

RELTIO®

WHITE PAPER

Building vs. buying for unified, trusted data: The top five myths



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The build vs. buy dilemma

When your organization decides it needs new master data management (MDM) or other data management capabilities to unify data and improve its quality, you often hear a simple question: can we build these capabilities in-house—or should we opt for a commercially available solution? This is the classic “build vs. buy” dilemma.

Opting for an off-the-shelf master data management and data unification solution, which includes data products capabilities, means gaining proven solutions that you can easily tailor to your specific needs. On the other hand, building such capabilities in-house gives you control over the scope and enables you to develop precisely what you want. And it can seem tempting to reduce subscription costs with open source software. But it comes with higher costs, more effort, a longer lead time, and ongoing maintenance costs. On top of that, it carries a much higher risk. According to a recent [Standish Group report](#), 20% of software projects are canceled before they get completed, and another 45% are significantly challenged projects (i.e., over budget, behind schedule, and producing low-quality deliverables).

20% of software projects are canceled before they get completed

45% are significantly challenged projects

The Standish Group

This paper delves into five common myths that may tempt companies to choose the in-house build route for MDM or data unification solutions for comprehensive, trusted data. We examine each myth and highlight the potential pitfalls of an in-house development approach.

Data unification is a broad category of capabilities to unify, standardize, enrich, and mobilize fragmented data from disparate data sources into secure, trusted, interoperable data, including 360 views of critical business data.

Myths about building MDM or data unification capabilities in-house

Myth 1

We can build what we need in-house for less than it costs to purchase an off-the-shelf solution. And we will also own that code.

Consider the cost of infrastructure, software, and resources to compare the three-year cost differences between in-house development vs. off-the-shelf approaches. For in-house development, you’ll need to budget for infrastructure, including building, testing, and deploying software, ensuring security, and maintaining high availability. In addition, there are costs for software licenses (DevOps tools, databases, middleware, etc.) and skilled resources for development, testing, management, and integration. You may be able to reduce some of these license costs by using open source components, but it is not likely to make a material difference.

In contrast, when you opt for our off-the-shelf SaaS solution, many of these costs are covered in the subscription fee. For example, a subscription to the Reltio Connected Data Platform, which powers our data unification and management capabilities, includes—at no additional cost—infrastructure, security, high availability, and software licenses for integration, middleware, and database. Our solution also offers a low-code/no-code development environment with over 1,000 prebuilt connectors to popular applications, data warehouses, and enrichment data sources, significantly lowering integration costs.

In-house development also extends the time before the capabilities are operational. The opportunity cost of this delay may exceed 10X the cost of building a solution in-house, which can take 24 months or more (see Figure 1). Incorporating open source components is unlikely to significantly alter development timelines. On the other hand, buying a SaaS off-the-shelf solution offers a cost-effective entry, delivering initial value in 90 days or less. It also allows the flexibility to build upon early successes, effortlessly supporting additional use cases with their readily available, rich capabilities.

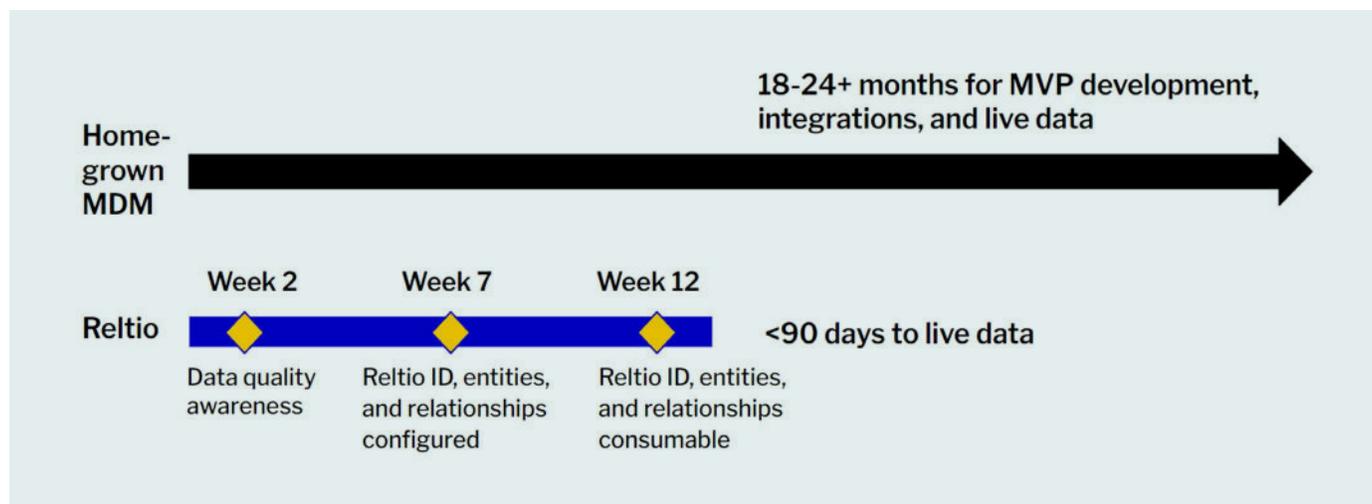


Figure 1: Comparing in-house MDM development and go live timelines vs. commercially available SaaS Reltio solution

It's crucial to recognize that even for a minimum viable product (MVP) of internally developed MDM or data unification capabilities, you'll need to construct most of the fundamental capabilities outlined below. Consider this analogous to laying the foundation of a house. Attempting to build trusses, beams, and roofs or installing sheetrock is only possible with a secure foundation. Establishing the MDM or data unification foundation demands specialized skills and expertise, some of which you may have to recruit. And then you need to plan for thousands of hours of engineering. The MVP capabilities you will need to build include:

- **A scalable entity resolution** solution that does not depend solely on a manual or rules-based approach to identifying and reconciling records from different systems across your enterprise. This is especially important if you have millions of profiles in the target entities for your use cases.
- **A continuous data quality approach** to ensure you have high data quality in downstream systems. This includes the ability to automatically and continuously inspect and flag data to rapidly and proactively identify and correct data issues, supported by interactive dashboards with real-time visibility into granular data quality metrics.
- **Data governance** to ensure trust in the data, including full traceability and data lineage for the entire data lifecycle for every entity, as well as policies and workflows.
- **Ease of integration** with the systems you currently use internally, third-party data enrichment products, and any systems you add to your ecosystem in the future.
- **Flexible data modeling** accommodating relationships, interactions, and transactions for a 360° view.
- **Scalability** to support millions of records, with high availability and performance to enable latency in milliseconds for operational use cases.
- **Support for multiple data domains** for today's and tomorrow's needs. Key domains may include customer, organization, employee, assets, location, and product data.
- **An intuitive UX** for business users and data stewards to ensure productivity.

- **Data security** to support regulatory and corporate policy requirements.
- **Compliance** with data residency, data privacy, and other local requirements.

To ensure your organization's downstream AI/ML and analytics efforts are effective, it's crucial to establish a trusted data foundation. If you aim to further provide trustworthy, interoperable and reusable datasets to BI analysts, AI/ML data scientists, and IT users, you'll need to enhance your MVP with additional features for easier consumption. This includes:

- API-based access to the data, along with documentation
- Fine-grained access control, so users have access to only those data attributes, entities, and metadata through the API that they are authorized to consume
- Exposed data lineage and quality metrics via APIs

Would you prefer to own software that is not on par with what your competitors use but still involves high development and support costs and takes too long to become operational? Or would you instead opt for a proven, world-class, feature-rich subscription that continuously innovates with new features and includes expert support and training? An off-the-shelf solution contains MDM and data unification capabilities to alleviate the burden on your IT teams. All of this is usually packaged with a modest entry price tag.

Suppose you want to design a solution that addresses both present and future needs. In that case, the expenses incurred in developing and sustaining such a solution will far surpass the costs of opting for a commercially available solution.

Myth 2

We are developing an in-house solution to address a specific, unique business requirement. An off-the-shelf solution would probably be overkill for us.

Opting for an in-house build may be tempting when requirements seem very narrow in scope. However, MDM capabilities from an off-the-shelf solution like ours have a well-established adoption across various industries and use cases. So, even if you want to address a requirement that is unique to your business, it's likely that an off-the-shelf solution has tackled a similar use case for one or more clients—either within your or a different industry. Furthermore, a modern unified data and management solution is highly adaptable, so it can likely incorporate your unique requirements. This means an off-the-shelf solution would give you a jump start in time to value, compared to building a solution in-house.

Then, once you see the initial value within 90 days, you can expand its usage to other use cases/data domains or stay focused on your specific problem. Most organizations expand their data unification and management capability usage beyond a single business process to other strategic initiatives. This is because trusted core data for customers, suppliers, products, and other key domains can deliver value across your entire organization by addressing key use cases like omnichannel customer experiences, process optimization, data privacy compliance, sales productivity, and more.

Conversely, developing an in-house, narrowly focused MDM or data unification solution for a single process hampers your ability to build on its success and implement other use cases, putting you at a disadvantage in your rapidly evolving industry. If you decide to expand your solution to other use cases later on, you will likely need additional resources, infrastructure, and an architecture rework. As a result, your costs will go up significantly. You would be making a better bet by purchasing an off-the-shelf solution that offers you the flexibility to start small but expand later, even if you don't use all its features.

Myth 3

We have a strong IT department with high employee retention rates, so we will have the resources to build, maintain, and support the MDM and data unification capabilities long-term.

If your IT team has data management expertise and enough resources, consider what essential projects you might skip by focusing your team on building a new platform instead of buying it from a vendor. You can use their skills for strategic projects that bring your company unique value but don't have off-the-shelf solutions. Also, many IT departments will struggle to keep their retention rates low in the future. According to an industry analyst in a recent [CIO article](#), the average budgeted increase across industries for internal IT talent spend is around 3%. In comparison, the salary growth expectations for 2024 are closer to 6%. So, CIOs are spending more money every year on fewer employees. "They did it last year; we're projecting them to do it this year; in fact, we're projecting the same chart for the next five years," according to the analyst quoted in the report. And, for those IT departments without in-house expertise, putting together a team to build and maintain a solution can be challenging and very expensive.

Some examples of the specific expertise required for a production-grade, high-volume baseline solution include:

- Designing and developing a multi-variable rules-based or ML-based system on large data sets to implement an entity resolution capability
- Ability to model relationships and hierarchies at scale
- Designing and developing a data management system for scalability, reliability, security, audit, and performance
- Development experience with highly scalable persistence technologies such as a NoSQL database, Elasticsearch, and Spark, along with other cloud services
- Designing and implementing good UX and workflow with modern web front-end development frameworks
- Working under a DevOps model to move new code into production
- Developing real-time application integrations, as well as low-latency, high-throughput data pipes
- Implementing metadata management
- Designing and developing API management capabilities

As you scale your in-house solution, its governance becomes more complex. Each added feature or capability introduces new layers of complexity, making the system harder to manage. According to a recent [article](#), 70% of companies had to revisit their governance protocols in two years due to in-house solutions and increasing operational costs. Compounding this problem, according to [Deloitte](#), a significant number of build projects lack sufficient funding to ensure they remain relevant and up-to-date in the long run. An off-the-shelf platform supported by a vendor's extensive team of specialized developers operating within an agile development methodology consistently releases new functionality. In comparison, in-house software risks quickly becoming stagnant if not adequately funded.

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Myth 4

We want to build capabilities in-house because we want control over development and product priorities. We know what features we need and in what order.

Custom-built software indeed provides more control over feature priorities. However, the advantages of opting for an off-the-shelf solution far outweigh the benefits of in-house development for master data management or data unification capabilities.

By choosing an off-the-shelf SaaS data unification and management solution, you instantly tap into a comprehensive set of MDM capabilities (refer to Table 2 below), rigorously tested across diverse industry-specific scenarios by numerous users. Extensive research and development, enriched by insights from a broad customer and partner base, have shaped the product. The vendor promptly addresses issues identified by customers or partners, ensuring continuous refinement and reliability. In such a packaged solution, you'll likely find nearly all

the features you need, allowing you to start deployment immediately, without waiting for in-house development and then testing with a customer size of one (you).

Moreover, the desire for control often overlooks inherent trade-offs. While a custom build provides gains in control, it often results in a loss of agility. Enhanced data security from total control over platform and architecture comes at the expense of resources that you could allocate to IT initiatives driving innovation or customer acquisition.

Myth 5

We want to treat our data as a product and enable easy consumption of trusted 360-degree views, but off-the-shelf MDM solutions don't help with this problem.

Our data unification and management solution offers multidomain MDM and enables data products that deliver a true 360-degree view of various entities, including interactions. You can create data products for customer 360, product 360, supplier 360, patient 360, healthcare organization (HCO) 360, healthcare provider (HCP) 360, and more. Each data model contains a rich set of attributes supporting multiple use cases to address your needs today and tomorrow. You can easily customize the data model for any of the data products to support your unique requirements. And the API-first approach of our platform means the data products you create are also easy to consume. So, with our data unification and management solution, you don't need to build your 360-degree trusted views for each use case, which takes significant time and budget to design, build, extend, and maintain.

Data products offer trusted datasets, including derived attributes and interactions, to support all its consumers or use cases without creating different data sets for each. Consumers include business users, knowledge engineers, and systems. A data product needs to be cataloged and has access control security, API-based access, and consumption reporting. 360 views of core data such as customers and products—consumable as data products—are a typical starting point.

When to build your own MDM capabilities

As discussed in the previous sections, building and maintaining your custom MDM or data unification capabilities is very expensive and time-consuming. However, if you have a specific data model or reporting/data management needs driven by unique business requirements in a niche vertical, opting for a homegrown MDM solution may be an acceptable approach. For example, if you are a manufacturing company in the defense sector, where you have unique federal reporting, tracking, and data security certification requirements.

In your build vs. buy decision, evaluate your current and future plans. Evaluate the uniqueness of your industry data model and the complexity of your relationship hierarchies. If vendors don't have a data model, data security certifications, and other capabilities to support your use cases, and customizations will take too long or create significant support and upgrade issues in the future, then opting for a build may be the right choice.

A better approach

At Reltio, we offer AI-powered [data unification and management capabilities](#) powered by our [Reltio Connected Data Platform](#) (Figure 2). We unify, standardize, enrich, and mobilize fragmented data from disparate data sources into secure, trusted, interoperable data that is available wherever and whenever needed.

The platform delivers trusted, 360-degree views of customers, organizations, products, suppliers, locations, and other domains, with interactions and transactions—provided as easy-to-consume data products. Our [velocity packs](#) include prebuilt, industry-specific data models, configurations, and integrations to provide the structure, governance, and interoperable core data sets. You can further customize and modify data products as needed based on your evolving requirements.

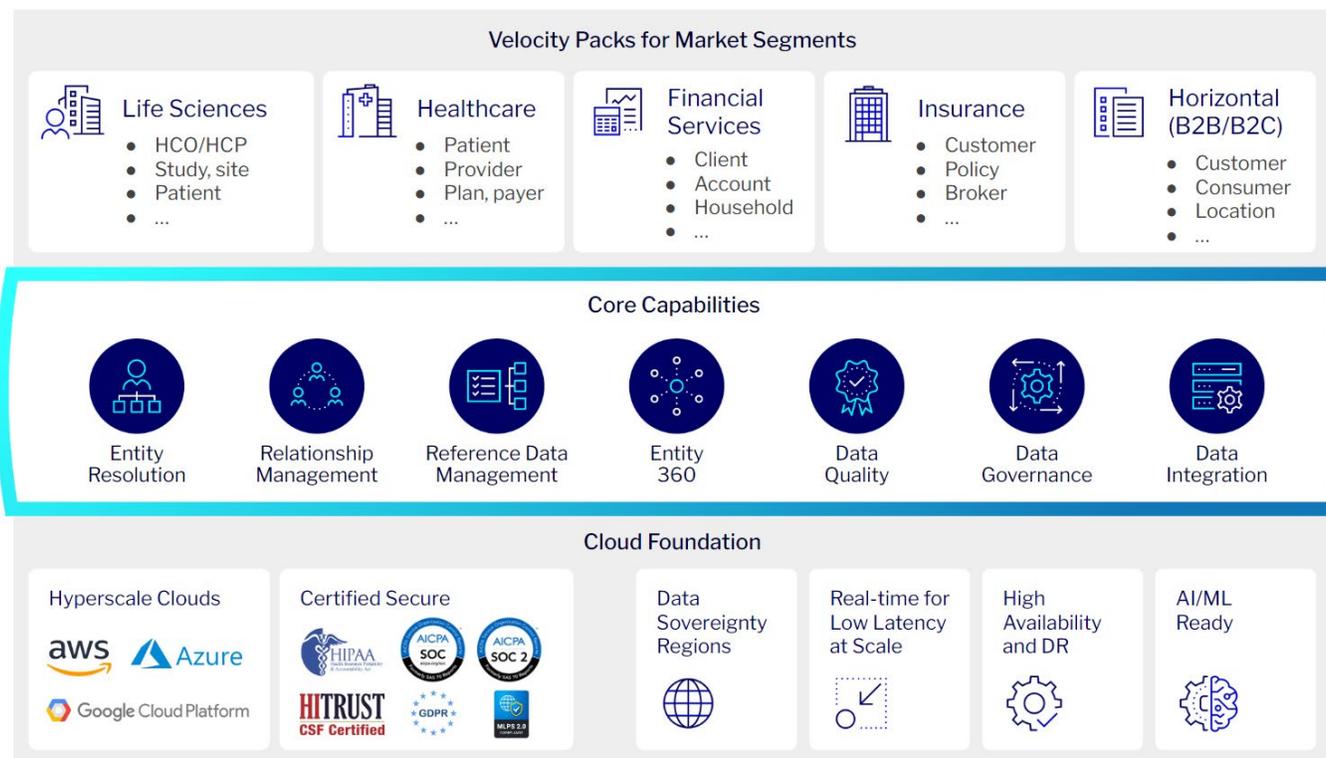


Figure 2: Reltio Connected Data Platform

Our cloud-native Reltio Connected Data Platform efficiently consolidates, manages, and mobilizes trusted and interoperable data within milliseconds so you can effortlessly fuel omnichannel experiences, targeted marketing, AI initiatives, and more. So you can expect a swift time to value for your initial use cases and access to data products—typically within 90 days. Table 2 highlights the key capabilities of our platform, with differentiated capabilities highlighted. You’ll find that these capabilities will meet your MVP requirements while containing compelling features to prepare for your future business needs. More information on our platform, its architecture, and key technology differentiators can be found in this [white paper](#).

Table 2: Key capabilities of the Reltio Connected Data Platform

Drive superior data unification with **AI-powered innovation**

- Enhance productivity through chat-based, **GPT-powered documentation search** for quick, accurate technical answers using **Reltio Intelligent Assistant (RIA)**
- Enable effortless entity resolution through automatic, industry-specific matching and merging using **LLM-driven, pretrained ML models**
- Improve data quality through precisely identifying outliers and unusual patterns using **ML-powered anomaly detection**

Deliver unified, secure, interoperable core data **in milliseconds**

- Unify data with a breadth of matching methods including referential and relationship-based matching, plus **automated unmerge and household grouping**
- Apply multiple **dynamic survivorship strategies** in parallel for dynamic profile views
- Unify, manage, and mobilize trusted data in **milliseconds** to any system, at scale, for **operational use cases**
- Achieve full traceability and native data lineage with a **single durable ID** tracked across systems and the entire data lifecycle for every entity

Build transparency and trust with real-time visibility into data quality

- Use built-in, **real-time data quality** management with ongoing cleansing, standardization, and visibility
- Analyze data quality trends over time for better decisions and visibility into progress
- View and fix reference data errors directly from the dashboard
- Access timely and trusted data with **continuous data validation**
- Gain real-time visibility into operational metrics in milliseconds with our interactive dashboard

Use and maintain high-quality reference data across the enterprise

- Create, manage, standardize, and provision reference data with **built-in RDM**—no need for special integrations
- **Manage complex mappings** among customer, partner, product, and supplier data domains
- Reduce IT burden with configuration, lookup, and transcode REST APIs for reference data
- Localize reference data for any number of sources in any language based on user preference

Define policies and workflows flexibility for data governance

- Implement centralized or federated governance with predefined and customizable workflows for any domain
- Increase productivity with **easy-to-use UI** to review domains, data changes, attributions, and definitions
- Enable data steward collaboration on policy definition and enforcement with built-in discussions and comments capabilities
- Achieve secure and auditable design with flexible role-based access control (RBAC), full traceability, and native data lineage

Easily ingest data from source systems and share trusted data with target systems

- Reduce integration development efforts via **1,000+ preconfigured connectors and prebuilt integrations** with applications and several third-party data enrichment sources
- Simplify integrations with popular cloud data warehousing systems using **prebuilt data pipelines**
- Make it easy to integrate with your systems using other supported methods such as REST APIs, **event streaming**, batch data loads, and more
- Develop integrations quickly using a **low-code/no-code development environment**

Deliver trusted data sets manageable as a data product

- Provide API access to all trusted data, along with metadata, lineage, quality metrics, and more
- Enable fine-grained access control, so users can access only those data attributes, entities, and metadata through the API they are authorized to consume
- Include **interactions and transactions to provide a 360-degree view of the entity**
- Provide product-level documentation for setup and consumption

Secure, SaaS-based delivery model

- Provide a subscription-based, cloud-native service with high availability and **disaster recovery built in**—no additional investment needed for redundancy
- **Deliver zero-downtime, zero-effort, zero-cost upgrades** to use the latest features
- Provide zero-effort security and access permissions, 24/7 monitoring and threat protection, and data encryption backed by certifications such as HITRUST, SOC 1, SOC 2, TruSight, EU, APEC
- Deploy on any major cloud platform: Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform (GCP)
- Access data center locations globally (North America, EU, Asia Pacific, and **China**) to enable compliance with local data residency regulations

Analysts are [recognizing](#) us as a leader in the space. Customers are taking advantage of our capability to migrate quickly from their legacy systems and expand their use cases after initial success. A large digital bank went live with Reltio in less than four months. This included complete migration from their legacy MDM system to their next-generation customer master powered by Reltio—their customer system of record, integrated with deposits, investment, and mortgage businesses. AstraZeneca, a top 10 life sciences company, replaced 67 legacy master data management systems with three interlinked regional hubs in Europe, APAC, and the US, powered by Reltio. They reduced their annual costs by £3.6M, empowered 10,000 representatives and 250 data stewards with trusted data, and delivered a 10X productivity boost to sales representatives.

Other recent examples of fast deployment, where customers went live with a specific use case in a few months, with a goal to extend MDM to other use cases within the organization:

- Four months’ go live at a leading snacks manufacturer - Includes near real-time integration into JD Edwards using Reltio Integration Hub, as well as customized workflows with multi-approval steps rolled out across multiple departments
- 3.5 months to go live at a pharmaceutical division of a Fortune 50 life sciences company – Includes management and dissemination of product data from 20 sources; key scalability metrics at go live include 2.5 million consolidated profiles and 1 million API calls per day
- 96 days’ go live for a US-based national medical group that migrated from their homegrown MDM system—the go live included six source systems and four consuming systems
- 131 days to phase 1 go live at a leading state health insurer retiring their legacy MDM solution for member/patient domains—integrating two data sources with 20 million records and one consumer Snowflake data warehouse

Our cloud-native data unification and management platform offers a clear, proven path to cost savings and rapid time to value for IT teams while enabling innovation and agility and ensuring high security and lower risk.

Forrester Consulting TEI Study reveals 366% ROI with Reltio

We commissioned Forrester Consulting to conduct a [Total Economic Impact Study™ \(TEI\)](#) to quantify the benefits and costs associated with implementing a modern, cloud-native master data management solution with our Reltio Connected Data Platform. Forrester interviewed six of our customers and used its proven methodology to build a total economic impact model for a composite organization that has both B2B and B2C operations. Based on interviews, the graphic below (Figure 2) illustrates the risk-adjusted benefits of our platform.

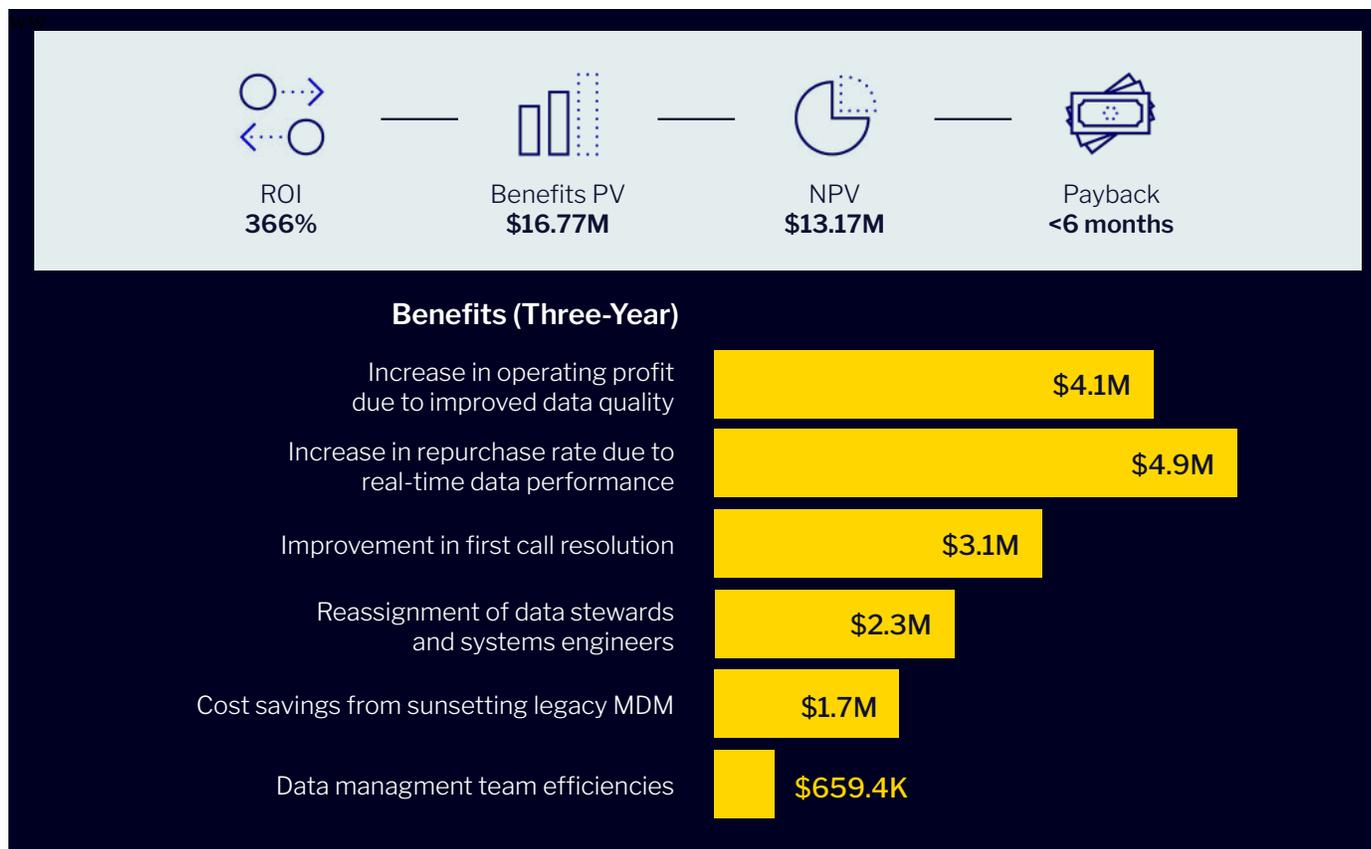


Figure 2: Risk-adjusted benefits of Reltio’s platform from Forrester TEI study



Organizations looking for a modern MDM platform with real-time data management capabilities for data operations should consider Reltio because it enables organizations to unify data while maintaining quality and reliability. With Reltio, users can connect data across a wide range of applications and data stores in real-time to accelerate decision-making and digital transformation.

— VENTANA RESEARCH, April 2023



Schneider Electric's journey from homegrown MDM to our commercially available solution

Schneider Electric is a leading provider of products and services that power homes, businesses, and data centers. They had long been using a home-grown MDM solution as its system of record to support a myriad of sales, marketing, support, and other operations. While the tool was fairly sophisticated and met the company's needs at the time, updating, enhancing, and even maintaining the system was becoming unsustainable. Management decided it needed a more supportable, adaptable, and innovative solution and decided to move to a commercially available data unification and management solution. After evaluating several options, they turned to our solution for its cloud-native SaaS MDM capabilities.

They now use the Reltio Connected Data Platform as the authoritative source for 5 million organizations and 13 million individuals. Our solution unifies data across its 20+ systems: global CRM with Salesforce, SAP, and Oracle ERP systems, sales quotation systems, marketing lead management, and an e-commerce platform, among others. Within Reltio, data is cleansed and enriched with Dun & Bradstreet's data to continually update business profiles for their clients and prospects. Instead of relying on an account manager to research and manually update this data—total sales volume, number of employees, and more—it is fed automatically into Reltio. Having more comprehensive and better quality data fuels more accurate sales targeting and mining for potential opportunities within their existing customer base.

Reconciling data between their CRM and ERPs, they identified customers mistakenly designated inactive—those were not considered potential sales targets. By correcting them as active, they added additional marketing targets and sales opportunities to their pipeline. According to them, they are still finalizing the process and amount of the opportunity, but so far, they have identified several million in potential business by simply connecting their CRM and ERP systems.

[Read the case study](#) for more information on how Schneider Electric benefited from moving from their homegrown MDM system to our platform.



The Reltio platform has enabled us to provide data quality at the source in every connected system—in real time. It supports our business operations, improves customer experience, increases our efficiency, and drives revenue growth.

— SCHNEIDER ELECTRIC



Future proof with an off-the-shelf data unification SaaS

While building capabilities in-house that offer a targeted solution for a specific problem may seem appealing and cost-effective on the surface, there are notable drawbacks. These include high opportunity costs, increased overall costs, and extended time to value. You may also find that your decision to build in-house will reduce your business responsiveness and hinder digital transformation initiatives. Not to forget that you may also encounter heightened project and security risks. Unless you have exceptionally unique requirements, it's more advisable to subscribe to a commercially available, cloud-native data unification and management SaaS to tap into modern technology benefits fast. This holds true for your current needs—and it positions you well to address future business requirements.

ABOUT RELTIO

At Reltio, we believe data should fuel business success. Reltio's AI-powered data unification and management capabilities—encompassing entity resolution, multidomain master data management (MDM), data products—transform siloed data from disparate sources into unified, trusted, and interoperable data. The Reltio Connected Data Platform unifies and delivers interoperable data where and when it's needed, empowering data and analytics leaders with unparalleled business responsiveness. Leading enterprise brands—across multiple industries around the globe—rely on our award-winning data unification and cloud-native MDM capabilities to improve efficiency, manage risk, and drive growth.

To learn more, visit www.reltio.com

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