



Introduction

In terms of reconciliation and close management best practices, Banking is a particularly challenging industry. High account and transaction volumes, process complexity, a multitude of data sources, ever changing regulatory requirements, and other factors compound to create some of the most intricate and cumbersome reconciliation processes that exist today.

ReconArt, both as a company and as a solution, is very well attuned to the particular needs of the banking world.

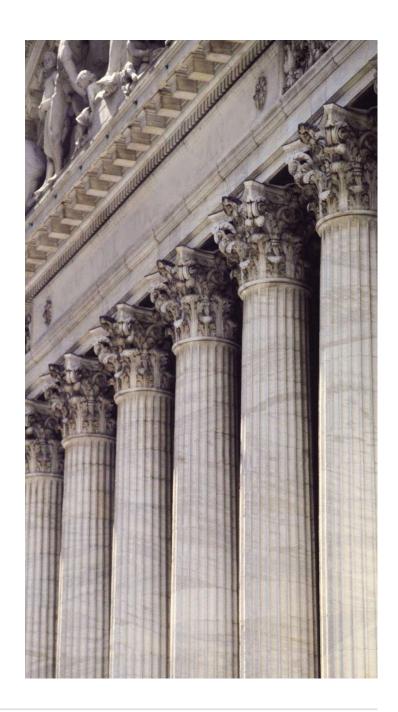
This is thanks to internal industry expertise and long standing partnerships with various banking institutions throughout North America and across the globe.

Our banking and other financial institution clients range from small community banks and credit unions, through to large nationally known banks, international banks, US bankers' banks, and multiple other types of lending and borrowing institutions.

We continue to amass experience from this everevolving market by truly partnering with our large and rapidly expanding banking customer base, at all times empowering them with a technology that evolves in alignment with their industry.

This paper has been written so that we can share our experience and solutions with our clients – both current and future – in the sector.

While existing users of our technology, as contributors to this paper, will already have seen significant gains in operational efficiency and operational risk management, we hope that they will find many other areas to target for ever greater return.



The Current Banking Business Environment

ReconArt's ability to provide a single, comprehensive solution for the financial services industry - and Banking in particular - is rooted in our expertise with common processes and corresponding data flows that govern the lifecycle of financial data at a financial institution.

The typical distribution of reconciliation duties by bank departments and functions can be grouped into at least four main categories:



The reconciliations for these, fundamental from a control perspective and to ensure regulatory compliance, require multiple different data sources. These typically include:

- Core Banking systems
- >> Very often mainframe printable text files, fixed width proprietary or standard data formats such as XML, SWIFT, BAI, FIRD, and multiple other from vendors such as FIS, Fiserv, Jack Henry, Misys, Temenos, etc.
- General Ledger/ERP systems
- >> Various feeds ranging from CVS exports, spreadsheets, XMLs of all types of accounts such as Balance Sheet, P&L, Suspense, Prepaids, etc.
- Subsystem balances and details



- >>> Loan balance extract reports, loan transactional activity extracts, teller cash exports, ATM transactional and balance data, customer front end system files, treasury confirmations, position holdings from trading system trades, cash, AR, AP, FX, etc.
- >> External Sources
- **>>>** Bank statements (Due From, Due To, Nostro, Vostro) in variety of formats ranging from BAI, SWIFT, XML, FIRD, CVSs, spreadsheets, fixed width, and mainframe printouts.

In many banks, this complex and diverse collection of needs, data formats and sources has resulted in a number of scattered 'solutions' offering partial and limited coverage. For those that have not yet deployed automated technology, some or all of these pockets of reconciliation activity are still very manual or only semi-automated. In this context 'semi-automated' might refer to the use of Excel spreadsheets (level 1) or, for example, the development of local Access databases (level 2).

Typically, these partial 'solutions' come with their own costs and extensive time resources – both business and IT — spent on maintaining staff knowledge and training in each area. Throughout the sector, one finds typical attempts at dealing with each major process and, unfortunately, none of them provides one comprehensive, best practice, industry compliant reconciliation solution. For example:

GL (BALANCE SHEET) ACCOUNT RECONCILIATION

Often handled monthly in spreadsheets, SharePoint, online docs, or a legacy certification solution, and typically with a multitude of emails flying around the business.

DAILY TRANSACTIONAL RECONCILIATIONS

Often combinations of Microsoft Access databases, spreadsheets and/or a legacy, often high cost of maintenance, matching engine – very typically limited by Amount and Date with little room for multi-step processes and complex matching logic. This leads to an over-reliance on manual effort to address the deficiencies of the patchwork solutions put in place.

TRADING ACCOUNTS RECONCILIATIONS

For banks involved in securities and investments the need to compare Positions in the trading system(s) (most often 1:1, by Security ID only and no adequate break management). Trades are either compared in spreadsheets, a legacy matching engine, or not compared at all.

REPORTING

Data cube aggregator software or an extension to the warehouse – a good source of data but usually not reconciled itself, therefore not suitable for compliant public reporting or reliable management reports.



The Industry's Challenges

Providing the Banking Industry with the right solution begins with an in-depth understanding of its particular challenges. Similar pain points affect financial institutions of all sizes, in all geographies, and with various growth strategies. Here are some of the major challenges we have identified throughout our years of working closely with the sector.

CHALLENGE 1 OWNERSHIP, COST, AND

COMPLIANCE responsibility of reconciliations are typically not unified. Rather, these are segmented across the organization, frequently spanning multiple departments. As a result:

- Reconciliation work is often defined by evolution rather than by design. It ends up being distributed and redistributed as the financial institution grows with no clear best practice definition or end-game.
- Both the true cost of reconciliations and the associated risk are very hard to define and often hidden from view.
- Compliance and efficiency gaps are impossible to identify and address.

Easy implementation, easy to work with, automates the tedious job and frees up valuable time to focus on sorting out differences. Just the right tool to be In Control.

- Marco Van Bakel, Knab Bank

CHALLENGE 2 HIGH VOLUMES AND

PROCESS COMPLEXITY are usually compounded with issues around data availability and data quality. Some of the frequent issues are:

- Availability of both internal and external transactional and balance data.
- >>> Frequency of available data feeds.
- Poor quality of data feeds with key data, that could otherwise maximize efficiencies and minimize user intervention, often missing.

CHALLENGE 3 FRAGMENTED SOLUTIONS

in the space address either high-volume daily operational risk control reconciliations OR monthly period-end certifications but not both at the same time, on one uniform platform.

- High volume solutions are often referred to as Data Matching reconciliation solutions.
- Month-end certification of the balance sheet is often referred to as a Financial Close reconciliation solution.
- >> It is uncommon to find these in different solution sets despite the results of one needing to feed, and be part of, the other for many balance sheet accounts.



How ReconArt addresses these challenges

The ReconArt™ Total Reconciliation Lifecycle™ platform has the ability to bring significant operational efficiency and risk management to the diverse range activities and practices described above.

The broader it is deployed over time and reach, the greater the gains. ReconArt™ offers financial institutions a multitude of opportunities and benefits that include:

- A centralized reconciliation repository for all types of reconciliations in one platform.
- >>> Business (as opposed to IT) owned and administered processes eliminating an often felt bottleneck of limited technical resources
- A highly intuitive 100% web-based user interface that is easy to learn and navigate.
- >>> Enhanced audit, compliance and associated reporting.
- Best of class functionality, usability, scalability, and cost.
- A "best practice" based system, ever evolving from constant user community and industry feedback.
- Enhanced Governance, Process, Workflows, and Compliance.
- Enterprise scalable architecture from hundreds or thousands to millions of transactions daily.
- Future proofing of deployment as technology priorities change with both cloud and on premise options.



ReconArt™ Home Screen

A single focus vendor entirely concentrated on reconciliations with only one platform to devote all R&D expenditure to and to enhance, enrich and maintain.



Key functionality of ReconArt™ that brings it all together

How does the ReconArt™ Total Reconciliation Lifecycle™ solution bring all of the above benefits to the table? Simply put, by delivering to financial institutions a uniform, integrated technology solution that encompasses, in one intuitive product:

- Wersatile Dashboards and Reports.
- >> Intuitive, AI augmented Import/Export configuration out of the box.
- Sophisticated Data Matching with simple configuration.
- Exception and Case Management for collaborative investigations.
- >> Journal Entry control and automation.
- Task Management to organize period-end checklists, team responsibilities, and progress tracking.
- Full GL account reconciliation including Certification and period close functionality.
- An integrated enterprise-class Scheduler to automate all tasks.
- Settings Migration (between test, development, training and live production systems.)
- >> Long term Archiving of historical data with easy subsequent access as and when required.

Key ReconArt advantages for financial institutions

When this combination of industry challenges is married to what the ReconArt™ platform can bring to the table, banks start to benefit from a multitude of advantages. These increase over time as the solution propagates itself naturally into more and more areas of an organization's operations. Consider:

Platform Independence of Daily Reconciliation and month-end Close Management.

ReconArt™ works with all GL/ERP platforms, Core Banking solutions, Lending, FX, Investments and other subsystems through data files or direct exchanges, and has its own data parsing, enrichment and import automation.

>>> Reconciliation and Close Enterprise Scalability.

ReconArt™ reconciles millions of transactions and balances and is capable of getting input, comparing data, managing exceptions and creating output to any corporate system or subsystem regardless of data volumes.

>> Future proofing of operations.

ReconArt[™] helps you grow efficiently because it supports exponential horizontal and vertical growth while total associated cost goes up only fractionally.

>> Compliance enhancement.

Staff accountability, audit compliance, accounting principles compliance, regulations compliance (SOX, Dodd-Frank, etc.) are all strengthened across the organization.



Current versus Future State

ReconArt's clients have experienced incredible results across their ReconArt™ deployments in the Banking Industry.

The chart below represents the results of research over a period of 5 years. It summarizes data collected from ReconArt clients and identifies their reconciliation processes automation and **associated efficiency gains**¹ at a typical financial institution:

Process	Current State	Future State	Efficiency ¹
Close Management Balance sheet certification, task management, SOX compliance	In-system, automated, audited, compliant	Implement Tasks, reporting and analytics, automatically transfer reconcilement items and balances from matching	30%
General Ledger daily transactional	Manual or Spreadsheet	Automatic import of GL transactions, matching, exceptions, reporting	250%
Cash daily transactional	Manual or Spreadsheet	Automatic import, matching, exceptions, reporting	250%
Due From (Nostro) correspondent banks, daily transactional and period end	Manual or Spreadsheet	Automatic import of both internal and external data, exceptions, reporting	400%
Due To (Vostro) correspondent banks, vendors and suppliers	Manual or Spreadsheet	Automatic import of both internal and external	400%
FED / Central Bank Federal Reserve Bank transactional and period end	Manual or Spreadsheet	Automatic import of FED and Bank data, auto matching, reporting	400%
Investments Holding Positions, Trades, Cash, Dodd Frank compliance.	Manual or Spreadsheet	Automatically import and match daily positions of holdings, trade details, cash settlements, investigate breaks and automate reports	600%

¹ These percentages have been averaged and rounded across a diverse range and size of FIs worldwide.



Process	Current State	Future State	Efficiency ¹
Teller Cash GL to Teller sub ledger, cash needs, availability	Manual or Spreadsheet	Automatically import and match GL to Teller sub ledger, expose any errors, overs/unders per teller or branch	200%
Loans Reconciliation	Manual or Spreadsheet	Daily or monthly – balances and/or activity	300%
ATM GL to ATM sub ledger, cash needs, availability	Manual or Spreadsheet	Automatically import and match GL to ATM	200%
Journals Role based, multi-level creation and approval workflow of Journal Entries. Flexible approval levels and amount thresholds.	Performed in ERP – Discuss Control levels.	Book journal entries from reconcilement items in ReconArt accounts and/or import (e.g. fees, FX differences, reclasses, etc., then match automatically next day)	400%
Exceptions Investigations and Exception Management workflows	Manual or Honor system	Take control with an Auditable, accountable collaboration workflow that captures all exception management activates, automate exception identification, handling and resolution	400%
Migration Transfer users, settings, accounts, rules, imports from one ReconArt system to another (e.g. Test > Dev; Dev > Live etc.)	Not applicable	Once test system has been successfully setup transfer settings to live with a few clicks (saves admin time in redoing setup manually in Live)	250%
Scheduler Automate absolutely everything – supports Import, Matching, Exceptions, Export, Reports, Notifications, Dependent Tasks, Task Stacks, etc.	Nothing is automated	Automate all import and export templates, matching, exceptions labeling, distribution, email notifications, reports, exports. Business managed and administrated	400%

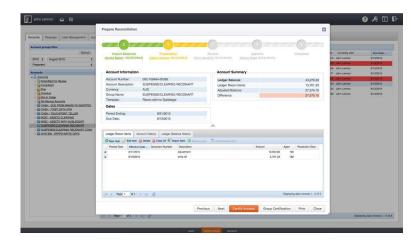


How to Reach this Future State

With all of the above at play, it can seem daunting to begin any sort of implementation effort.

However, ReconArt™ lends itself to very rapid deployment.

ReconArt[™] is a 100% web-based, best-practice, intuitive product that packages powerful functionality in an easy-to-use interface.



ReconArt™ GL Account Reconciliation

You can expect to learn and implement this product much faster than other typical enterprise class solutions on the market.

This is because ReconArt[™] has leveraged the latest technology in combination with the latest proven design techniques to deliver these attributes.

With ReconArt's sole focus on reconciliation and period close, undistracted by other solutions or other legacy products to support, and coupled with ReconArt's constant customer feedback flow, the benefits can truly be enjoyed rapidly without the pain of a heavy deployment.

Furthermore, ReconArt's Implementation Teams are here to support you in this effort. You can expect industry-relevant competence, best practice expertise, and above-industry standard responsiveness and dedication to your success.



Assuming your data and internal resources are implementation-ready, you can expect the following timeline:

STEP 1. Discovery/Specification – a matter of a few days

- NeconArt will conduct a discovery workshop on site or, where more efficient and for geographically dispersed teams, online, with all the areas that harbor manual data matching and reconciliations today.
- We will sit with the reconcilers and their managers and thoroughly map the current matching and reconciliation process.
- We will also look at every data source and analyze its "importability" offering advice on how to maximize its value.
- >> We will determine:
 - Matching reconciliation accounts type, count, volume, structure
 - Account naming convention and hierarchy
 - Data sources, data enrichment sources, import scheduling and dependencies
 - Matching logic
 - Exception handling logic
 - Reporting, compliance, audit requirements
 - >>> Training requirements.

STEP 2. Delivery: a few weeks

- Build a reconciliation account tree, data import and enrichment – 1-2 weeks.
- >>> Build match rules 1-2 weeks.
- >>> Build reports 2-3 weeks.

STEP 3. Training: a few days – We will train the power users during implementation at no additional cost. If needed add 3-5 days for end users training. Deliverables:

FROM THE RECONART TEAM

- Timeline
- >>> Project Plan
- >>> Project Manager
- Project tool with online access for the key stakeholders
- >> Implementation Lead
- >>> Relationship Manager

FROM THE BANK TEAM

- Published deadline(s)
- >>> Project Manager
- Implementation Lead
- Subject Matter Expert² for each process with time availability to work on project tasks within the mutually agreed project plan and timeframe.

None of the above needs to be full time on the project; however, during implementations, their availability should be known and predictable.



In Summary: Success Stories

Nothing speaks to the ReconArt difference in the Banking and broader Financial Institution industry as well as our Customer Success Stories. See what your industry peers have to say about the ReconArt™ in their own words by reading the following online article:



FIRST NATIONAL BANKERS BANK

"After we saw ReconArt's proof-of-concept demonstration we thought it was a great system; we were impressed with what we saw."

Read Case Study