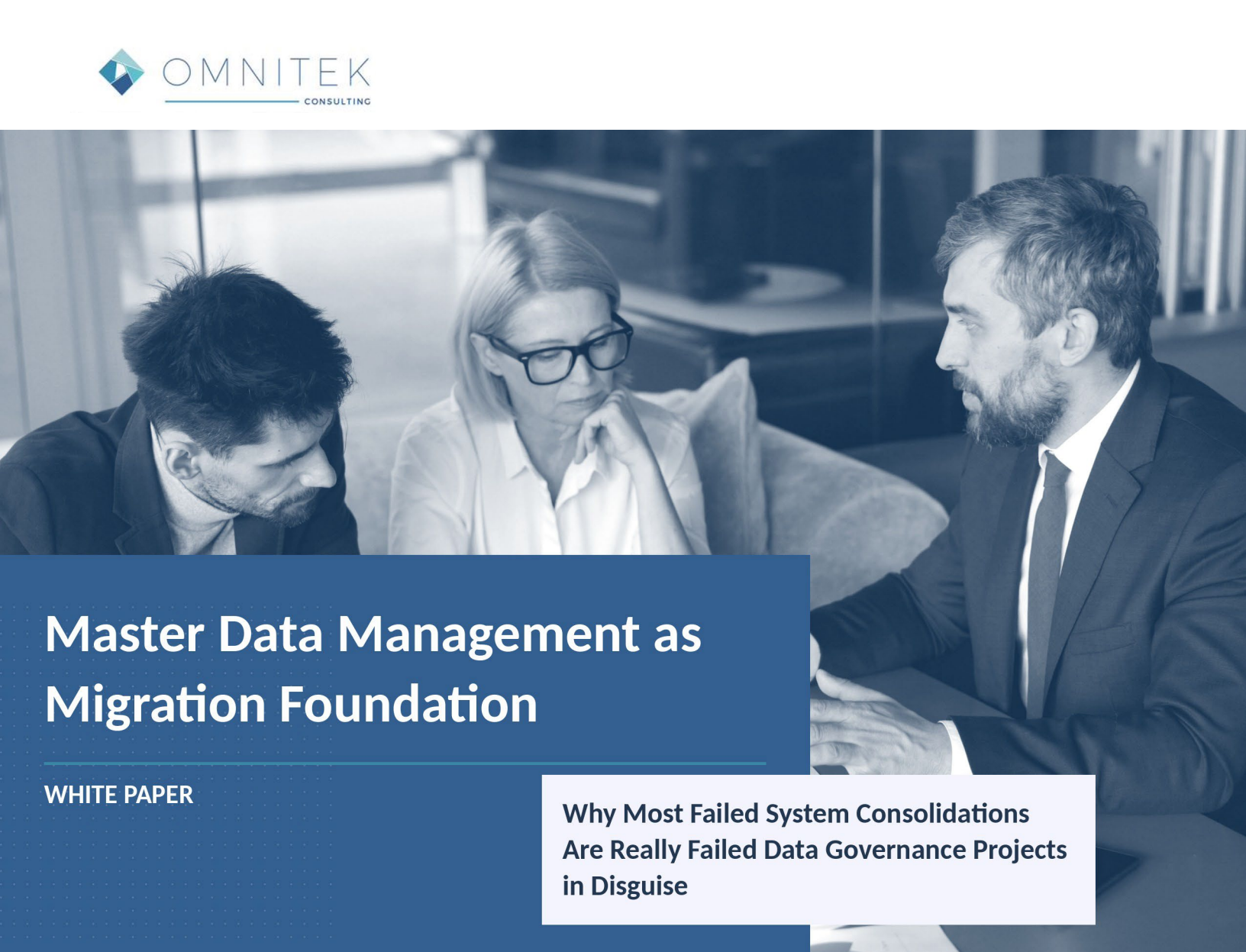




Master Data Management as Migration Foundation

WHITE PAPER

**Why Most Failed System Consolidations
Are Really Failed Data Governance Projects
in Disguise**

Abstract

Organizations still running SAP ECC face a 2027 mainstream maintenance deadline, and that single date is pulling a wave of pharmaceutical manufacturers into S/4HANA migrations on a timeline they did not choose.

What those organizations are discovering, often later than they would like, is that batch and serialization records accumulated over years of ECC use carry inconsistencies that need proper cleansing before they can move into a new system, because carrying regulatory errors forward creates compliance exposure a new platform does not erase. This is the pattern behind a large share of consolidation projects that stall or underdeliver: the project was scoped as a system migration when it was actually, underneath, a data governance problem that had never been addressed. Modern master data management platforms can improve data quality by more than 50% in a matter of weeks and deliver a working use case in as little as six weeks, which means the fix is not a multi-year undertaking once an organization treats master data as the actual foundation the migration depends on, rather than a cleanup task to handle after the new system goes live. This white paper applies established system-consolidation and change-management best practices to master data management specifically, making the case that MDM is not a parallel workstream to system consolidation. It is the foundation the consolidation is built on.

The Deadline Forcing the Issue

A significant share of pharmaceutical manufacturers are approaching system consolidation not by choice but by necessity. SAP ECC reaches its mainstream maintenance deadline in 2027, and organizations still running it are being pulled into S/4HANA migrations on a timeline set by the vendor's support calendar rather than their own readiness.

That external deadline is surfacing a problem many organizations had successfully avoided looking at directly: batch and serialization records accumulated over years of ECC use carry inconsistencies, duplicate entries, drifted naming conventions, incomplete supplier certifications, that a straightforward technical migration will carry forward rather than fix. A record that was wrong in the old system does not become correct by moving to a new one. It becomes a compliance exposure in a system regulators expect to be more accurate, not less.

The Governance Problem Hiding Inside Every Migration Project

Master data problems in pharmaceutical organizations follow a familiar shape: data silos across research, clinical, and commercial systems create inconsistencies, duplication, and errors that data stewards absorb manually rather than solve structurally. Product, ingredient, formulation, and regulatory filing relationships accumulate complexity that a system migration project, scoped narrowly around moving data from one platform to another, is rarely designed to untangle.

Regulators are not shy about what they expect from this data. Authorities like the MHRA expect accurate, traceable records demonstrating exactly where a batch originated and who handled it along the way, information that comes from master data quality, not from how fast a transaction system processes records. A migration project that treats master data cleanup as a secondary task, something to address after the new system is live, inverts the actual dependency. The migration's success depends on the master data being right, not the other way around.

This is why so many consolidation projects that appear to fail on technical grounds, missed timelines, budget overruns, post-launch data quality complaints, are actually failing on a governance dimension that was never properly scoped. The project plan accounted for moving data. It did not account for fixing it first.

Applying Best Practices: MDM as the First Migration Deliverable

A foundational best practice in system consolidation and change management, understanding what a system actually holds before deciding how to move or consolidate it, points directly at master data management as a prerequisite rather than a parallel effort. Treating MDM as the first deliverable in any consolidation project, not a cleanup task after go-live, changes the entire risk profile of the migration.

1. **A Master Data Quality Baseline Before Migration Planning.** Assess the actual state of product, batch, supplier, and provider master data before finalizing a migration timeline, so the scope reflects the data's real condition rather than an assumption of cleanliness.
2. **Governance Ownership Established Before Data Moves.** Assign clear, standing ownership for master data domains, product, customer, provider, supplier, before migration begins, so data quality has an accountable owner rather than becoming an orphaned concern once the project team disbands.



3. **Incremental MDM Wins Ahead of the Full Migration.** Use the six-to-eight-week timeline modern MDM platforms can deliver against a defined use case to demonstrate measurable data quality improvement before the broader migration timeline locks in, building organizational confidence and surfacing hidden data issues early.ⁱⁱ
4. **Master Data as a Standing Discipline, Not a Project Phase.** Build the governance structure to persist after the migration completes, so master data quality does not quietly degrade again once the project team's attention moves elsewhere.

None of this requires delaying a migration indefinitely to achieve data perfection. It requires sequencing the work so master data quality is established as a foundation the migration builds on, rather than an afterthought the migration exposes.

What MDM-First Migration Buys, and Where It Gets Hard

Advantages

- **Regulatory errors get fixed, not relocated:** cleansing batch and serialization records before migration prevents carrying compliance exposure into a system regulators expect to be more accurate.
- **Faster, more predictable migration timelines:** a migration built on known-good master data avoids the schedule slippage that comes from discovering data quality problems mid-transfer.
- **Measurable early wins build organizational confidence:** a six-to-eight-week MDM use case delivering visible data quality improvement demonstrates value before the full migration timeline is locked in.
- **Durable data quality beyond the migration itself:** governance ownership established as a standing discipline protects the investment made during migration rather than letting quality degrade again afterward.

Risks and Barriers

- **External deadlines compress the available runway:** organizations facing the SAP ECC 2027 deadline may not have the lead time to run a proper MDM baseline before migration planning must begin.
 - **Data ownership disputes surface during cleansing:** resolving which function owns a given master data domain often surfaces long-standing disagreements between research, commercial, and regulatory teams.
 - **Cleansing effort scales with years of accumulated drift:** the older and more fragmented the source system, the more manual remediation work a proper cleansing pass requires, regardless of how fast modern tooling can deliver a use case.
 - **Governance discipline is easy to relax once the migration is declared complete:** without a standing owner, the same drift that created the original problem will recur.
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Case in Point: The Supplier Record That Multiplied Five Times

A mid-size generics manufacturer began planning its migration off an aging ERP system with a straightforward technical scope: move product, batch, and supplier records to the new platform on a defined timeline. A pre-migration data quality assessment, added late in planning after a project sponsor raised concerns, found that one of the manufacturer's most active raw material suppliers existed as five separate records across the source system,



each created at a different point over a decade as the supplier relationship expanded, each carrying a slightly different name, address format, and certification reference.

Migrating those five records as they existed would have replicated the fragmentation in the new system rather than fixed it, and would have left auditors asking why one supplier's certification history appeared incomplete across records that did not obviously connect to each other. The manufacturer added a dedicated master data cleansing phase ahead of the technical migration, consolidating the five records into one authoritative supplier profile with a complete certification history, before any data moved to the new platform.

The cleansing phase added several weeks to the project timeline. It also meant the migration that followed moved data the organization could actually stand behind, rather than exporting a known problem into a new system with a bigger compliance spotlight on it.

Recommendations for IT and Data Governance Leaders

1. **Run a master data quality baseline before finalizing a migration timeline.** so the project scope reflects the data's actual condition rather than an assumption of cleanliness.
2. **Assign standing governance ownership for each master data domain.** before migration begins, so data quality has an accountable owner throughout and after the project.
3. **Use a fast, narrowly scoped MDM use case to build early momentum.** demonstrating measurable improvement within weeks rather than waiting for the full migration to reveal data quality gaps.
4. **Treat regulatory traceability as a master data requirement, not a reporting feature.** since the accuracy regulators expect comes from clean underlying data, not faster transaction processing.
5. **Build governance structures designed to outlast the migration project.** so master data quality does not quietly erode again once the project team's attention moves on.
6. **Plan for cleansing effort proportional to source system age.** recognizing that older, more fragmented systems require more remediation regardless of how quickly modern MDM tooling can deliver results.

Measuring Success: KPIs for Master Data Management as Migration Foundation

- **Master data quality score improvement:** the measured improvement in duplicate, incomplete, and inconsistent records before migration begins, tracked toward a defined threshold.
- **Domain ownership coverage:** the percentage of master data domains with a formally assigned, standing governance owner in place before and after migration.
- **Post-migration data quality drift:** the rate at which data quality measurably degrades in the months following migration completion, tracked toward near zero as evidence of durable governance.
- **Regulatory traceability completeness:** the percentage of batch and supplier records with a complete, unambiguous provenance chain in the new system.



Conclusion

The SAP ECC 2027 deadline is forcing a wave of pharmaceutical manufacturers into system migrations on a schedule they did not set, and that pressure is exposing a pattern that has been true of consolidation projects all along: the projects that stall or underdeliver are rarely failing on technical grounds alone. They are failing because master data governance was treated as a cleanup task instead of the actual foundation the migration depends on.

Applying disciplined best practices to put master data management first, a quality baseline before timelines lock in, standing governance ownership, fast use cases that build early confidence, discipline that persists after the project ends, turns system consolidation from a project that exposes years of accumulated data drift into one that actually resolves it.

About OmniTek & Contact Information

OmniTek Consulting is a trusted partner for organizations seeking to enhance governance, operational agility, and decision-making. We specialize in modernizing business processes with a blend of human-centered design, technology expertise, and hands-on change management.

For IT and data governance leaders facing a system consolidation or migration deadline, OmniTek applies proven best practices to put master data management first: a quality baseline before timelines lock in, standing domain ownership, and governance discipline built to outlast the project. Whether you are planning your SAP S/4HANA migration or scoping a broader platform consolidation, OmniTek can help you build a migration on a foundation that actually holds.

Contact us today to explore how OmniTek can support your transformation journey and drive lasting results.



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[Click here to book a 15-minute call to see how OmniTek can help your team put these insights into practice.](#)

Endnotes

ⁱ BlueStoneX, "Pharma Master Data Management: The Healing Power of Data," on the SAP ECC 2027 maintenance deadline, S/4HANA migration data cleansing requirements, and MHRA traceability expectations, available at <https://bluestonex.com/knowledge-bank/pharma-master-data-management-the-healing-power-of-data/>

ⁱⁱ CluedIn, "Master Data Management for Life Sciences and Pharmaceuticals Industries," on data quality improvement timelines and industry-specific master data challenges, available at <https://www.cluedin.com/resources/articles/master-data-management-for-life-sciences-and-pharmaceuticals-industries>

