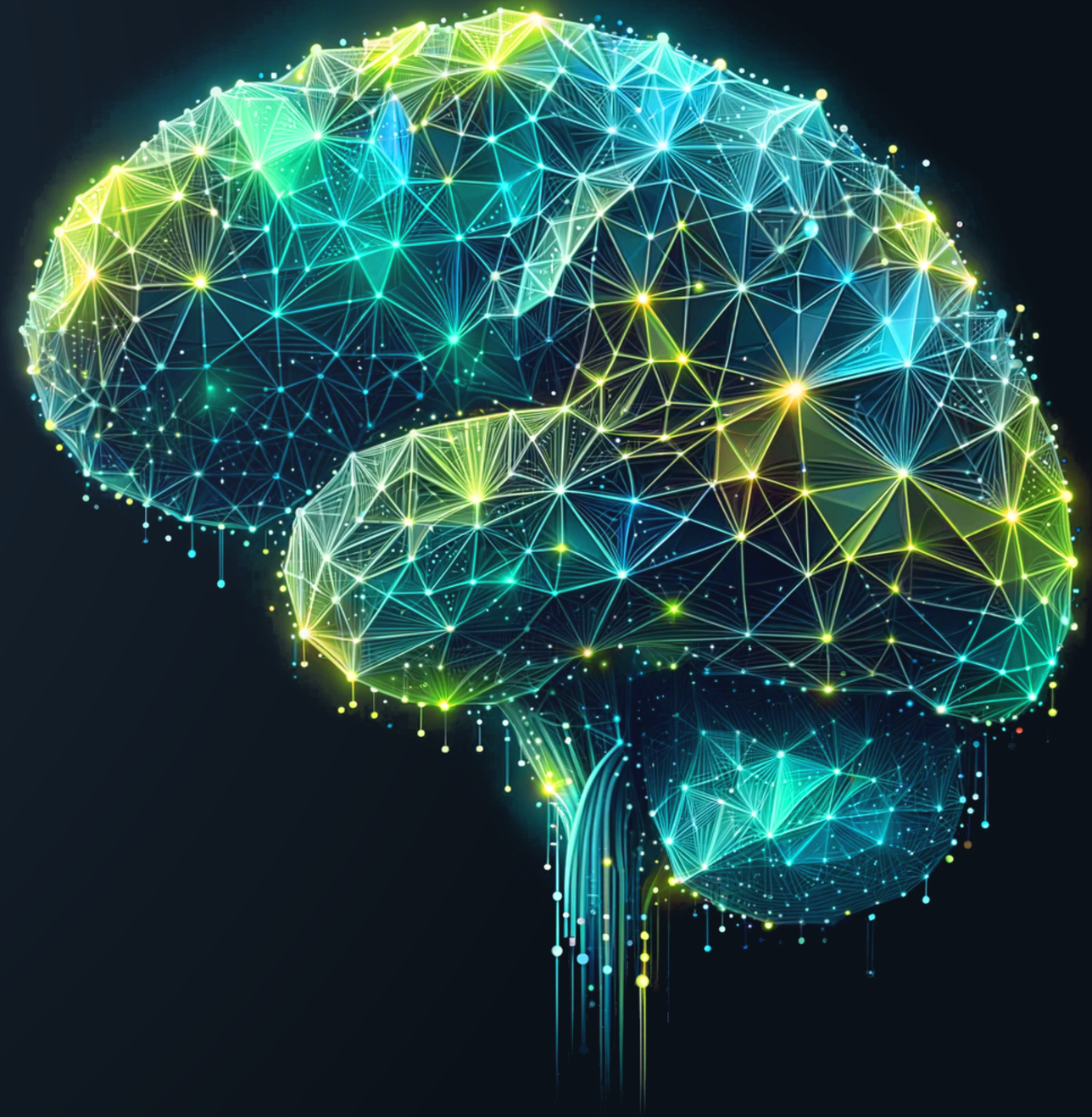
Faster, Cheaper, Better:

Why AI-Powered, Human-Refined Golden Records Outperform MDM



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 achieving a true Customer 360 view, critical for delivering the transformative experiences customers expect.

- 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 when it comes to regulatory compliance
- Reactive risk management prevents the anticipation and prevention of unforeseen threats
- Inaccurate, incomplete, or unreliable data leads to flawed outputs and biased predictions from AI models

Fixing the challenges is difficult, but not impossible. Doing so requires you to adopt 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 reign in the data chaos. But to be frank, they just can't keep up.

They're rules-based and don't scale

They require manual, human 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's 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-powered, human-refined golden records, the fastest and most-effective method for ensuring that every decision-maker has access to accurate, comprehensive, and durable data. This data is crucial for identifying new business opportunities, managing risks, and improving operational efficiency—benefits that collectively drive business value and lead to astounding 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-first approach. By leveraging artificial intelligence (AI) 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.

Case in point:
Santander UK: 360° Customer Views Cut Lending Time in Half

The Challenge: At Santander UK, enterprise data silos made it difficult to reconcile customer data and gain a comprehensive view of customers across disparate sources. Lending decisions were slow, with rules-based systems failing to remediate the situation.

The Solution: Santander successfully unified 45 sources, encompassing millions of customer records, in under four weeks. By adopting a unique AI-first approach to clean, curate and enrich data, the bank created comprehensive and accurate customer golden records, generating unique identifiers, known as **Tamr IDs**, for each customer.

The Result: Higher confidence in customer data accelerated lending processes, increased the reliability of reporting and compliance data, and opened new cross-selling opportunities across divisions and products.

Read Santander's story or **watch** the discussion with data leaders at Santander discuss how Tamr enables them to transform their business processes with an accurate, enriched view of their customers.

Why Traditional MDM Falls Short

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

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

The rules-based approach MDM relies 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 human effort, making it difficult for these solutions to scale. That’s why companies who invest in MDM fail to realize the promise of the golden record.

To make matters worse, implementations are costly, time-consuming, and complex, relying on teams of professionals to ensure project success. And because 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 MDM solution break.

Case in point: Old Mutual

Old Mutual, a 175+ year old African financial services group that supports retail and corporate customers across 14 countries, 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 couldn't interoperate with their cloud-based approach, making the need to accelerate the modernization of their existing MDM solutions even more acute.

And that's where Tamr came in. By adopting Tamr's **patented** advanced AI/ML technology, 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.

These advancements have not only fortified Old Mutual's position as a stronger, more agile, and financially healthier organization, but have also provided profound benefits to their customers. By delivering a more holistic and accurate view of each customer, 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 delivering accurate, consistent customer data at scale so they can deliver the exceptional experiences customers expect.

AI-Powered, Human-Refined Golden Records: 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.

It requires an AI-first approach to speed the discovery, enrichment, and maintenance of trustworthy golden records that organizations need to accelerate growth.

AI 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 data consumer.** AI integrates every identifier in the system of records 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-enhanced solutions increases with use.** AI-powered solutions 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.

"Human-refined" acknowledges the valuable role that human expertise plays in ensuring the quality and trustworthiness of AI-powered golden records, providing a critical layer of oversight and refinement to complement the AI's capabilities.

While AI can handle a lot of the heavy lifting, it's not infallible. Algorithms might struggle with data that is exceptionally noisy, ambiguous, or complex. That's why human-refinement is critical. Humans apply judgment and domain expertise to review and refine the AI. This could involve correcting errors, making judgment calls on ambiguous cases, or providing additional context that the AI might not have considered.

This human involvement is crucial for ensuring the highest level of accuracy and reliability in golden records. It combines the best of both worlds: AI's efficiency and scalability with human intuition and expertise.

The refinement process requires businesses to leverage both AI capabilities and human expertise, underscoring the need for solutions that are sophisticated yet user-friendly to manage and utilize this AI-enhanced data effectively. This is where data products come into play.

Data products have the out-of-the-box AI capabilities you need to create **golden records**. They're dynamic, and they enable 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, data products adapt, ensuring that the golden records they create and support always reflect the most current and accurate version of your data.

Data products provide templates for mastering the entities that matter most to your business. They provide the schemas, configurable data cleaning workflows, and pretrained models needed to deliver the **best version of your data** for a specific entity, packaged in a way that both humans and machines can consume.

Tamr data products package the AI capabilities businesses need to deliver consumption-ready sets of high-quality, reliable, and accessible data that people across the business can use to solve business challenges.

Data products are built to address specific business needs.

A Customer Data Product could include comprehensive customer profiles, purchase history, and preferences that enable a company to personalize their marketing campaigns.

A Supplier Data Product may encompass supplier profiles, performance metrics, and compliance information, enabling procurement teams to assess supplier reliability, manage risks, and optimize their supply base.

A Provider Data Product might offer healthcare 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.

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.

Defining “best”

“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 Motor Europe

The Challenge: With a goal of boosting business across Europe, Toyota Motor 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 unique combination of AI and human intelligence 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 its 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."

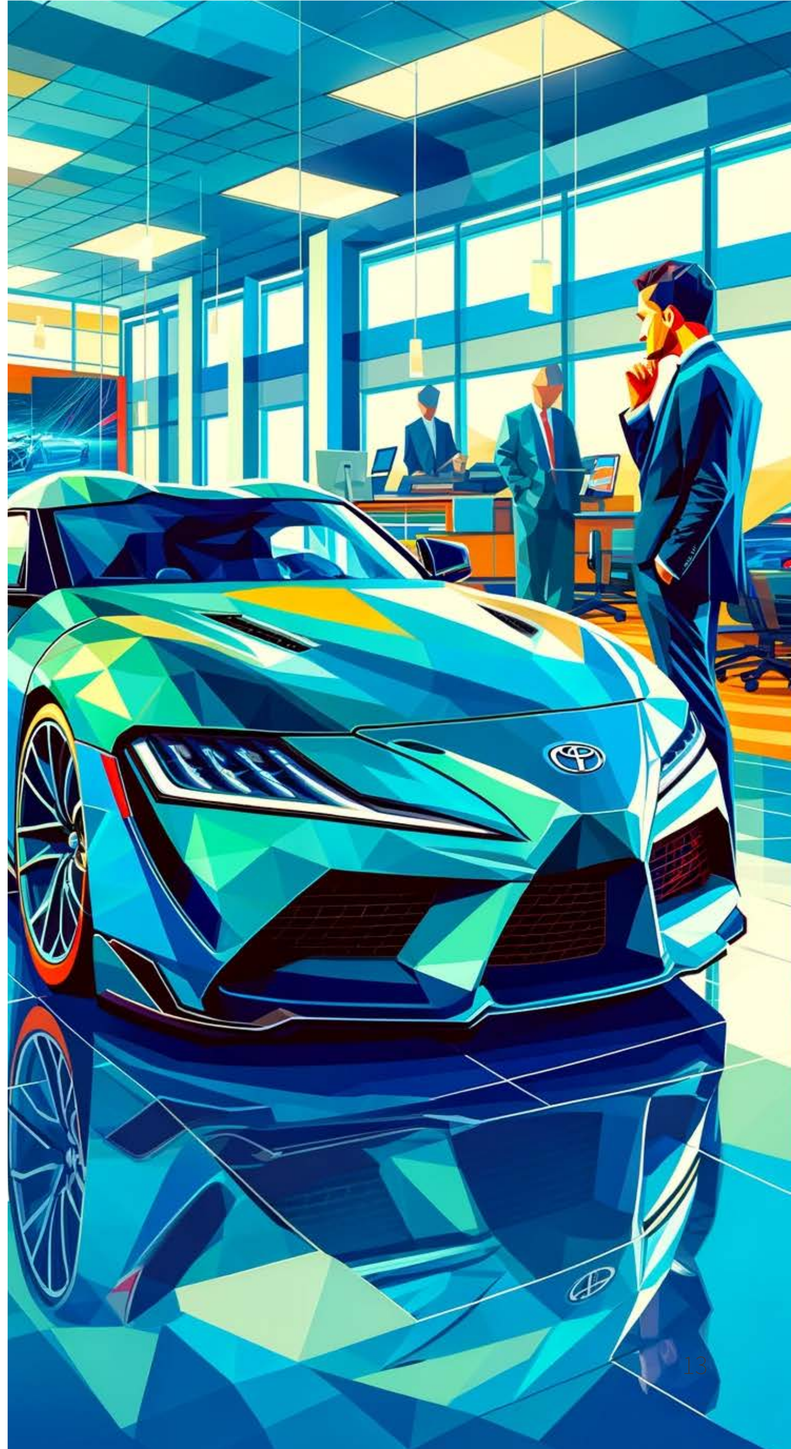
Matt Stevens, General Manager, Toyota Motor Europe

TOYOTA

Achieving Customer 360

AI-powered golden records make the difficult task of achieving Customer 360 possible. Just look at Santander UK, Old Mutual, and Toyota Motor Europe. Their results speak for themselves.

Using Tamr, these organizations achieved what they couldn't with their rules-based legacy applications: a holistic Customer 360 view that's accurate, reliable, and trustworthy. That's the power of AI.



Showdown: AI-Powered Golden Records vs. Rules-Based MDM

Still not sure which solution is right for you? Let's look at a head-to-head comparison of AI-powered golden records versus rules-based MDM to see how each solution stacks up.

	AI-Powered Golden Records	Rules-Based MDM
Speed & Savings Delivers faster time to value and lower project and ongoing operational costs		
Time to golden records	Golden records achieved in days, not months or years.	Takes months to years to reconcile and standardize data.
Project costs	Lower project costs due to efficiency and automation.	Higher project costs due to extensive manual intervention.
Operational costs	Lower operational costs.	Higher operational costs due to manual processes and maintenance.
Accurate Clean, matched, trustworthy data delivered on your terms and ready for consumption		
Data quality and matching	Entirely focused on enhancing data quality and matching for effective entity resolution.	Relies on manual preparation, leading to potential inconsistencies and errors in data quality and matching.
Automation and efficiency	Automation reduces data curation efforts by 90%, enhancing accuracy.	Labor-intensive and time-consuming due to manual processes, reducing overall efficiency and data accuracy.
Resource allocation	Frees up valuable resources for other critical tasks by automating data management processes.	Diverts valuable resources from critical tasks due to the need for extensive manual work in data management.

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continued

Showdown: AI-Powered Golden Records vs. Rules-Based MDM

	AI-Powered Golden Records	Rules-Based MDM
Comprehensive Aligns all data sources and unique data attributes plus 1-click, 3rd party enrichment capabilities to take data to the next level		
Data quality and completeness	Ensures highest value data is comprehensive and complete.	Requires you to manually develop data quality logic.
Data synchronization	Matches data across all source systems, including unique data attributes.	Requires you to build and maintain complex matching logic.
Unique company attributes	Recognizes and leverages unique data attributes that make a company distinct.	Difficult to utilize unique company attributes.
Third-party enrichment	Offers 1-click, 3rd party data enrichment to enhance data further.	Must build custom integrations to enrich with 3rd-party data.

To sum it up, AI data management systems overcome the limits of rigid, rules-based MDM solutions by providing 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.

	AI-Powered Golden Records	Rules-Based MDM
Durable Real-time API integrations and AI-powered search + Easy human engagement = Accuracy and completeness of golden records over time		
Longevity of golden records	Ensures golden records are durable over time by using APIs to connect source systems for ongoing data additions and changes.	Struggles with long-term durability due to slower adaptation to new data sources.
Adaptability to new data sources	Seamlessly integrates with various data sources, whether operational systems like Salesforce, marketing websites, or third-party providers, maintaining data currency and accuracy.	Requires manual updates and integrations, making it less adaptable to new or changing data sources.
Real-time	Offers real-time, AI-powered search to keep data up-to-date, preventing inaccurate or duplicative data from entering the system.	Relies on periodic manual reconciliation and ID-based lookups, leading to potential delays in updating and maintaining accurate data records.
User accessibility	User-friendly for business users, data curators, analysts, and other team members to review, refine, and approve updates and changes, enhancing collaborative and efficient data management.	Monolithic platforms require more specialized knowledge for data review and updates, impeding collaboration and efficiency.

If you only remember one thing, it's this:

90% AI

+ 10% Human Validation

100% Golden Record

AI-powered Golden Records

- Speed & Savings
- Accurate
- Comprehensive
- Durable

Rules-based MDM

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

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Build vs. Buy

The Strategic Choice for Data-Driven Success

By now, we hope you've determined that AI-powered, human-refined golden records are 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' 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:** inability to integrate disparate data into a single, reliable source of truth
- **Inaccessible:** 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 data management solution offers a myriad of 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 versus months or years
- **Proven:** pretrained models, built-in data quality, and expert best practices minimize risk of implementation failures
- **Feature-rich:** out-of-the-box capabilities such as third party data enrichment and simplified human refinement reduce the effort for data processing and maintenance
- **Scalable:** volume of sources and data are irrelevant, avoiding unnecessary costs caused by over-provisioning or frequent system upgrades

Cons

- **Set capabilities:** may require compromises in functionality to address unique needs
- **Defined roadmap:** vendor sets the agenda for product releases and future functionality

Navigating the Build vs. Buy Dilemma

Advice from Elena Alikhachkina, Data and Technology Pioneer, Global Data Power Woman

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 data product 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 data stack with data products.

Elena Alikhachkina
Data and Technology Pioneer,
Global Data Power Woman

Still Not Sure?

Tamr has spent the last 11 years focused on using AI/ML to tackle the hard problem of performing accurate, enterprise data entity resolution at scale. Our technology has been proven in the open market over scores of customer engagements with some of the most recognizable brands in the world. With 18 patents on the technology, there's nothing else like Tamr in the market.

Take a test run of Tamr and experience for yourself why leading companies are abandoning traditional MDM solutions in favor of advanced AI technology to address their golden record problem.

Finally, true Customer 360 is within reach!

Tamr develops data products that use battle-tested AI to speed the discovery, enrichment and maintenance of the golden records businesses need to accelerate growth. Tamr's AI-powered, human-refined approach delivers value in days, not months or years all while lowering project and operational costs when compared to MDM or DIY solutions. By connecting data across source systems and incorporating 1-click, 3rd party data enrichment, Tamr delivers accurate, comprehensive and durable data ready for consumption.