ Pros

- **Cost-effective:** Upfront costs are lower, and ongoing maintenance is predictable.
- **Time to value:** Rapid implementations deliver results faster, often days or weeks versus months or years.
- **Proven:** Pre-trained models and AI agents, built-in data quality, and expert best practices minimize the risk of implementation failures.
- **Feature-rich:** Out-of-the-box capabilities, together with frequent product updates and third-party data enrichment, reduce manual effort and maximize ROI.
- **Scalable:** The number of sources and volume of data are irrelevant, avoiding unnecessary costs caused by over-provisioning or frequent system upgrades.

⊖ Cons

- **Set capabilities:** Systems may require compromises in functionality to address highly unique needs.
- **Defined roadmap:** The vendor makes the decisions on product releases and future functionality.

Navigating the Build vs. Buy Dilemma

Advice from Elena Alikhachkina, Data and Technology Pioneer, Named to CDO Magazine's Global Data Power Women

When it comes to deciding whether to build or to buy, you must consider two primary factors: synthesizing disparate data and enhancing user experiences. During your evaluation, ask yourself:

- *Do we have the ability to develop this solution in-house?*
- *What is the strategic importance of the solution?*
- *How quickly must we deploy it?*
- *What will it cost?*

I've seen organizations determine they have the skills and resources to build the solution in-house, but ultimately decide to purchase a pre-built solution because it offers faster time-to-value and lower cost. Others prioritize the ability to create bespoke functionality, even if it takes longer to deploy. Weigh the tradeoffs so you know which option is right for you.

The user experience is also a critical consideration. Assess the level of user engagement each option provides, as well as the solution's ability to easily integrate with your existing data stack. Your responses will guide you to the solution that is right for your business.

Read Elena's full article where she digs deeper into this critical first step in modernizing your MDM approach with data products.

Elena Alikhachkina
Executive Director, Digital Leadership IQ Architect

The Tamr Advantage

Tamr has spent more than a decade focused on using AI and ML to tackle the hard problem of performing accurate, enterprise data entity resolution and creating golden records at scale. Our technology has been proven in the market over scores of customer engagements with some of the most recognizable brands in the world. With **19 patents** behind the technology, there's nothing else like Tamr in the market.

Get a **free, no obligation demo** from Tamr, and see for yourself why leading companies are embracing AI-native MDM to produce the golden records they need to advance their business.

Finally, true Customer 360 is within reach!

Tamr

As the only AI-native master data management (MDM) solution, Tamr delivers the trusted data you need to power your generative AI initiatives. By unifying, cleaning, and enriching fragmented enterprise data, Tamr produces the golden records required for responsible and effective AI automation, informed decision-making, improved revenue growth, and better customer experiences.

Tamr's patented, AI-centric approach combines machine learning and AI agents with human refinement and oversight to deliver value in days or weeks, not months or years like traditional rules-based MDM and DIY solutions. With intuitive 360-degree views linking data across silos, your business can improve data accessibility and leverage the best, most accurate information in real time.

Learn more at **tamr.com**