

The MDM Journey

From Trusted Data to
Operationalization



Let's be honest: delivering the clean, curated data your company needs to drive business success is a daunting task. For years, companies have launched initiatives that attempted to deliver holistic, 360-degree views of their customers and other key business entities. But inevitably, these initiatives fell short, failing to deliver the golden records companies needed to make the best decisions for their business.

gol·den rec·ord

[GOHL-duhn REK-erd], noun

1. a single, authoritative, accurate version of a business entity's data across multiple data sources and datasets.

Through no fault of their own, these businesses were led astray. While traditional master data management (MDM) solutions vowed to solve the golden record problem, these initiatives had a fundamental flaw: they focused solely on technology. By jumping straight to operationalizing the data before taking the time to properly assess it, improve it, and review it with the people who know and use it the most, they failed to deliver a solution to the business problem at hand. And that misstep

caused a ripple effect of data quality challenges that became impossible to fix.

If this scenario sounds familiar, you're not alone. Many (many!) organizations struggle to deliver the high-quality data their stakeholders need to drive better decisions and actions. But we're here to tell you there is a better way. Because it's not just about adopting MDM technology. **It's about ensuring you have data that you trust.**

The secret to reaching MDM nirvana is understanding the problem you're trying to solve, taking the steps that matter, and progressing through the journey in a way that prioritizes high-quality data and aligns it with your business goals. In this guide, we'll show you how to transform past failures into an actionable plan for maximizing the value of your data once and for all.

MDM, Misguided

For decades, traditional MDM has delivered technology designed to provide companies with a system of APIs and a repository of data. But here's the problem: traditional MDM is solving the wrong problem.

Businesses don't always need sophisticated tools to deliver better data repositories and APIs. **They need better data.** And when they fail to address the underlying data quality issues, their MDM initiatives will inevitably fail to deliver the results they expect.

Think of it like flipping a house. Many house flippers focus on aesthetics. They paint the walls, replace the molding, and upgrade the appliances. Each of these surface-level improvements boosts the appearance of the

promotional photos, but fails to address key foundational elements such as whether or not the HVAC works properly, if the plumbing and electrical are up to code, and the house has genuine structural integrity. These homes, while beautiful on the surface, have flaws in their underlying infrastructure.

The same is true when it comes to data. Traditional MDM delivers the aesthetics: a robust data repository and system of APIs that connect to BI and data visualization tools so businesses can surface data in beautiful reports and dashboards. But traditional MDM ignores the foundational issues of poor data quality. And failing to improve the quality of the underlying data causes the foundation to crack, wreaking havoc on decision-making.

To overcome this challenge, organizations need to consider all of the steps needed to maximize the value of their data so users will trust it. It's a journey, but one that's important to take if you want to tap into the full potential of your data.



When it comes to mastering your data, success comes from knowing where to start. But that's where many well-intentioned companies stumble. They begin by implementing MDM technology that serves as yet another data repository with its own flashy set of APIs. **This is a mistake.**

Instead of leading with technology, you must start by assessing your data, improving it, and thoughtfully reviewing it with your users. Once you've taken these steps, then you're ready to operationalize your data by connecting it to your essential business systems.

This is the MDM journey. And it's the secret to turning your data into a mission-critical asset.

When companies follow the MDM journey, they can confidently answer questions like "how many customers do I have," "which providers deliver the specific set of services I need," or "what markets have the highest potential for revenue growth?" And because these companies follow the steps to improve data quality before they operationalize it, they see higher degrees of success.



The MDM Journey

- 1 Assess:** know where you are...and where you want to go
- 2 Improve:** make your data trustworthy by cleaning and enriching it
- 3 Review:** put your data in front of end users to gather feedback and build trust
- 4 Operationalize:** turn your data into a mission-critical asset by connecting it to key business systems


How to determine where you are in the journey

Before embarking on the MDM journey, it's crucial to understand exactly where you stand. Here are a few key questions designed to help you evaluate your current state and provide the clarity needed to chart the right path to reach your MDM goals.

Q: Do you know how many customers you have?

A: Yes - proceed to the next question.


A: No (or the answer varies depending on who you ask)

 You need to take a step back and assess your data.

Q: Can you quickly and easily identify and fix an error or missing piece in your data?

A: Yes - proceed to the next question.


A: No.

 You need to improve your data by building a reliable, scalable solution to improve, measure, and maintain your data's quality.

Q: In a cross-departmental meeting, does everyone bring the same data points? Or does each department bring a slightly different version of the truth?

A: Everyone brings the same data - proceed to the next question.


A: Every department brings different data and we argue over who is right.

 It's time to connect your siloed data and put it in front of users so they can review it and provide feedback.

Q: Does every person and every application or system in the organization have access to the best, most accurate and up-to-date data at all times?

A: Yes - congratulations! You've reached MDM nirvana!

A: No.

 The right next step is to operationalize your data by connecting it with operational systems.

The MDM journey underscores the point that technology alone isn't enough to realize the true value of your data. That's why traditional MDM has failed.

On the flip side, improving data quality is good, but if you stop short of operationalizing it, you will fail to capitalize on the full potential your data has to offer.

Rather, companies must embrace the entire MDM journey and complete all four steps. And if you think this sounds like another resource-intensive, time-consuming initiative, you'll be pleased to hear it's not.

<AI enters the chat>

It should come as no surprise that AI is the secret to enabling companies to progress through the MDM journey. Not only does AI help companies to improve the quality of their data, but it also makes it easy to maintain its integrity as data evolves and changes – and it does this cost-effectively and at scale. It fills a gap where traditional, rules-based MDM falls short, enabling companies to tap into the advanced capabilities they need to finally deliver the golden records users have been demanding.

Further, because AI is dynamic, it 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 adapts, ensuring that the golden records it creates always reflect the best version of your data.

With AI, you can (finally!) master the entities that matter most to your business, giving everyone immediate – and the appropriate level of – access to your company's best data. Said differently, AI gives businesses everything they need to make it consumable: high-quality, reliable, accessible data sets that people across the business can use to solve business challenges and confidently pursue important business initiatives.

Breaking Down the MDM Journey

When it comes to the MDM journey, success comes from understanding where you're starting, defining clear objectives, and staying the course toward meaningful outcomes. Skipping steps or taking shortcuts leads to missed opportunities and diminished returns. But when you follow the MDM journey from start to finish, you position your business to deliver the high-quality data needed to drive real business transformation.

Step 1: Assess your data

Conducting an assessment of your data at the outset provides clarity on the starting point for your MDM journey. But too often, companies skip this crucial step, leading them to pursue initiatives and implement technologies that don't address the problem at hand. As a result, they not only waste resources and delay progress, but they also erode trust as stakeholders across the organization lose confidence in the data.

However, when you begin with a thorough and honest evaluation of the current state of your data, you lay a solid, realistic foundation to deliver high-quality, trustworthy data that drives actual business value.

As you assess your data, ask yourself:

- Is my data accurate, complete, and always up-to-date?
- What sources do I have?
- Are enrichment sources relevant?
- What are the relationships between entities?
- What data is the highest priority to the business?
- Is there agreement on which data is the "best" data?
- Do users trust the dashboards we have in place?

Answering these questions provides insight into the strengths, weaknesses, and opportunities within your data, as well as with the processes and technologies to support it. Then, use the insights you uncovered to prioritize the data sets and sources that require immediate attention. If you are struggling with which one to choose, a good rule-of-thumb is to let the business define the priority. Start by answering one question that is critical to your business stakeholders. For some organizations, this question is simply "who are my customers?" For others, the question may be more nuanced, like "which accounts are our highest priority?" Either way, this approach enables collaboration with the business early, keeps you on track to deliver value to them, and helps you align with your strategic goals.

Step 2: Improve your data

Cleaning your data – before you operationalize it – is a critical, yet often overlooked, step in the MDM journey. In the past, this step was tedious, requiring complicated rules and lots of people. And while it may still feel like this step is slowing you down, in reality, it's actually accelerating your ability to deliver business value.

Once you've identified the question you want to answer, the next step is to select the key entities (e.g., customers, suppliers, parts, locations, etc.) and sources that supply this data. Keep in mind this should not be a "boil the ocean" exercise. Instead, be selective and ensure that the core entities you choose are the ones that matter most to the business. Once you've identified your core entities, the

next step is to make the quality of these entities better. Using AI, your organization can improve data quality with minimal human effort by quickly:

- **Aligning your data to a schema** to provide a common frame of reference for your source data that aligns to a universal understanding of the entity.
- **Eliminating duplicates across data silos** by leveraging pre-built machine learning models that handle the yeoman's work of mastering data across disparate systems and sources.
- **Fixing bad and/or missing values** to create consistency in your data and automatically clean and normalize the data so that it's easier for both machines and people to use.

- **Enriching data with reputable, third-party sources** by filling in the gaps in your internal data as well as including additional data attributes from external sources that didn't exist in your source data.
- **Creating golden records** that serve as a single source of truth for each entity by consolidating and standardizing data such as a customer, product, supplier, or provider.

As the old adage goes, "garbage in, garbage out." That's why taking the time to improve the quality of your data is an essential step in the MDM journey, one that will pay dividends when it comes to making better, more-informed decisions.

Step 3: Review your data with a broad group of users

Collaboration and user feedback are equally vital when it comes to improving the quality of your data. Without input from a cross-section of stakeholders, including the data team and end users, the data you deliver runs the risk of being misaligned with real-world needs, leading to missed opportunities and underutilized insights. That's why reviewing your data with actual users of the data and teams that support it and collecting their feedback is a critical step on the MDM journey.

When data stewards update the data and proactively put it in front of data consumers for feedback, you change the dialogue by fostering an environment marked by a partnership that builds trust in the data, ensuring that it is accessible, actionable, and tailored to solve actual business problems. Using an intuitive search interface, users can provide instantaneous feedback on the integrity of the data and correct it in real time. And if the process is intuitive, it makes providing

feedback second nature, helping to preserve the quality of the data as it transforms.

By seeking feedback from (and providing a feedback mechanism to) a wide range of users early and often, you can ensure that your data remains accurate, complete, and aligned with the needs of those who use it. This collaborative approach not only builds trust, but it also drives greater adoption and ensures that your data delivers meaningful value.

Step 4: Operationalize your data

The final step in the MDM journey is turning your data into a mission-critical asset by connecting it to your critical business systems. And it bears repeating – this is the final step in the journey. There is no point operationalizing data that is incorrect, outdated, or incomplete because the insights it provides will be flawed or misleading. And, worse, actions that utilize this insight such as compliance, customer service, personalized marketing, supply orders, and more, will be misdirected or erroneous.

Operationalizing data involves structuring and integrating the data in such a way that you can integrate it into workflows and make it easily consumable across teams and departments. If you've followed the journey step-by-step up to this point, you can feel confident that your data is clean, curated, and ready for use to engage customers with exceptional experiences, uncover new opportunities to grow revenue, and streamline operations. And because you've already put the data in front of end users, you can rest assured that it meets their standards, too.

Of course, AI plays a major role in maintaining the data integrity you've worked so hard to achieve. Using AI, users can clean and curate their data as well as “chat” with it to answer questions that help them improve its quality. And, AI makes it easy for users to spot anomalies that require updating, merging, or unmerging so they can alert data stewards to correct the issue at the source.

The Role of AI-Native MDM in the MDM Journey



Navigating the MDM journey not only requires organizations to think differently about how they assess, improve, review, and operationalize their data. It also demands a new, AI-first approach to technology that accelerates the mastering of data, while still acknowledging the critical role human expertise plays to ensure the data remains trustworthy and high quality.

That's where AI-native master data management (MDM) changes the game. AI-native MDM delivers all the value and benefits that rules-based MDM simply cannot achieve. By combining AI's efficiency and scalability with business context and human expertise, AI-native MDM provides the advanced capabilities you need to deliver the best version of your data.

AI-native MDM plays an important role in supporting each step of the MDM journey. And because AI-native MDM is dynamic and operates in real time, it fosters agility and iterative development across the MDM journey based on use cases that are most important to the business. And when those use cases or the data that supports them changes, AI-native MDM adapts, ensuring that the golden records it creates always reflect the most current and accurate version of your data.



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 as they progress through the MDM journey. It embodies key capabilities, including:

AI-driven entity resolution: reconciliation of multiple, disparate datasets by using AI to detect and match records that are the same entity such as a person or business

AI/ML mastering: human feedback combined with pre-trained machine learning models and semantic comparison with large language models (LLMs)

Data enrichment: referential matching paired with a reference database of trustworthy, third-party sources, linked together with unique IDs

Data quality: insights into missing, incomplete, incorrect, and duplicative data

Real-time APIs: instant access to a mastered view of every entity that matters to the business

Further, AI-native MDM combines embedded similarity with human feedback to achieve best-in-class match rates with external data, ensuring data accuracy and reliability out-of-the-box. It's tailored to data consumers, integrating every identifier in the system of record with human validation to create a personalized, single view of each critical business entity. It continuously receives machine- and human-generated feedback, which means AI-native MDM continuously improves and adapts. And, through the use of real-time APIs, AI-native MDM delivers a deeper, more immediate understanding of critical business entities across disparate systems and silos.

With AI-native MDM, you'll have everything you need to adapt and scale your MDM journey so you can finally deliver the trustworthy, accurate golden records your end users desire.





The Business Case for AI-Native MDM

Making the business case for AI-native MDM requires more than just outlining features and costs. It also must demonstrate how the investment aligns with your organization's strategic goals and drives tangible results.

When developing a business case for AI-native MDM, the best place to start is by identifying your why. Defining your "why" is critical because it roots your proposal in purpose and

clarity. Not only will it help you articulate the strategic importance of AI-native MDM in the context of the MDM journey, but it will also ensure the initiative aligns with organizational goals. And this, in turn, makes it easier to gain stakeholder buy-in and support.

For most organizations, their primary "why" is grounded in one or more of three objectives:

 **Increase revenue**

 **Reduce costs**

 **Reduce risks**

Once you've identified your "why," the next step is to support why AI-native MDM is the key to addressing your objectives. To do so, you must articulate:

- 1 Benefits:** the value the business will gain from investing in AI-native MDM
- 2 Risks:** the missed opportunities and consequences of following a traditional MDM approach
- 3 Costs:** the people, process, and technology, as well as the hidden costs of failing to adopt AI-native MDM

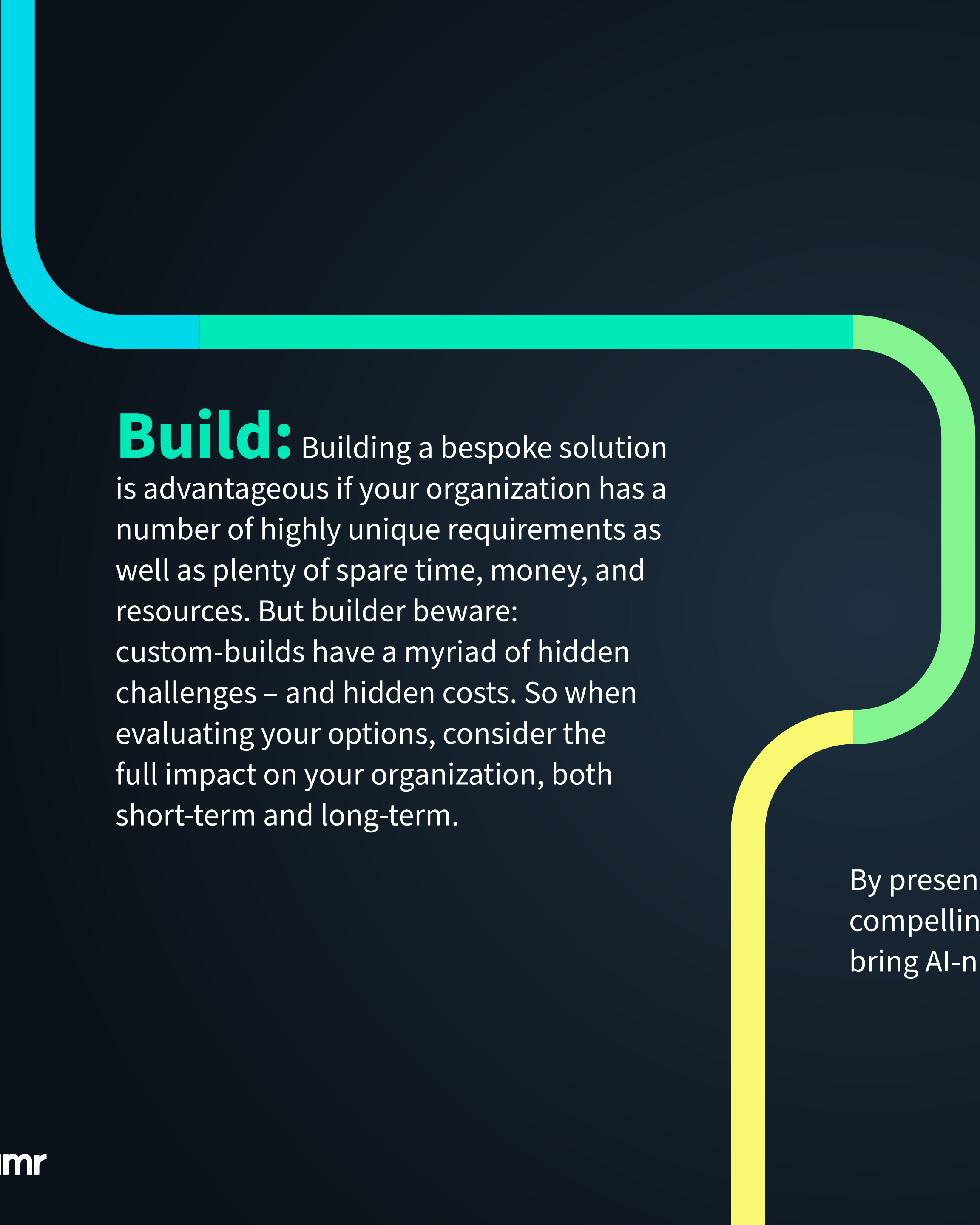
Next, you need to address the elephant in the room: what makes AI-native MDM different from traditional, rules-based MDM?

If your company has spent years attempting to garner value from traditional MDM solutions, you may face skepticism when it comes to the value AI-native MDM provides. But rest assured, there are many reasons why things will be different this time around.

First, AI-native MDM scales as data grows and evolves. This is important, because a drawback of traditional, rules-based solutions is that they literally can't keep pace with the volume and variety of data in use at modern organizations. Next, AI-native MDM relies on human feedback, not manual human effort. Because AI does the heavy lifting, humans can focus their time and attention on reviewing and providing feedback on the data, not on configuring, curating, and maintaining the rules. And

unlike rules-based MDM, AI-native MDM does not rely solely on centralized control for governance and management; it can work with both a centralized or decentralized governance model. Finally, AI-native MDM is built for modern, dynamic data. Traditional MDM is not, which means it will never allow you to build a sustainable, scalable data quality process.

Another important element to include in your business case is a point of view on building a solution versus buying one. When deciding on your stance, it's important to consider the pros and cons of both approaches.



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.

Buy: Buying a pre-built AI-native MDM solution offers a myriad of benefits for organizations, especially those with aggressive timeframes and limited resources. Businesses benefit from lower costs, increased data accuracy, greater agility, seamless integration into existing tech stacks, and the scalability needed to achieve golden records.

By presenting clear value propositions, quantifiable benefits, and a compelling vision for the future, you can build the momentum needed to bring AI-native MDM to your organization.

Tamr: Your Guide to the MDM Journey

We know that embarking on an MDM journey can be complex and challenging. You have countless decisions to make, skeptics to win over, obstacles to overcome, and paths to navigate. But that's where Tamr comes in — as your trusted guide and partner every step of the way. Our AI-native MDM solution enables you to move forward in your MDM journey with confidence, avoid common pitfalls, and achieve measurable business results. Whether you're assessing the current state of your data, making improvements and reviewing it, or advancing toward the ultimate goal of operationalizing your data, Tamr provides the guidance, support, and tools you need to move through each stage of the MDM journey with confidence.

With Tamr by your side, navigating the MDM journey becomes less daunting. Tamr has spent more than a decade focused on using AI/ML to tackle the hard problem of performing accurate data mastering and golden records creation at scale. Our unique blend of advanced AI/ML and human feedback makes improving the quality of your data easier than ever before. With Tamr, you can tackle the dirty data challenge in a manageable way, progressing through each phase of the MDM journey at the pace that is right for you and your organization.

Our technology has been proven in the market over scores of customer engagements with some of the **most recognizable brands in the world**. With **18 patents** behind the technology, there's nothing else like Tamr in

the market. And, through capabilities such as Tamr RealTime, we provide the safeguards you need to ensure your newly-cleaned data remains pristine, even as you make changes and add new sources.

In short, Tamr helps you solve the real problem at hand: fixing the quality of your data so you can use it to drive transformative business results.

Ready to begin your MDM journey?

Schedule a free data assessment with a Tamr expert to receive insights into the state of your data and the recommended steps you should take to finally achieve the clean, connected, and enriched golden records your business deserves.



Tamr provides the only AI-native Master Data Management (MDM) solution that delivers real-time master data for every dashboard, application, and person in your business. Tamr accelerates the discovery, enrichment, and maintenance of golden records, enabling informed decision-making, improved revenue growth, and better customer experiences.

Tamr's patented, AI-centric approach – with human refinement and oversight – delivers value in days or weeks, not months or years like traditional rules-based MDM and DIY solutions. And with intuitive Customer 360 pages, your business can improve data accessibility across the organization and leverage the best, most accurate data to support analytical and operational use cases in real time. Learn more at tamr.com