

Whitepaper

The reconciliations handbook

Key challenges and automated software considerations



Reconciliations have always been a fundamental control mechanism for finance and accounting for organisations across the financial sector.

The process compares two sets of records to check that figures are correct and in agreement.

This was once a relatively simple process conducted with Microsoft Excel, a legacy point solution or in-house reconciliation tool. But the growth of the digital economy, higher transaction volumes and growing regulatory obligations have intensified the challenge in recent years and left many of these solutions unfit for the challenge. The result is that many finance and operations teams are often buried in data and complex manual work.

This paper offers an overview of the key challenges and efficiency gaps we find in reconciliation processes across our work in the financial services sector. The second section provides guidance on what firms should look for from an automated reconciliation solution to address these issues and provide maximum business value.



Challenges with current reconciliation solutions

The drawbacks of spreadsheets

The first and most prominent challenge with reconciliations is a lack of automation and dependency on spreadsheets. Heavy reliance on spreadsheets and manual efforts of staff causes much of the friction with financial control processes. Organisations that choose the manual route tend to struggle with:

01

Higher frequency of breaks

Incorrect inputs, wrong accounts, adjustment errors, incorrect accruals, omissions and deletions are all aspects of manual processing that are predisposed to human error. Spreadsheets also lack sophisticated matching algorithms, leading to a higher number of breaks to investigate. This is especially true if the spreadsheet author is not skilled in advanced spreadsheet calculations and functions.

02

Lack of control and auditability

All spreadsheet controls begin with a blank sheet. They lack inherent controls or protections, relying instead on the author to insert them. Even the most skilled spreadsheet users find it difficult or impossible to embed enterprise-class controls in Microsoft Excel.

These include controls such as field level security, account security, transaction security, business rule security, sign-off hierarchy, audit trails, version control, and other change management functions. Firms that struggle with these issues will be exposed to greater operational risk and a reconciliation process that is difficult to audit properly.

03

Poor operational efficiency

Manual processes, increased time to resolve queries and a lack of visibility leads to employees spending time on non-value add activity. As a result, teams experience a notable increase in email traffic, query management and breaks investigation. If a more automated and integrated process were in place, employees could spend more time analysing root cause issues to eliminate breaks.

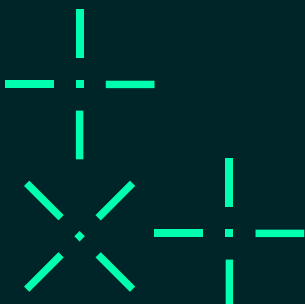
04

Limited scalability

As businesses grow, so does the complexity of their financial control function. There is a volume-based tipping point with manual processes, which is directly proportional and correlated to overall growth.

High volumes of unresolved breaks carry a significant negative impact on close processes, financial statement generation, regulatory reporting, audits and potentially even cash flow. Problems here create a barrier to business expansion.

Spreadsheets also have a processing limit where data volumes and numbers of rows/columns outstrip both the spreadsheet's functional capacity and the user's ability to manage large data sets effectively.



“Any process that involves the manual efforts of staff always increases the likelihood of errors, especially when dealing with high volumes of data.”

05

Reduced operational resilience

Operational Resilience requires organisations to anticipate, respond and adapt to market disruptions while still delivering services consistently to its clients. This requires agile yet well controlled financial systems. While spreadsheets are somewhat agile, business disruptions and continual change puts stress on the inherent control weaknesses of spreadsheet-intensive operations. The more dynamic the environment is, the greater the risk when relying on spreadsheets.

06

Elevated risk of error

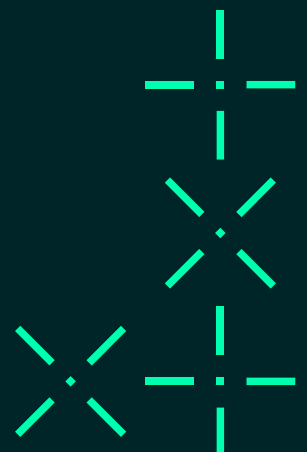
Any process that involves the manual efforts of staff always increases the likelihood of errors, especially when dealing with high volumes of data. Spreadsheets also need to be supplemented with other applications and tools like email to complete the process, creating fragmented data and process flows that raises the chance of error even further.

07

Reliance on users and flight risk

Spreadsheets are only as smart as the user who built them. In today's financial landscape, where match rule requirements are highly complex and sophisticated, firms will need staff with advanced Excel skills to build matching algorithms. This raises further challenges around change management and version control of the algorithms and business rules. For example, material accounting policy changes such as changes to match rules, exception tolerances and sign off authority all need to be well documented and controlled.

Even if highly skilled staff manage the above, firms are still open to flight risk should employees leave the company. After all, spreadsheet logic is difficult to decipher for those who didn't create it in the first place. Most firms do not have adequate documentation in place to bridge the gap when the spreadsheet creator leaves the company.



Legacy technology

Legacy technology can significantly limit the effectiveness and agility of a reconciliation operation. Older technology is typically more difficult to integrate and less likely to accommodate game-changing developments like real-time reconciliations, cloud computing, artificial intelligence and machine learning. Most are deployed as point solutions that must be supplemented by other software applications to automate a complete reconciliation process, leading to information islands and fragmented processes.

Older systems are difficult to change compared to today's "low code" systems. They also bring additional risks when vendors discontinue support or when staff who understand older proprietary technology aren't available. Ultimately, legacy solutions can't keep pace with the innovations, technologies and regulatory changes that characterise today's financial landscape.

Data quality issues

The plethora of data exchanged today means that firms often perform lots of manual work to manipulate and standardise data before reporting. Teams have to work with unpredictable and erroneous data supplied from merchants, as well as multiple data sets with different formats and data fields.

Data sources are not always complete nor are they compatible with each other. Data elements like currency rates may need to be added to make transactions matchable. Bulk entries may need to be exploded to unpack the detail before matching with other files.

All of this must be corrected by the manual efforts of staff, which creates a growing efficiency gap as operations scale.

Disparate systems

Also known as "spaghetti systems", the infrastructure underlying reconciliations in many large firms is made up of multiple systems tangled together. Problems arise because systems are not built to interact with one another, and much legwork is required to pull data from the entire tech stack. Without an end-to-end view of the underlying transactional data, employees managing reconciliation procedures are unable to analyse the root cause of any differences. As such, the audit trail is difficult to follow and trace through the entire reconciliation process.

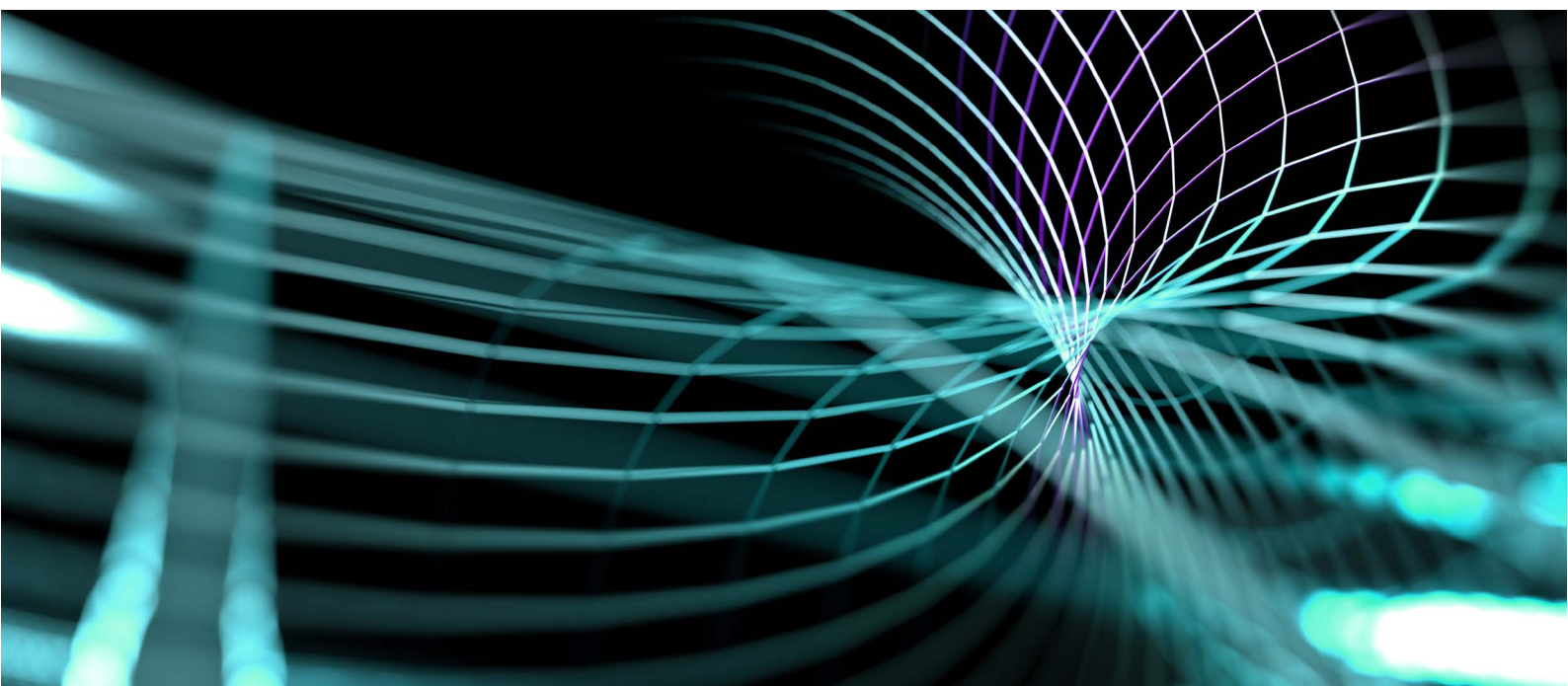
In-house solutions

There are two primary issues we've encountered with in-house solutions. The first is a tendency to focus on one or two aspects of the reconciliation process such as matching or matching speeds without putting as much

thought into the steps before and after the matching process. Peripheral (yet essential) elements of the process are left to business users to solve with spreadsheets and emails, leading to increased manual effort, higher labour costs and an elevated risk of human error. This approach does not lead to real economic scale – something which is critical for all business models in financial services.

The second issue is that companies underestimate the dynamic nature of finance. Change is constant, and reconciliation software needs to be engineered with change in mind to accommodate new data sources, data formats, matching rules and reporting requirements.

Besides taking too narrow of a scope on one or two constituent parts, in-house solutions are often hardwired to the current situation to minimise development efforts. This makes the task appear relatively small initially but fails but to consider the long-term development efforts required to accommodate system changes over time.



Software considerations:

What to look for in a reconciliation tool

Automating the entire process

The modern reconciliation process is now far more than just a matching exercise. There are multiple steps requiring automation before and after matching. What firms really need for maximum efficiency and cost-saving is a solution that automates the below process from end-to-end. Purpose-built functionalities designed for each stage should work seamlessly together as one unified system.

In this section, we break down what financial organisations should look for from a reconciliation tool to deliver maximum business value across the entire process.

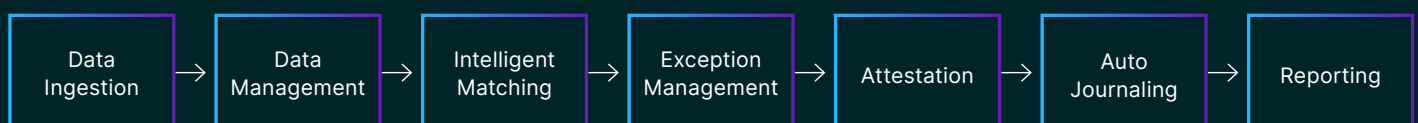
Data ingestion

The first step is data ingestion. It is the process of importing or integrating data from a variety of sources (ACH files, SWIFT files, bank statements, trading systems, currency systems and ERP systems). Formats can vary and change over time and even include unstructured data sources such as paper documents like insurance or bank statements.

Best-in-class reconciliation applications are flexible, allowing users to manage and adjust different format types without much help from IT. With the right tool, the data ingestion process can be highly automated, using real-time feeds via APIs to populate data in the reconciliation tool. Some applications even offer canned integrations or plugins for common integrations.

Key data ingestion features to look for:

- Out of the box support for input formats such as:
 - SWIFT
 - ACH
 - ISO 20022
 - Spreadsheets
 - CSV
 - Bank statement formats
- Supports OCR for paper data sources like insurance and broker statements
- Ability to automatically identify source data formats to simplify process for users
- An API to programmatically input data
- Canned integrations with ERP, front-office, email, trading, currency management and portfolio management systems



Data management

Before imported data can be reconciled, it first needs to be consolidated, normalised, transformed or enriched to make it matchable.

After all, data sources are not always complete nor are they always compatible with one another.

Most commercial software products have invested in functionality to allow users to make these data adjustments quickly and accurately with minimal IT involvement. Firms should look for low-code or no-code technology like wizards to simplify this exercise and reduce reliance on IT.

Key data management features to look for:

- Data enrichment and transformation tools to improve raw data sets
- Ability to merge a third data source with raw data files like currency tables
- Ability to consolidate detailed transactions to create summarised transactions
- Functionality to disaggregate or explode bulk entries
- Ability to use one data source for many reconciliations without re-importing
- Reporting labels and fields for downstream classification and exception management
- Full audit trail of the original and transformed files
- Ability for end users to perform data management functions without IT involvement

Intelligent matching

Once data is cleansed, enhanced and normalised, the matching part of the process can begin. This is the heart of the reconciliation process, where transactions from different data sources are matched against one another or identified as breaks or unmatched exceptions that need to be accounted for.

Reconciliation tools have various ways to perform matching, ranging from simple algorithms to the latest development in machine learning technology. The higher the match rate, the fewer exceptions there are to manage. Regardless of the matching method, it is critical for end users to keep control and understand how matching is performed. Equally important is the ability to approve matching rules before they are applied to the data set.

Key intelligent matching features to look for:

- Intelligent match analysers that recognise fields and suggest optimal results
- Ability for end users to build match rules without IT involvement
- One to one, one to many and many to many match sequencing
- Timing and age-sensitive match rules
- Role segregation for match rule creation, approval and execution
- High speed matching for large volumes
- Ability to schedule match rule processing

Exception management

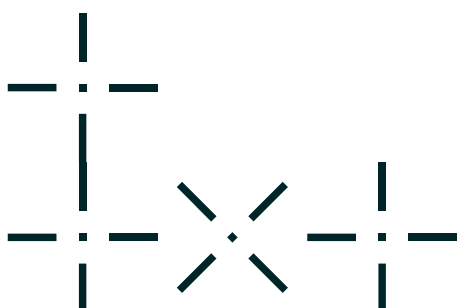
Following matching, the exception management process determines how unmatched items are accounted for. This is often a labour-intensive process that puts the onus primarily on finance operations to chase down discrepancies and sign offs using spreadsheets, email and other manual methods.

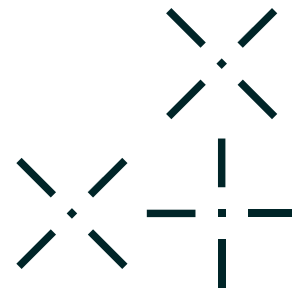
However, modern reconciliation tools have the functionality to eliminate manual steps in the exception management process using embedded workflow automation to create, route and assign break resolution cases automatically. An integrated or embedded workflow approach works better because matching mechanisms and exception case management are not separated, meaning the audit trail remains intact.

The most advanced systems allow firms to organise and prioritise a user's exception management work queue by materiality, due dates and other criteria. Information is then surfaced into dashboards to prioritise what they should do from day-to-day, enabling staff to focus on value-add tasks rather than searching through a sea of reconciliation data.

Key exception management features to look for:

- Integral workflow to assign, route and track exception cases
- Ability to surface exceptions into dashboards and work queues to organise and prioritise tasks
- Automatic escalation of breaks that exceed due dates and materiality levels for follow up
- Consolidated view of all outstanding breaks, user work queues and bottlenecks





Attestation

Attestation – the process of certifying results – is another manual or semi-automated function at most companies. It is integral to the exception management process.

Modern software products have this function integrated into the reconciliation engine so there is no separation between reconciliation, case research and the sign off audit trail. This integration allows for clear close sequences and iron clad audit trails.

Key attestation features to look for:

- A centralised sign off and attestation hub with full audit trails
- Ability to assign ownership of accounts, transaction types and other criteria
- Clear visibility of ownership across legal entities, business units and locations
- Ability to create and enforce sign off hierarchies
- Maintains separation of duties

Auto-journaling and reconciliation accounting

One of the last steps is to document the accounting impact of the reconciliation with journal entries. It is another labour-intensive yet essential part of the reconciliation.

Many reconciliation software packages address this need with integral subledgers that automatically create journals for entries like rounding differences and write offs. Automation at this stage eliminates manual, spreadsheet-based work and calculations.

Key auto-journaling and reconciliation accounting features to look for:

- An integral subledger with transactions that are easily exportable to ERP/general ledger
- Ability to automatically create journals for rounding differences, tolerance write offs, currency differences and sales taxes
- Support for multi-period, multi-currency and multi-company subledger posting controls
- Journal entry audit trails tied to the reconciliation

Reporting, dashboarding and auditing

The final stage of the reconciliation process is to provide reports for accounting, regulatory and management information purposes. How reconciliation data is stored determines how easy it will be to report on. Systems that store the data in a single, unified database are more efficient than those with several different tables and proprietary systems that need to be joined together or consolidated.

Auditors will want to see full data lineage across the end-to-end process, from data ingestion, through to enrichment, matching, sign offs and journal entries. A unified reconciliation package simplifies auditing because all the data is contained in one place. Firms should also look for applications with dashboards that allow users and auditors to drill down into every stage of the process.

Key reporting, dashboarding and auditing features to look for

- Full data lineage maintained throughout the process
- A unified database for reporting
- Online dashboards with drill down and drill around functionalities
- Automatic or scheduled report generation

The bottom line: look for an integrated process

This paper has described each step of the reconciliation process individually, but the key is for firms to look for a solution where all the steps work seamlessly with one another.

Best-in-class reconciliation solutions have a similar user interface across the entire process and not presented as a series of bolted together sub-packages. Equally critical is for the audit trail to go from one end of the process to the other, all traceable online. Automation should be scheduled across each step to eliminate manual work.

In short, automated reconciliation solutions should encapsulate the whole process and not take a piecemeal approach.



The AutoRek solution has been consistently developed over 27 years of collaboration with some of the largest and most sophisticated financial institutions in the world.

AutoRek is a leading software provider to companies in the global financial services sector.

An industry leader at the forefront of financial data management, AutoRek's customisable rules driven platform allows firms to automate and streamline the collection, validation and reconciliation of data. This facilitates the necessary transparency to fulfil regulatory obligations and ensure good governance. Efficiency and cost reduction are delivered by eliminating spreadsheets and manual processing, as well as mitigating operational and regulatory risk associated with managing high volumes of data.

Its clients span the asset management, banking, payments and insurance sectors and include: retail, investment and commercial banks; wealth managers, brokers, hedge funds, CFD & FOREX brokers and asset managers; insurance underwriters, general insurers and brokers.

Headquartered in Glasgow, with offices in Edinburgh, London and New York, the firm has over 100 employees, with extensive experience in finance, regulation and technology.

Corporate social responsibility is at the heart of AutoRek's ethos and it is involved in a number of initiatives to reduce waste, help local communities and create a positive work environment for its employees.

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