thredd

The playbook for invisible transitions

INTRODUCTION:

Why card migrations matter

In the contemporary financial landscape, the card is the primary touchpoint between a brand and its customer.

Consequently, the decision to migrate a card portfolio is never taken lightly. It is a high-stakes undertaking involving immense operational and reputational risk and one of the few technical events where failure is both especially public and consequential. If a migration fails, customers cannot pay for essentials, leading to immediate churn and regulatory scrutiny.

However, the demand for migrations is surging. Legacy processors are increasingly plagued by innovation and reliability issues—outages that last for hours—and a technical inability to keep pace with changing competitive requirements like personalization at scale, agentic commerce and real-time fraud orchestration.

At Thredd, our philosophy is simple: the migration must be invisible. A successful migration is one where the cardholder wakes up, uses their card as they did the day before, and notices absolutely nothing, while the issuer gains a more stable and innovative foundation. This guide outlines the disciplined, repeatable playbook Thredd employs to ensure success and a seamless switch.

A high-stakes, cautionary tale: The 2018 TSB Bank migration

The 2018 TSB Bank IT migration is frequently cited by analysts and regulators as the benchmark for migration failure and a cautionary tale of migration gone wrong:

The Event: TSB attempted to migrate 5.2 million customers from a Lloyds Banking Group system to a newly developed core banking platform billed as a modern platform for the digital era.

The migration failed spectacularly, locking nearly two million customers out of their accounts in addition to data breaches and failures with card transactions.

The Fallout: TSB's then-CEO was forced to resign after the event and the CIO was personally fined £81,620 by the Prudential Regulation Authority (PRA) for failing to manage the migration risks adequately.

(TSB migration disaster: how to avoid CIO's costly mistake," Ekco Publications, May 18, 2023)

Anticipating a rising “migration wave”

Analysts estimate that over 100 million cards per year will shift from legacy to modern platforms over the next five years, driven by concerns over attrition, lost growth opportunity, and the unsustainable reality of remaining on legacy stacks:

The Revenue Risk

Retail banks that fail to re-platform are projected to lose 10% to 15% of payments revenue annually as they fail to meet modern expectations for hyper-personalization, AI-enabled efficiencies and cloud based resiliency.

Growth Potential

Modernised institutions report 2.5x higher revenue growth and a 50% faster time-to-market for new digital products compared to their legacy-bound peers.

Market Scale

The modern card issuing platform market is projected to surpass $4.2 billion by 2030, driven by the need for virtual card tokenization and push-provisioning.

The “Innovation Tax”

Traditional banks spend 70% to 80% of their total IT budget simply on maintaining legacy systems, leaving less than 20% for actual innovation and growth.

Outage Impact

Global payment outages cost merchants an estimated $44 billion in lost sales annually. In high-stakes environments, a business can lose $1.2 billion in sales per minute during an outage lasting more than eight minutes.

(Juniper Research, Payments Dive, Pragmatic Coders 2025-2026)

UNDERSTANDING THE STARTING POINT:

Why knowing your dataset matters

A card migration is not a “lift and shift” exercise; it is a clinical transformation.

As Thredd’s Darren Spencer, a migration consultant with over 20 years of experience moving portfolios for the major financial institutions, notes, “Data is the driver. That is what you’re moving. Fundamentally, you must understand the existing data model—whether it sits in the existing processor or the client’s internal systems—before you can map it to the target system.”

The client must understand what they have before moving anything

Before a single record moves, the client must have a granular understanding of their current state. As such, Thredd requires a comprehensive map of:

Product configurations	Every fee, limit, and interest tier.
Cardholder profiles	KYC statuses and communication preferences.
Account statuses	Identifying active, suspended, or blocked accounts.
Chip parameters and card-level settings	Precisely matching the logic governing the physical EMV chip to avoid POS rejects.
Transaction patterns	Analyzing historical patterns to establish what “normal” looks like.
Ledger and balance levels	Ensuring “penny-accurate” starting points.
Fraud rule sets	Understanding existing triggers to maintain security parity.
Tokenisation data (MDES/VTS)	Crucial for ensuring Apple Pay and Google Pay continue to work uninterrupted, without re-enrollment.

It is also critical to understand how the current architecture will change:

- Authorisation and clearing endpoints: Rerouting the flow of transaction data.
- Mobile/Pay wallet integrations: Managing Apple Pay, Google Pay, and SDKs.
- Notifications and webhooks: How the issuer’s app is notified of spend.
- AML/Fraud monitoring: Aligning real-time feeds with existing processes.
- Global instances: Localisation requirements for different jurisdictions.
- Operational servicing: The APIs or portals used by support teams.

Watch-out: Problematic legacy data elements

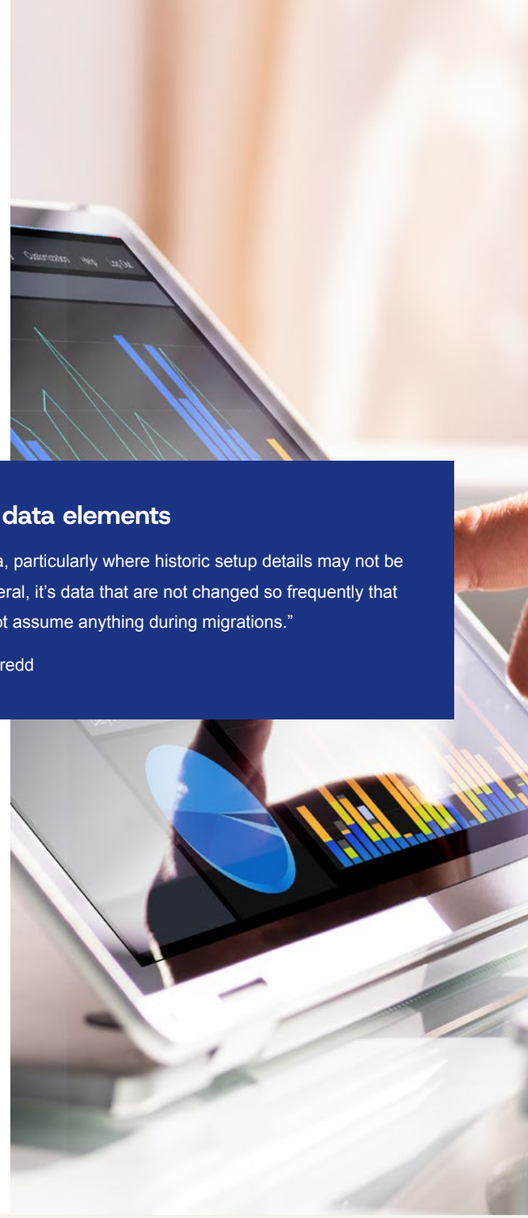
“From experience, card chip and key setting data, particularly where historic setup details may not be available, are key areas to watch out for. In general, it’s data that are not changed so frequently that people make assumptions about. But, you cannot assume anything during migrations.”

Darren Spencer, Senior Migration Specialist, Thredd

Why issuers often underestimate this step

Many providers lack visibility into legacy data. Old, unused, or misconfigured records often act as “landmines” late in the process. Furthermore, understanding customer usage patterns is critical because post-migration monitoring depends on comparing new system behavior to historical baselines.

This is why Thredd calls these factors out early. Without a complete dataset, transformation logic cannot be applied correctly. This leads to missing mappings, incorrect status codes, and degraded user experiences immediately after cutover.



DATA ACQUISITION:

The practical reality of getting the data

Moving the data is often more of a human and contractual challenge than a technical one.

The Four-Party Coordination

A migration typically involves a tight coordination between four parties. If one party stalls, the entire project risks delay:

The Client	The Existing Processor	The Card Networks	The New Processor
(Issuer)	(The Incumbent)	VISA, Mastercard	thredd

Managing the incumbent

Incumbent processors may become uncooperative due to the looming loss of business. Some incumbents may deliberately try to delay the process to retain revenue. Other common issues may include format disagreements, contractual disputes, or surprise extraction fees.

Thredd's mitigation approach

To counter these blockers, Thredd defines data formats and templates at the very start of the engagement. The company pushes for the earliest possible full extraction to identify format disagreements or missing fields long before the live date. By using pre-prescribed templates, Thredd ensures predictable processing and works to align expectations long before the live date.

"Very few modern processors have the depth of experience required to move tens of millions of cards. At Thredd, we've built a bench of experts who have collectively managed dozens of major migrations. We don't just provide the platform; we combine a high-touch approach with decades of learnings into a structured, gated process."

Damien Gough, Head of Asia Pacific, Thredd

INTRODUCTION:

Getting migration slots booked

While Thredd and the client control the internal roadmap, the card networks control the calendar.

For example, Visa and Mastercard provide narrow, pre-set migration windows. All technical activities must be synchronised to fit these slots.

“The process typically commences with a tri-party call to run through certification requirements and dependencies, map environment changes, and discuss potential date ranges for migration slots,” says Gough adding that ultimately, it’s the responsibility of the issuer/program manager to ensure a migration sponsor is assigned from the network.

The Two-Slot Rule

Thredd’s best practice is to always book two slots:

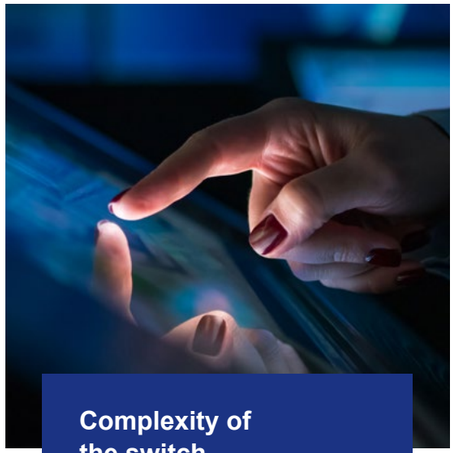
Slot A:

The primary target date.

Slot B:

A contingency window (typically 4–8 weeks later).

This prevents a project from stalling for six months if a “practice event” (dress rehearsal) uncovers a minor anomaly that requires a fix-forward approach.



Complexity of the switch

The switch is the moment live traffic shifts to the new processor. Timing accuracy is critical; even a minor delay can result in transaction timeouts globally.

ETL:

The core migration methodology

ETL stands for Extract, Transform, and Load. In the context of card processing, this is where the "heavy lifting" occurs.

Why transformation is the hardest part

Transformation requires mapping every card control and status to ensure user experience remains identical post-migration. For example, if a cardholder has blocked "International Spend" prior to the migration, the setting must remain in place once the switch complete

Thredd's repeatable ETL process

Thredd's best practice is to minimise the data migrated to reduce complexity. For example, if a legacy processor has 1,000 fields per user but only 200 are required for the future product roadmap, Thredd advocates for migrating only the essential 200. This reduces the "error surface" and speeds up the reconciliation process.

Extract

Performed by the client or the legacy processor.

Transform

Thredd maps legacy data values to Thredd values.

Load

Data is moved into Thredd's production environment(s).

TESTING AND FULL DATA EXTRACTS:

The heart of risk reduction

In card processing, "good enough" testing is the enemy of stability. For this reason, Thredd rejects "subset testing." For example, testing only 10,000 cards from a 1-million-card portfolio could be a recipe for failure.

Why full-portfolio testing is non-negotiable

Thredd insists on extracting every single account as subset testing can miss anomalies in dormant or old records that can cause load failures.

Mock events and trial runs

Thredd runs multiple rounds of end-to-end testing using real, anonymised data to identify mapping issues and reconciliation errors early.

Criteria gating

Thredd uses a strict, four-point Go/No-go criteria:

- Mock loads must succeed.
- Reconciliations must match.
- Data volumes and balances must align.
- Transformation logic must be stable prior to proceeding.

DRESS REHEARSAL:

The final full-scale practice

A dress rehearsal is a full-scale practice run that replicates "Live Day" conditions with all teams involved.

Replicating the live event

Thredd simulates the scheme window, using the full dataset, and verifying every reconciliation step. This serves to validate timings and cutover behaviour under a real-world scenario:

- All teams involved.
- Scheme window simulated.
- Full data set used.
- All reconciliation steps verified.

Purpose: Why this reduces risk dramatically

By practicing the "real day" multiple times, Thredd leaves almost no room for surprises:

Timings are validated.

Network cutover behaviour is validated.

Transformation accuracy is confirmed.

Operational coordination issues are exposed.

COMMON MIGRATION ISSUES:

What can go wrong — and how Thredd avoids it

Common issues in migrations

Migrations are fraught with potential “landmines”:

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Missed mappings

Resulting in the wrong card statuses.

Incorrect chip settings

Leading to POS rejects.

Incorrect transaction flags

Causing false declines.

Unseen legacy anomalies

Leading to load failures

Scheme window overruns

Extending downtime.

Differences in daily usage patterns

Causing post-live alerts

Thredd’s risk mitigation

Thredd works to avoid risks by taking early measures, following pre-established and tested processes including establishing baselines to identify anomalies immediately after going live:

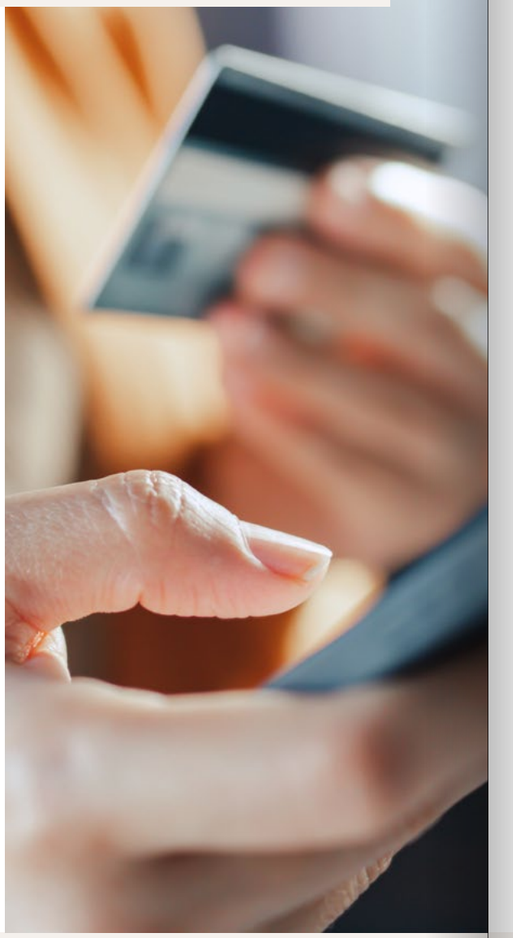
- Performing full data extracts early to uncover anomalies.
- Strict runbook to guide every step.
- Multiple practice cycles (mock, test, dress rehearsal).
- Pre-prescribed data templates.
- Realistic baselining (understanding hourly/daily transaction patterns).
- Post-live enhanced monitoring and observability.
- Booking two network switches (main + contingency).

“Very few modern processors have the depth of experience required to move tens of millions of cards. At Thredd, we’ve built a bench of experts who have collectively managed dozens of major migrations. We don’t just provide the platform; we combine a high-touch approach with decades of learnings into a structured, gated process.”

Damien Gough, Head of Asia Pacific, Thredd

“EVERY PENNY MUST MATCH”:

Financial and data integrity



Complete accuracy is paramount in a migration.

Even in prepay or debit migrations, a single penny mismatch can trigger regulatory audits and erode cardholder trust.

Precision in credit

In credit scenarios, the need for precise reconciliation becomes even more essential involving key parameters such as:

- Balances.
- Interest calculations.
- Fees.
- Adjustments.

The principle of integrity

A migration isn’t just about moving data—it’s about ensuring every cardholder’s experience and every penny moves cleanly. This builds the trust necessary for a long-term processing partnership:

- Ensures cardholders retain identical balances.
- Ensures regulatory compliance.
- Prevents disputes and chargebacks.
- Builds trust in the new processor.

AFTER THE GO-LIVE:

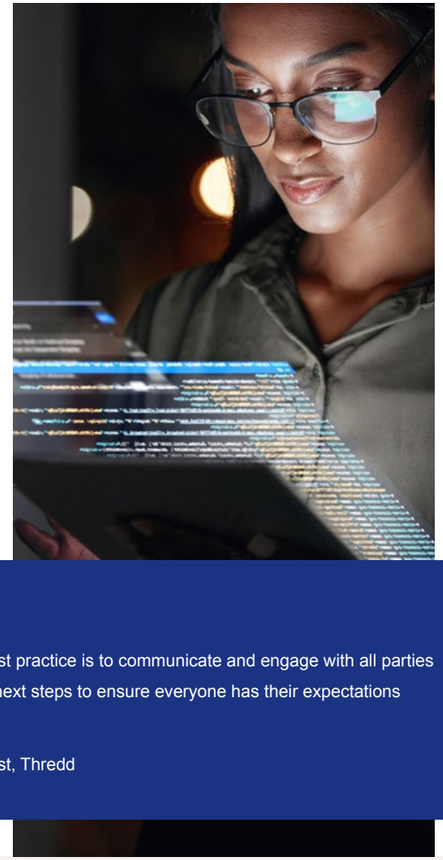
Post-live monitoring and support

The work doesn’t end at the cutover.

Thredd has developed a series of support services specially designed to bring migrations to a successful conclusion.

These include:

- Early-life support from experienced Thredd team
- Watching for anomalies in authorisation patterns.
- Comparing live-day data to historical baselines.
- Rapid response mechanisms.
- Issue triage and resolution.



Communication is key

“In the critical weeks after migration, the best practice is to communicate and engage with all parties frequently, providing clear information and next steps to ensure everyone has their expectations managed throughout the process.”

Darren Spencer, Senior Migration Specialist, Thredd

INTRODUCTION:

Why Thredd's migration approach is superior

Thredd's approach to migrations stands apart from less-supportive and experienced competitors.

It's the product of decades of expertise, proven processes and modern technology:

Experience-led approach

Expertise developed across decades of migrations by senior specialists.

Pre-prescribed formats & minimal data approach

Minimises risk, reduces complexity, speeds delivery.

Discipline & repeatability

- Standardised ETL process.
- Strict gating.
- Multiple practice rounds.

High-touch approach

- Emphasis on communication and managing expectations at every turn
- Exceedingly proactive with clients and schemes.

Commitment to cardholder invisibility

Cardholders should never know a switch happened.

CONCLUSION:

A framework for a no-surprises migration

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Plan your migration, without the surprises.

Talk to our specialists today.

Contact us

Migrations are high-stakes, multi-party events, but they are also the gateway to innovation.

As the window to future-proof platforms closes—and as emerging technologies like AI, personalization at scale, cloud-enabled platforms and agentic commerce become the standard—issuers cannot afford to be tethered to unreliable legacy stacks.

Thredd's disciplined, repeatable migration playbook reduces uncertainty through technical excellence, strong coordination, deep data discipline, and a relentless focus on the cardholder experience.

When you migrate with Thredd, you aren't just switching processors; you are investing in securing your portfolio's future and a smooth, stable, cardholder-invisible cutover.

Meet the authors

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Head of Asia Pacific, Thredd

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About Thredd.

Thredd is the trusted, AI-first, cloud-enabled issuer processing platform powering the next generation of global payments. Through a single API, unified platform, Thredd delivers debit, credit, digital wallet and ledger capabilities to over 100 fintech, digital banks and embedded finance providers, across 47 countries.