Buy versus Build: Gaining the Upper Hand on Reconciliations

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Introduction:
Why fast-moving transaction data needs new tools

The explosion of ecommerce and digital payment usage, and the array of increasingly complex data formats worldwide, are pushing payments companies to pull as much value as they can out of every bit of data.

We know that the 2020 pandemic accelerated a trend that was already evident, with cash falling out of favour virtually overnight in favour of quicker, easier and more secure digital payments.

Three years on, the estimated size of the global digital payments market transaction value is set to be:

$9.5 trillion in 2023 → **$14.8 trillion** by 2027

As governments, businesses and consumers worldwide continue to shift towards digital payments, it's essential that businesses dealing with transaction data have the capabilities to manage it in the most efficient and safest way. Data reporting and reconciliation is a vital part of ensuring continued regulatory compliance and future-proof scalability.

In this whitepaper, we'll dive deep into why traditional approaches to reporting and reconciling data are no longer fit for purpose. Right now, many organisations across the payment ecosystem are exploring whether the solution to that problem is to build their own in-house platform. But are they simply delaying the inevitable pitfalls of in-house tech becoming a legacy handicap as payments continue to evolve?

The 2023 'State of the Industry' survey from the Payments Association throws up some stark findings – with the need for compliance capabilities, keeping up with digital transformation and streamlining back-office processes all ranked as some of the biggest challenges in the payments sector.

25%
Compliance with new regulation and policy

21%
Financial crime and cybersecurity threats

14%
Keeping up with digital transformation

13%
Streamlining back-office infrastructure & processes

13%
Implementing new payment methods

5%
Understanding what the customer wants

5%
Other

4%
Wider macroeconomic downturn & shifts

Source: Payments Association 'State of the Industry' survey, 2023

There's no room for error in data reconciliations

As transaction volumes skyrocket, the need for fast and accurate data reporting and reconciliation intensifies. But even today, too many firms are relying on outdated processes that are limiting their opportunities for success.

Although in-house finance teams are used to working with macro-enabled spreadsheets for data reconciliations, the dangers of relying on formula-riddled spreadsheets are many and varied:

1. Human error in data input, formula calculations & formatting mistakes
2. A lack of internal controls means they can be altered and manipulated
3. Being incorrectly linked to other large, multi-layered spreadsheets, further throwing data off-balance

These errors can be compounded by a lack of reviews and checks, which increases the risk of inaccurate reporting. Many errors simply won't be detected by the human eye and will go un-noticed until they cause problems.

Even the most carefully constructed spreadsheets will typically contain an **error rate of 1%** in all formula cells. When linked to other large spreadsheets, those errors can corrupt vast data sets and cause massive amounts of manual investigation and rectification – not to mention expensive regulatory penalties.

Generic spreadsheet or database software packages also pose security risks. It's common for internal teams to share these files through email, USB drives and online file-sharing applications, which can be subject to loss or data breaches.

More broadly, mass-market spreadsheets and software packages simply don't offer the real-time collaboration or tailored business intelligence analytics that many firms need to stay competitive.

There's also the risk that as people leave or move away from in-house roles, their knowledge will leave with them and it can be a costly and time-consuming process to recruit and train people to replace them. That skills gap can further increase the risk of poor data reporting and reconciliation which can blight the business.

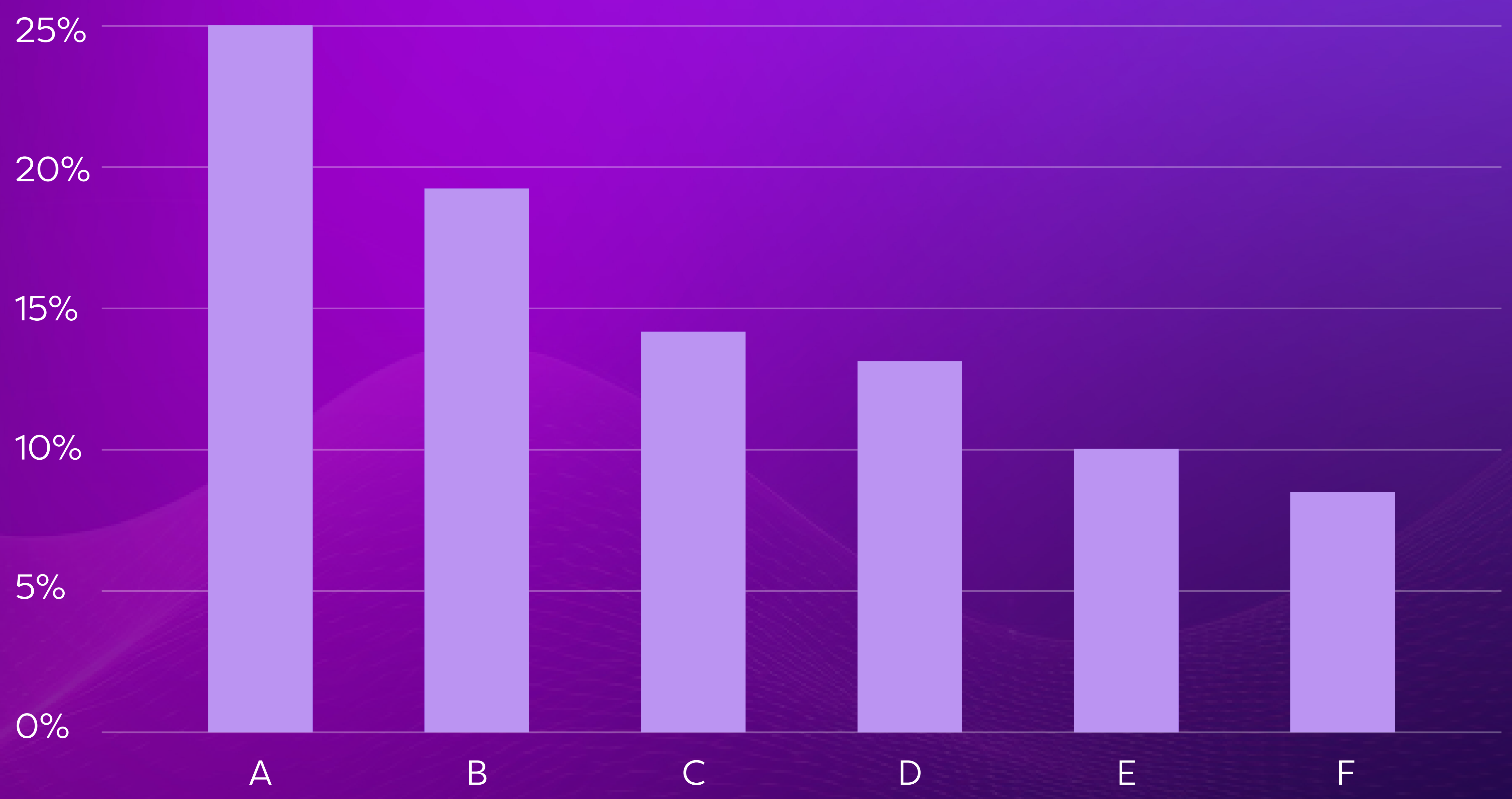
Common issues with reconciliation among UK SMEs

A 2022 survey from Pay.UK found that one in four UK SMEs reported high costs and lengthy times associated with manual reconciliation.

On average, SMEs spent approximately 3.6 hours a week manually reconciling payments.

There are many reasons for this, including:

1. Having to reconcile payments that have come in via different payment methods
2. Having problems categorising incoming payments
3. Using out-of-date systems for reconciliation



A Manually reconciling payments: **25%**

B Manually uploading payments: **19%**

C Transactions not clearly labelled: **14%**

D Complexities of using multiple systems: **13%**

E Manual transaction upload time: **10%**

F Bulk payment reconciliation time: **8%**

Pay.UK (SMEs and Payments: Challenges and Opportunities), 2022

There's no excuse for manual reconciliations

Overall, the Pay.UK study found that 25% of UK SMEs reported manual reconciliation as a problem, spending an average of 3.6 hours each week on the issue.

That equates to nearly:

700,000
hours a week

33 million
hours a year

£320m
worth of employee time*

*an employee earning the National Living Wage

It's astonishing that 25% of companies are still manually reconciling payments, often with spreadsheets that are simply not fit for purpose. Spreadsheets have zero audit history, and errors often lead to disaster.

Old formats

Saving a spreadsheet in the old XLS format rather than the updated XLSX format can mean data sets get corrupted and difficult to clean up.

Software limitations

XLS spreadsheets don't have as many rows as XLSX, which can cause data to simply vanish from a spreadsheet.

Human error

One study which examined 10,000 spreadsheets containing formulas found that around a quarter of them contained glaring errors such as missing reference fields. On average a spreadsheet with errors contained more than 750 of them.

It's all the more baffling that so many companies are struggling with the pain points of manual reconciliation, identifying transactions, and reconciling using multiple systems, when there are reconciliation platforms that can solve them all.

Automated reconciliation systems can identify and categorise vital reference fields in items like bank transactions, helping to determine whether the payment is from a specific customer, or relates to a bank fee for example. Such systems know what data they're looking at, and what to look for.

Similarly, there's no need for a business to manually upload payment card transactions onto accountancy systems when automated reconciliation tools can do that automatically, along with reconciling bulk payments.

However, it's important to distinguish between the tools which have already thought through these issues, and in-house builds, which typically overlook many of these problems, because they are too costly or complex to fix. That leaves some pain points unaddressed, and more chance of manual errors occurring, which can expose the business to further operational risk.

Why payment firms face extra reporting pressures

Aside from their inability to enhance workflows, spreadsheets aren't designed to handle the complex burden of producing regulatory or industry scheme reports that payments firms are required to submit.

Worries about the safety of customer funds in banks and other institutions are prodding regulatory watchdogs into action. In March 2023, the UK's Financial Conduct Authority warned 291 payment firms, including e-money firms, digital wallet providers and payment initiation service providers, about tightening up the safeguarding of customer funds.

The letter highlights several common failings at payment firms, including a lack of processes for identifying which funds are "relevant funds" and must be safeguarded. In practice, that means keeping those funds segregated in an account that's designated solely for that purpose, and ensuring that those segregated funds are not mixed with funds belonging to other parties.

FCA guidance states that it should already be standard business practice for safeguarding account reconciliations to be done on at least a **daily basis.** Typically, accurate reconciliations should give a daily compliance balance or control total of **zero.**

But without accurate reconciliation data, many payment firms may not even be aware of errors or suspicious transactions that need urgent attention. And that could prove calamitous for in-house finance teams who are alredy overstretched.

Card schemes demand strict compliance with reporting standards

Payment firms face even more pressures unique to their sector, particularly if they're dealing with transaction data generated from Mastercard and Visa cardholders.

With more than **1.6 billion** Mastercard and Visa cards in circulation globally, issuers are confronted with the dual demands of collating and accurately recording all transactions made using these cards. And they're also obligated to submit regular reports to Mastercard and Visa in the form of QMR and GOC reports respectively.

These reports are based on transaction data supplied by processors to the card issuers. Without these reports, the card networks won't know how their products are performing, so they require huge amounts of information. Metrics required include:

- number of domestic and international transactions
- number of in-store, online and ATM transactions
- blocked cards & failed transactions

Interchange

The data included in QMR and GOC reports determines the level of interchange that needs to be paid. Interchange is part of the merchant discount fee, and is a fee paid by a merchant's bank (also known as the acquiring bank) to the cardholder's bank (the issuing bank) to compensate the issuing bank for a portion of the risks and costs it incurs.

While the card networks don't earn direct revenues from interchange, it's a way of sharing some of the payment system costs among banks and issuers participating in their schemes. That's why it's essential that QMR and GOC reports are accurate, to the very last transaction.

What makes compiling these reports so difficult is that card transaction metrics create huge raw data sets to sift through. That problem is compounded if a card issuer is working with more than one processor.

MasterCard and Visa send information on aggregate transaction levels over the course of a day or a reconciliation cycle. How the processors interpret that differs depending on the processor which poses a number of questions:

1. How to get something useful out of massive data sets
2. How to standardise the data into something uniform and usable
3. How to see all of your transcations across all of your processors

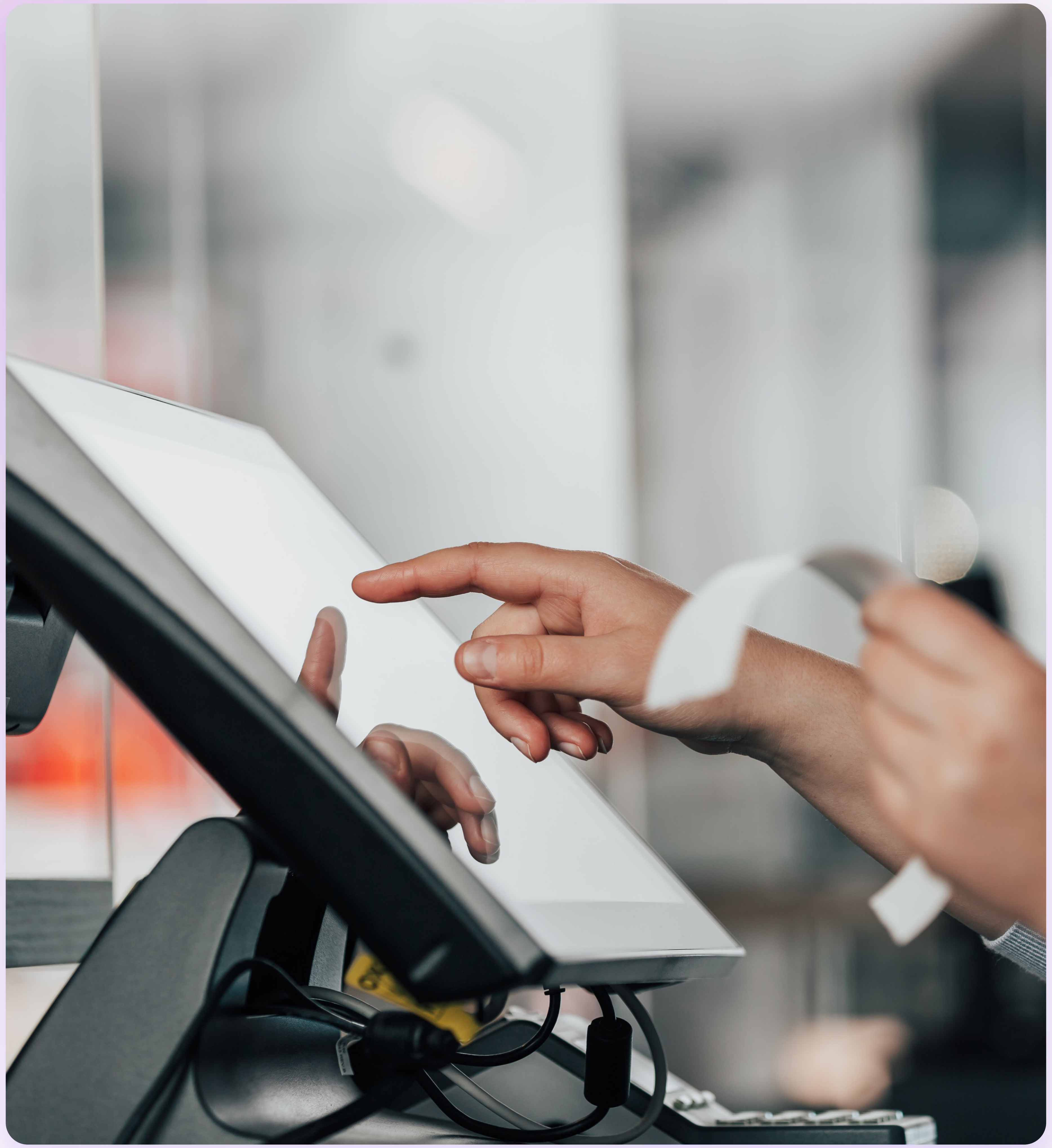
If these QMR and GOC reports aren't generated correctly and submitted on time, there could be major problems for issuers.

Non-compliance

They could also be punished with non-compliance assessments, damaging their ability to offer card services to their customers.

Fees

Costly financial penalties that could surpass the card fees they pay to the schemes.



In-house fintech finance teams are required to reconcile and report transaction data, but may not have the payment data knowledge to really understand what they're working with.

Spreadsheet and database packages haven't been designed to handle the intricacies of transaction data. They can't identify the nuances in transaction data, nor can they be used to quickly and accurately rectify them, as transaction data errors may have originated in the raw data files used to populate spreadsheets.

When businesses can't clean up their data and simplify it into a common language, problems can arise.

- Reporting processes will be sluggish
- They may contain multiple anomalies which take a while to rectify
- Missed reporting targets/deadlines can lead to falling out of compliance

Spreadsheets are out... but are in-house platforms any better?

So, now that we've outlined why generic software packages aren't fit for payments purposes, what's the alternative? Answering this question means confronting the 'build or buy' dilemma.

It's common for many payments firms to want to build their own in-house data reporting and reconciliation platform. Understandably, the temptation to build in-house is strong. Many firms have the perception that:

1. In-house build will be lower cost
2. Will give them more control over their back-office systems
3. Will enable easier integration with their financial and accounting processes

A recent survey found that this is a common scenario, with half of payments firms using an in-house build to facilitate financial reporting and controls.

But in the fast-moving world of payments, such in-house projects can quickly lose pace with shifting customer needs and exponential transaction growth. Today's cutting-edge platform can become tomorrow's legacy dinosaur if it's not built with scalability, and the flexibility to integrate new services, volumes and touchpoints.

In fact, in the Payments Association's 'State of the Industry' survey, payment industry respondents pointed to legacy infrastructure as being the biggest single barrier to growing their business.

The biggest barriers to business growth

(5 being the biggest barrier, 1 being the smallest barrier)

5	4	3	2	1
Legacy Infratsructure	Internal Resource	Cost & Budgets	Scalability	Developing a Business Case

Source: Payments Association 'State of the Industry' survey, 2023

The build or buy dilemma

One of the biggest misconceptions about legacy systems is that they cannot be replaced or integrated with. In many cases, they can be modified or other services can be bolted on without causing any issues.

It's about selecting the right technology to work with, and smart technology that has been built to address all of those issues outlined above, however firms are still investing poorly in the technology they use.

Modernisation

Many firms have invested poorly in back-office modernisation, are still hampered by inefficient internal workflows, and are still suffering from a lack of visibility over their data inflows.

Digitisation

In-house platforms are struggling to cope with rapid digitisation of payments, and are leaving businesses perilously exposed to increased operational risk such as falling out of compliance with regulators.

In-house focus

Most in-house resources and funding are usually focused on front-end or customer-facing platforms, leaving back-office infrastructure creaking under the strain of scaling.

Non-futureproof solutions

In many cases, critical process gaps emerge quickly and are either not addressed or given tactical band-aid solutions that are just delaying the inevitable failure further down the line.

What's clear is that today's payments firms need interoperability and standardisation of data processes if they are to stay competitive and in compliance with an increasing range of demands. Combined with staffing challenges and economic uncertainty affecting the payments world, it's getting much more difficult for payments firms to justify the cost and time needed for in-house builds.

The pitfalls of in-house builds

The five common misconceptions of developing in-house are:

- Technologists can develop anything
- We only need to build it once
- It is cheaper to build and maintain
- Our solution is scalable
- Back-office processes are easily manageable

Even when these fundamental back-office processes are automated, they are done so without a clear, holistic overview of how they link into other parts of the business.

This results in time-consuming and risk-laden manual workarounds for exception management, workflows and financial reporting. This approach usually consists of hastily-produced spreadsheets and poorly patchworked in-house solutions, resulting in poor performance, higher costs, and more operational risk for the business.

Myths & misconceptions about in-house platforms

1 Technologists can develop anything

In large part, this is very true. The DNA of any payments firm is to solve technical problems internally, making the best use of highly skilled (and rewarded) engineers.

Seemingly benign activities such as reconciliations and back-office controls are seen as an easy fix. While this may be true in the beginning, the solution is always more complex and drawn out than expected.

For instance, some companies attempt to build a matching engine to reconcile internal and external data sources. At first, creating such a matching algorithm appears a simple job, but beyond simple like-for-like matching lies a series of unexpected payment data scenarios that can cause a multitude of complexities.

Multi-currency transactions
For multi-currency transactions, for example, settlement payments are often made in base currency rather than transaction currency. This requires functionalities to process multiple currencies and apply FX rate tables for conversion.

Chargebacks
Another common example is chargebacks, where previously matched transactions need to be reversed and reprocessed. Fee complications, timing differences and new payment methods are all additional and evolving scenarios that add to the IT development backlog.

As the list of considerations gets longer, so does the work effort. Firms should therefore not forget that the opportunity cost of an in-house build outweighs the marginal benefits, consuming months of development time and distracting engineers from the core product.

2 We only need to build it once

The general assumption is that a back-office process is a one size fits all scenario. This is simply untrue. Businesses change and so does their product and customer base.

In the payments world in particular, the speed of innovation can outpace even the most audacious in-house build. Back-office processes need to be dynamic and flexible to accommodate new data sources, volume surges, and be able to incorporate changes to payment scheme transaction category codes in real-time demands. As businesses scale, so should their data reporting and reconciliation capabilities to accommodate new and shifting demands.

It's one thing to build a software application to solve a specific problem; it is another thing entirely to build a software product that can be adapted and easily understood and accessible to relevant in-house teams for effective collaboration. This is the major difference between commercial applications built to accommodate rigid scenarios and solutions built for fluid and fast-evolving payments purpose. It takes much more time and effort to build a flexible, change-friendly application.

3 It is cheaper to build and maintain

The idea of a self-build is attractive because the resources are already available and ready. But what is the true cost of this approach?

If your business is in Silicon Valley, then the price of redirecting three engineers to a six-month (or more!) back-office project is more than a little significant – even before you calculate the opportunity cost to core product development.

Next, you also need to consider maintenance costs. Reconciliation processes need to adapt to the increasing challenges of business growth and also changing regulatory requirements. Managing and maintaining an intricate system designed to manage your core financial processes is time-consuming and expensive – and becomes even more so if the solution is hard-coded.

In the long-term, the initial development cost can be just the tip of the iceberg. Relying on inefficient and outdated legacy inhouse builds leaves businesses exposed to more manual errors and data gaps that can lead to regulatory breaches – with costly penalties hitting the business.

4 Our solution is scalable

While many business leaders eagerly envisage hyper growth, few actually plan for it and even fewer take actions towards it.

The explosion of non-cash payments since 2020 exposed the shortcomings of in-house financial and data reporting platforms, which are simply not designed to process rapidly rising data volumes and are creaking under the weight of new reporting demands.

The key failure factors in scaling lie in either the tech stack, hardware or design of the platform itself. A common fix is to simply add more spreadsheets and therefore more people. Over time, however, this means that large teams sit around in-house solutions to support its processes. This is simply not efficient or effective.

5 Back-office processes are easily manageable

Payments firms pride themselves on being able to attract the best candidates for any job, and the finance function is no exception.

But, even for those firms with partially manual processes, those highly qualified (and highly paid) accountants will spend much of their time on laborious, repetitive and low-value tasks. Many will eventually get bored and leave the company.

This approach goes against the values that modern payments firms are supposed to embody: speedy technology, smart people and scalable growth. As such, manual back-office processes are simply not the ideal recruitment tool.

Avoiding the pitfalls

Why purpose-built payments reporting platforms empower future-proof growth

There are a number of solutions in the market that might solve these immediate issues, but are they really future-proof?

Many platforms promise faster, more accurate way of mapping transaction data and speeding up data reporting and reconciliation workflows. But it's essential that they're built with agility, flexibility, data standardisation and scalability in mind.

Purpose-built data reporting and reconciliation software is designed to take the pain away and provide scalable solutions that require minimal maintenance over time. They are built to be managed by business users, with little impact on already stretched teams of internal developers. The key is to ensure that any automated solution fits into the business's existing systems and back-office processes. If not integrated correctly, untangling it can be daunting.

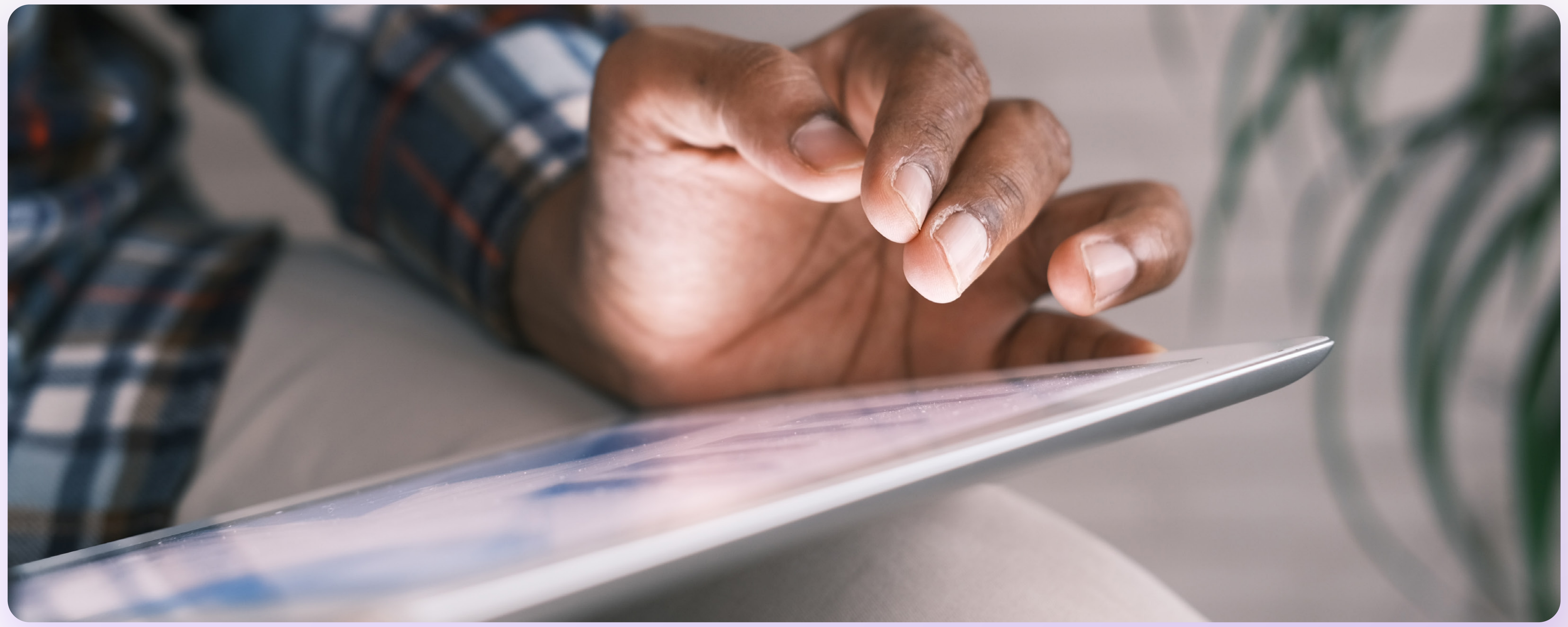
Contrary to these widely held misconceptions, the reality of building in-house reconciliation systems is that:

- Highly manual jobs will not attract the best industry talent
- Systems built once will need perpetual updating and maintenance
- It is far more expensive in the long-term
- Even the best technologists cannot develop systems to accommodate for unknown future changes
- These solutions are not scalable and will necessitate manual intervention

Standardising complex raw data is the key to reporting efficiency

With a common language speeding up data reporting and reconciliation outputs, it becomes much easier and quicker for businesses to produce accounting reports, scheme reports or other ad hoc requests from regulators.

Purpose-built platforms can capture every data fragment of every transaction, which comes with some huge benefits.



Accessible audits

They enable businesses to generate complete audit trails of past and present transactions, that are accessible at a moment's notice, while also helping them to meet new requirements around customer fund safeguarding reconciliations and Average Outstanding E-Money (AOEM) calculation from the UK's Financial Conduct Authority.

Standardised data

With fragmented raw data being transformed into standardised data, businesses can easily filter it and drill down into specific transaction data figures, for example, to get individual transactions or balances that contribute to Mastercard and Visa QMR and GOC figures.

Insights

Standardised data views can also enable businesses to unlock unique business intelligence insights, including transaction heat maps, detailing where payment methods are most active by volume, value or location.

Up-to-date reporting

SaaS platforms designed to work with processor or payment scheme data can be instantly updated to incorporate any code updates from the payment schemes, with no interruption to businesses' reporting capabilities.

Purpose-built platforms can generate smart, standardised data

The good news is that today's automated platforms offer full control and clarity of transaction data, enhancing data reporting and reconciliation processes with game-changing speed, automated accuracy and business intelligence insights.

By transforming disparate raw data into a single common language, it becomes possible to generate powerful ad hoc analytics. You can then drill down into your whole portfolio to see where your cardholders are spending, or if there is a certain merchant category with high growth or low growth. Standardisation enables those ad hoc queries to be answered in a matter of minutes. By speeding up the data workflow, data validation and quality is improved.

> "We have 10 processing partners and each of those processors supply different data in different formats. We need that data to meet regulatory obligations as well as scheme obligations. What Kani Payments does for us is consume all that data, cleanse it and send it back to us so we're able to meet those obligations. From a business perspective, it was a very hard job in the past, but Kani Payments have made it a lot easier. We're able to reconcile and report a lot quicker and more effectively."
>
> Noel Smith, Director of Business Development, Transact Payments Limited

Speed

Kani Payments' SaaS data reporting and reconciliation platform has enabled Mastercard and Visa issuers to speed up QMR and GOC report production from three weeks to just three minutes – a capability that no other data reporting platform can offer.

Savings

Our clients also typically experience savings of $500,000 in IT building costs, 200 hours per week of manual effort, and $500,000 per year through automation of common reporting outputs and reconciliations.

Compliance

Freed from laborious and time-intensive reporting workflows, businesses can get on with brainstorming and delivering outstanding services and products for their customers, safe in the knowledge that they're in full compliance with all scheme and industry regulations.

Streamlining and automating transaction data will remain business-critical for many years to come, especially as regulators worldwide place more scrutiny on payments and fintech companies. Data goes through an arduous journey before it becomes ‘smart’, usable and actionable. Finding the right partner who can transform your data, and whose platform can evolve alongside your business, can ensure you achieve success.

Want to know more?

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