Frictionless reconciliation and allocation of cash:

Can the adoption of ISO 20022 XML turn this dream into reality?

standard chartered

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PERFORMANCE WHEN IT COUNTS

Foreword

In today's rapidly evolving global business environment, corporates are continuously streamlining their treasury and finance operations to drive efficiencies and maintain competitive advantage. Among the key challenges that many face, account receivable reconciliation and the cash allocation process are stand-out areas of friction. Despite technological advances, these critical processes continue to consume valuable time and resources, hindering cash flow, increasing operational complexity, and creating costly inefficiencies.

This paper explores a pivotal shift in the cash management landscape that promises to turn the dream of frictionless reconciliation into reality. It focuses on the potential of ISO 20022 XML[1], the global language of payments, to address many of the longstanding challenges in reconciliation and cash allocation processes.

We examine the operational and financial friction points currently facing corporate treasury and finance teams, from data quality issues to inefficiencies caused by fragmented payment systems. We then delve into the transformative power of ISO 20022 XML, highlighting how its richer, structured data can lead to faster, more reliable reconciliation and more precise cash allocation. The migration to this new standard is more than just a technological upgrade—it's a paradigm shift, one that will redefine best practices in financial operations across industries and geographies while opening new opportunities for innovation.

A key tenet for the ecosystem to be successful would be the collaboration among corporates, banks, and fintechs in embracing this change. Learn first-hand the key lessons by early adopters – such as Standard Chartered and its clients – alongside practical steps to ensure a smooth and successful transition to ISO 20022 XML.

As digital transformation continues to gain momentum, those who embrace structured data will find themselves at the forefront of new technologies such as artificial intelligence and machine learning, leveraging these advancements to optimise financial workflows and build innovative solutions to stay ahead of the competition.

Standard Chartered and Zanders are excited to invite you to explore this paper, a blueprint for organisations looking to navigate the complexities of this transition. Whether you are a corporate looking to optimise your accounts receivable processes, a bank seeking to differentiate yourself in a competitive market, or a fintech innovator poised to offer cutting-edge solutions, this paper offers invaluable insights and guidance.

Should you wish to discuss this important topic in more detail or explore further how ISO 20022 XML can transform your organisation's processes, we would be delighted to hear from you.

Mahesh Kini
Global Head of Cash Management
Standard Chartered

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Chapter 1:

Challenges in the accounts receivables domain

For corporates, pinpointing which invoice a customer has paid – or even identifying who has actually paid – creates a drag on operational and financial efficiency regardless of whether they are on a decentralised model, a shared service centre, or a global business services framework.

This challenge hampers working capital management and given the increased focus on working capital efficiency, accelerating the cash application process becomes crucial. Improving Days Sales Outstanding (DSO) plays a vital role in achieving this efficiency.

In this first chapter, we examine the importance of the accounts receivable reconciliation process and the key challenges that corporates currently face with cash application, which result in inefficiencies and costs.

The importance of account receivables reconciliation

Accounts receivable reconciliation is a critical and time-sensitive process. It ensures that the amounts recorded in the corporate's financial records accurately reflect the money owed by customers. Timely and precise financial statements are essential for informed decision-making related to investments, growth strategies and cost-cutting measures as part of broader strategic planning. Inaccurate financial reports can also mislead stakeholders about the corporate's performance and financial health, potentially impacting critical decisions and eroding investor confidence. Moreover, inaccuracies in required statutory financial reporting can lead to regulatory consequences, including audits, penalties, or fines. Such repercussions can damage the corporate's reputation and strain relationships with regulatory bodies.

Accurate and prompt recording of all receivables transactions reduces the risks of errors in associated cash flow reporting. This accuracy is vital for managing the day-to-day operations and supports a more precise budget and planning process. A timely reconciliation process also accelerates the identification of any billing issues or customer payments delays. Early detection of these issues allows for faster dispute resolution and helps maintain strong customer relationships, which are essential for sustained business success.

Finally, from an audit perspective, having timely, accurate and reconciled accounts receivable records is indispensable. It demonstrates the corporate's commitment to financial accuracy and transparency, fostering trust among investors, regulators, and all other stakeholders.

Friction in the cash application process

Cash application is a pivotal component in the accounts receivable workflow. It involves matching incoming payments to corresponding invoices, addressing any discrepancies, and accurately posting payments to the appropriate accounts. While the corporate objective should always be achieving 100% straight-through reconciliation (STR), several challenges often lead to time-consuming manual reconciliation. According to a study by The Institute of Financial Operations[2], manual processing error rates for cash application processes can range from 2% to 5%. These errors result in reconciliation challenges and potential revenue losses.

> While XML V09 migration isn't currently mandated, Schneider Electric approaches this strategically from dual perspectives. From a reporting standpoint, we prioritise XML for value-added scenarios, particularly when handling local character sets and cross-border transactions. Our payment systems currently utilise pain.001 v3, which meets our structural requirements. We have adopted a pragmatic approach – implementing XML selectively where it delivers immediate business value rather than pursuing wholesale migration.

Florent Legot
Director, Back Office & Cash Management, Global Finance
Schneider Electric

Key challenges in the cash application process can be grouped into four primary areas:

1 Data quality

Partial payments
Customers may make partial payments due to discounts taken or invoice related disputes, complicating the reconciliation process.

Consolidated payments
A single consolidated payment covering multiple invoices can be difficult to allocate correctly without detailed remittance information.

Data truncation
Information may be lost or truncated during the end-to-end payment processing. This issue is often linked to the payment method, the payment file formats used, or limitations within banking systems.

Separate remittance information
Remittance details sent separately, often as PDF advice via email, require manual matching with payments, adding to the workload.

2 Local payment practices and payment methods

Clearing system variations
Differences in the information supported through the in-country clearing systems affect the reconciliation process.

Limited payment methods
For example, not all countries offer a direct debit capability, impacting the methods available for collections.

Local market practices
Preferred collection methods (for example the Boleto in Brazil), requiring adaptation to local practices.

Cultural preferences
Some countries have a cultural reluctance toward direct debit collections, preferring the customer to maintain control over payment timing and methods.

3 Statement file format

Limited data fields
Traditional statement reporting formats like the Swift MT940 have approximately 20 data fields, limiting the amount of information available for reconciliation.

Partner bank limitations
Some cash management partner banks have limitations regarding supported statement formats and how bank statements are generated.

Legacy practices
Many corporates have historically used the Swift MT940 bank statement for reconciliation purposes. This legacy 'Swift MT' mindset persists, hindering the adoption of more advanced and efficient formats.

4 Technology and operations

Systems limitations
Corporate systems may lack the capability to consume certain statement formats, requiring significant upgrades or replacements.

Limited automation
A lack of auto-matching rules and logic in systems forces reliance on manual processes.

Resource constraints
Budget pressures and limited IT resources can restrict the ability to customise systems to handle the advanced reconciliation processes.

Global inconsistencies
A lack of standardised systems and processes globally adds to complexity, making it challenging to implement uniform reconciliation practices.

In summary

Corporates face persistent challenges in identifying payments and reconciling accounts receivable, no matter their operating model. Issues such as partial payments, data truncation, and separate remittance information create friction, leading to increased manual intervention and inefficiencies. These obstacles hinder working capital management, delay dispute resolution, and strain customer relationships. Accurate and timely accounts receivable reconciliation is of critical importance, with its role in supporting strategic decision-making, regulatory compliance, and stakeholder confidence.

With an understanding of the importance of accounts receivable reconciliation and the frictions in the cash application process, the next chapter explores the transformative potential of ISO 20022 XML in addressing many of these challenges in the accounts receivable domain.

Chapter 2:

The global language of payments

The payments industry has undergone significant evolution over the past two decades, both in variety of payment methods and the ways in which payments can be made. On a global scale, there has been increased focus on payments since G20 leaders endorsed the Roadmap for Enhancing Cross-border Payments[3] in 2020. This roadmap made enhancing cross-border payments - along with remittances - a priority, specifically aiming to make them faster, cheaper, more transparent, and inclusive. The ongoing Swift migration to ISO 20022 XML (commonly referred to as MT-MX), is at the heart of this transformation, with the interbank migration scheduled to be completed by 22 November 2025. This shift is a key element of the Committee on Payments and Market Infrastructures' (CPMI) focus on improving "Data and Market Practices" identified in July 2020[4]. Better quality data is recognised as a catalyst for improving the overall efficiency, speed and compliance of payments.

In this chapter, we will explore why ISO 20022 XML has become the global language of payments, highlighting both the broad industry benefits and practical lessons learnt from corporate adoption.

ISO 20022 XML for cross border payments

ISO 20022 XML is not a new concept within the payments domain. While Europe was the first to adopt ISO 20022 XML to support the SEPA (Single Euro Payments Area) in 2008, over 70 countries have now adopted this standard to enhance their payment systems. Swift estimates that by 2025, 80% of Real-Time Gross Settlement (RTGS) volumes will be ISO 20022-based, with all reserve currencies either live or having declared a live date[5].

The benefits of global adoption

At a technical level, ISO 20022 XML is an open global standard for financial messaging, based on a business dictionary and syntax-independent business model. The main benefits it delivers to the financial industry include:

Richer data
The ISO 20022 XML messages support more extensive and better structured data throughout the end-to-end payment chain. This richness provides greater visibility into the payment details and enhances the potential for automating and accelerating the reconciliation process.

Global industry harmonisation
Historically, different payments market infrastructures have used their own proprietary technical standards, leading to increased complexity and costs for participants. ISO 20022 XML aims to improve interoperability and flexibility across the global payments landscape. With over 70 countries now ISO 20022 XML enabled and a growing alignment around generic implementation guidelines within the cross border and domestic RTGS clearing systems space, the opportunity for greater interoperability is now becoming a reality.

Futureproofing
ISO 20022 XML offers greater flexibility to adapt to change, underpinned by a robust and proven global maintenance process within the ISO TC68[6] finance domain. The original baseline payments message includes over 900 elements (fields) based on a comprehensive review of the global payments landscape. This extensive foundation allows for better responsiveness to changes in the economy, emerging technologies, and innovation compared to domestic and international legacy standards.

Enhanced compliance
The rich, structured data in ISO 20022 XML accelerates and improves compliance checks, such as sanction and embargo screening and anti-money laundering (AML) processes. This efficiency reduces the risk of false positives and delivers benefits across the entire ecosystem.

Greater automation
Enhanced data quality and structure materially improves straight-through processing (STP) rates by reducing the need for manual interventions by banks. This decrease in manual handling reduces payment delays for the beneficiary customer.

Enable greater competition and innovation
With the industry migration from domestic proprietary to global industry standards including greater harmonisation comes the opportunity for more competition and product innovation as the solutions will now have a more global dimension. Banks and fintechs can design new value-added solutions around the payments ecosystem that will unlock the full potential of this digital transformation of cross border payments.

Lessons learnt from the corporate adoption of ISO 20022 XML

Looking back, the original drivers for the corporate adoption of ISO 20022 XML were linked to pressure from corporate groups like RosettaNet and TWIST. Both groups wanted to remove friction in multi-banking environments caused by the complexity, inefficiency and costs associated with bank-proprietary formats. Adopting ISO 20022 XML offered the opportunity to simplify and standardise the multi-banking environment, providing a more portable messaging structure.

Despite efforts by the Common Global Implementation Market Practice (CGI-MP) Group, which published implementation guidelines in 2009, challenges exist. Over the past 15 years, the corporate community have encountered significant divergence in bank implementations of the 2009 standard, commonly referred to as Version 3.

The divergence in payment message implementation covered everything from the non-use of core service level codes for payment method identification to inconsistencies in identifying the originating customer, and variations in payment batching logic. In the reporting space, banks often adopted an unstructured data-first approach, replicating the existing design logic of the free text (tag 86) field in the MT940 statement message. This lack of structure hindered effective automation, making rule-based processing more expensive and challenging.

Additionally, the corporate community faced challenges with the lack of granularity around Bank Transaction Codes (BTCs) which help to automate the general ledger (G/L) posting. For example, TRF (transfer) codes were often used instead of the correct CHG (charges) code, due to limitations in bank back-end systems. In some cases, banks converted the existing MT940 statements into an XML format without leveraging the full potential of structured data, meaning the corporate was simply receiving an XML MT940 statement. These issues prevented corporates from achieving their goal of a simplified, standardised, and optimised multi-bank cash management architecture.

> The voice of the corporate customer is crystal clear in terms of the need for a simplified, standardised cash management model combined with a richer structured data first approach. We recognise that ISO 20022 is now foundational within the corporate treasury transformation agenda, and we understand the opportunities that the industry migration to ISO20022 can deliver to the corporate community. We are committed to supporting our clients through a combination of innovation and collaboration with the fintech community, to achieve operational and financial efficiencies.

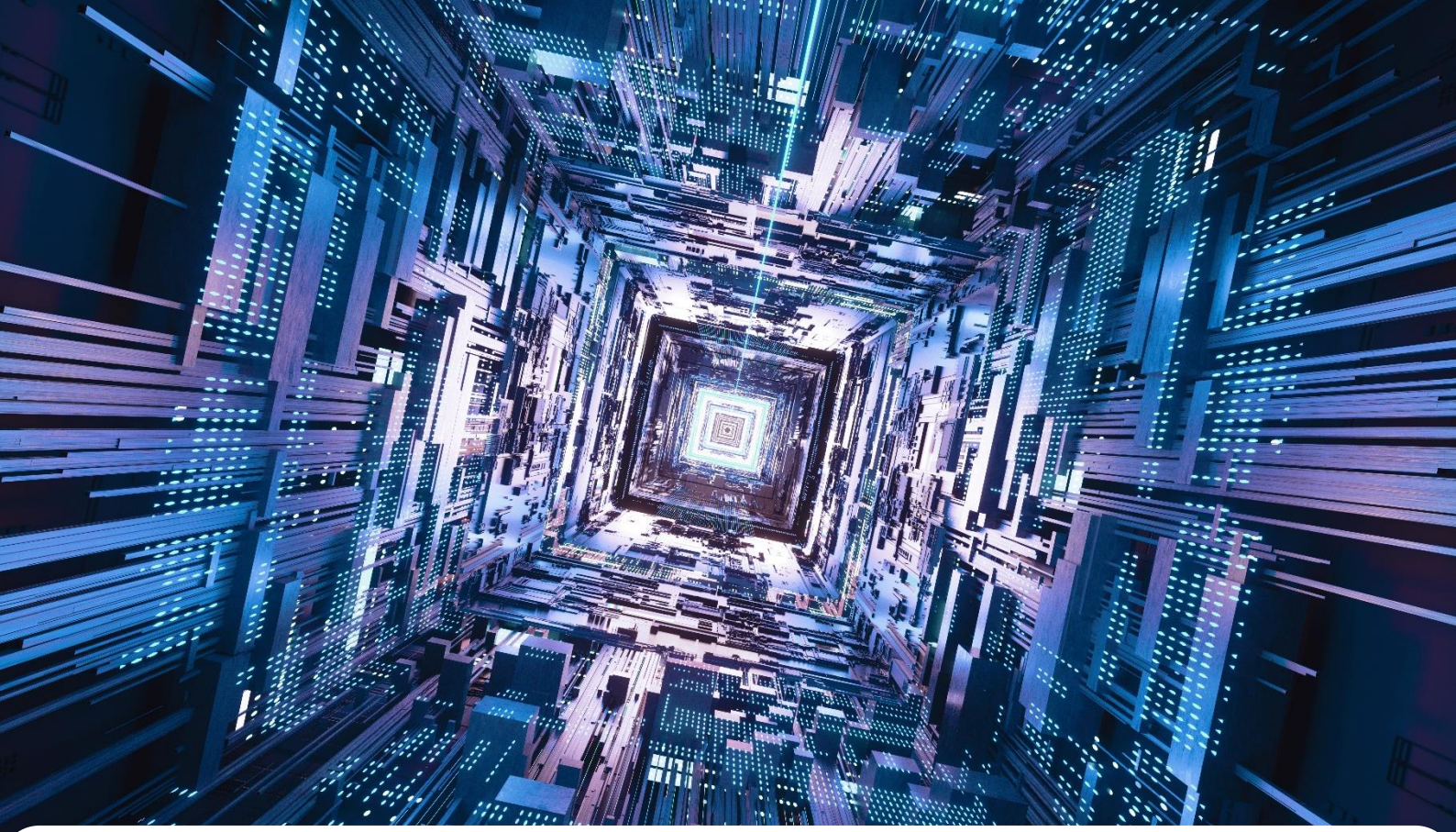
Ankur Kanwar
Global Head of Structured Solutions Development, Cash, and Head of Transaction Banking, ASEAN
Standard Chartered

In summary

The combined efforts of governments, exemplified by the G20's initiatives, alongside the growing pressure from local regulators on market infrastructures to improve the use of structured data, have promoted ISO 20022 XML as the global language of payments to address many of the challenges across the accounts receivable domain highlighted in Chapter 1.

Its rich, structured data format supports end-to-end automation, enhanced compliance processes, and fosters global harmonisation. Despite its promise, the corporate adoption journey has been marked by challenges, including divergent bank implementations and legacy system constraints.

Highlighting lessons learned from early adoption efforts establishes a foundation for understanding how corporates can deploy ISO 20022 XML to accelerate and elevate reconciliation and cash application processes, capitalising on the operational benefits and collaborative industry efforts to be explored in the next chapter.



Chapter 3:

Opportunity to accelerate and elevate performance

In Chapter 1, we highlighted the significant operational and financial drag caused by delays in the reconciliation process, specifically within the cash application process. These delays stem from various issues and ultimately create a sub-optimal cash management environment. The ongoing global adoption of ISO 20022 XML messaging presents a significant opportunity to accelerate and elevate the cash application and broader reconciliation processes. In this chapter, we will explore how XML statement messaging can drive operational and financial efficiencies and how the industry's collaborative efforts, specifically through the Common Global Implementation – Market Practice (CGI-MP[7]) Group, plays a pivotal role in unlocking this opportunity.

How ISO 20022 XML bank statements can help to accelerate and elevate reconciliation performance

At its core, the benefits of ISO 20022 XML financial statement messaging stem from the richness of data it supports. A prime example is the camt.053 end-of-day bank statement, which contains nearly 1,600 elements - allowing each datapoint its own unique XML field. This rich data structure not only includes detailed payment remittance information, but also provides enhanced data that enables higher degrees of STR. Additionally, this data supports improved reporting, analysis, and risk management.

> We have the pleasure of supporting many corporate clients on their digital transformation journey of cash management. ISO 20022 statement reporting provides the foundation to accelerate and elevate existing processes, thereby driving greater operational and financial efficiencies across the enterprise.

Mark van Ommen
Partner
Zanders

1. Enhanced data

As more payment clearing systems adopt ISO 20022 XML, a greater volume of payment related data will pass through the payment chain from the originating customer to the beneficiary. Where a clearing system supports XML, there is potential for a full end-to-end XML flow, significantly reducing the risk of data truncation. This means enhanced data can pass through and ultimately be reported on the bank statement.

The enhanced data available within these statements offers the following features and benefits:

Structured remittance information

Details such as document type (e.g., invoice, credit notes and withholding tax), document numbers, amounts and dates can be structured within the message. This structure allows for automation and acceleration of the cash application process, removing friction caused by manual reconciliations and minimising exceptions through improved end-to-end data quality. The diagram below shows the core structured data elements available in the camt.053 statement message.

Structured	0	*
Referred Document Information	0	*
Referred Document Amount	0	1
Creditor Reference Information	0	1
Invoicer	0	1
Invoicee	0	1
Tax Remittance	0	1
Garnishment Remittance	0	1
Additional Remittance Information	0	3

Richer foreign exchange (FX) data

The messages can include detailed FX-related data, covering source and target currencies, applied FX rates, and associated contract IDs. These values can be mapped into Enterprise Resource Planning (ERP) and/or Treasury Management Systems (TMS) to automatically calculate any realised gains or losses on transactions, eliminating the need for manual reconciliation. The example below is an extract from the CGI-MP guidelines showing the use of the source and target currencies.

Debtor camt.053

```
<Ntry>
 <Amt>              EUR 100
 <NtryDtls>
  <TxDtls>
   <AmtDtls>
    <InstdAmt>
     <Amt>          USD 150
    <CcyXchg>
     <SrcCcy>       EUR
     <TrgtCcy>      USD
     <UnitCcy>      EUR
     <XchgRate>     1.5
    <TxAmt>
     <Amt>          USD 150
```

Inclusion of key references

The latest camt.053 bank statement supports key references, such as the originator-generated end-to-end reference, the Swift GPI reference for payment tracking, and the partner bank reference for timely investigations. These references enhance traceability and facilitate quicker resolution of discrepancies. The example below is an extract from the CGI-MP guidelines providing a comparison of the supported references.

Reference Comparison

camt.053.001.08	E2T	camt.053.001.02
<TxDtls>		<TxDtls>
<Refs>		<Refs>
<MsgId>12345</MsgId>	MsgId	<MsgId>12345</MsgId>
<AcctSvcrRef>234423423</AcctSvcrRef>	AcctSvcrRef	<AcctSvcrRef>234423423</AcctSvcrRef>
<EndToEndId>INVOICE121</EndToEndId>	E2EId	<EndToEndId>INVOICE121</EndToEndId>
<UETR>xxxxxxxx-xxxx-4xxx-yxxx-xxxxxxxxxxxx</UETR>	UETR	</Refs>
<AcctOwnrTxId>123123-1212</AcctOwnrTxId>	AcctOwnrTxId	...
<AcctSvcrTxId>345634-4554</AcctSvcrTxId>	AcctSvcrTxId	
<MktInfrstrctrTxId>ABCD-123</MktInfrstrctrTxId>	MktInfrstrctr	
</Refs>		

Separate reporting of fees and charges

Fees and charges are reported separately, combined with a rich and granular BTC list. This granularity allows for automated posting to the correct internal G/L accounts.

Improved liquidity management

Enhanced intraday updates enable more efficient management of cash positions and forecasts, leading to better overall liquidity management.

Enhanced related party information

This is essential when dealing with organisations that operate an “on-behalf-of” (OBO) model. The additional visibility ensures the ultimate party is shown, allowing for process acceleration through auto-matching.

Intraday bank statements

The camt.052 intraday bank statement offers the ability to accelerate the cash application process by completing the automated reconciliation on a near real-time basis, as opposed to waiting for the end-of-day bank statement, which is typically received the next working day. The enhanced statement data significantly reduces manual effort and reduces credit risk exposure by accelerating payment clearance. This allows corporates to release goods from warehouses sooner, improving customer satisfaction and optimising inventory management.

“Whilst receiving richer more structured data will enable bp to automate and accelerate existing cash management reconciliation processes, richer data that is not truncated through the clearing systems will also support our 3rd parties with a more efficient, potentially frictionless, reconciliation process.”

Ling Kit Foong
Head of Transaction Banking
BP Treasury

2. Enhanced risk management

The full structure and rich data included in ISO 20022 XML messages support more effective and efficient compliance and risk management. Key data elements, such as Legal Entity Identifier[8] (LEI) allow for identification of the parent entity, and unique transaction IDs enable auto-matching with the original hedging contract IDs and credit facilities (e.g., letters of credit or bank guarantees). This rich data structure enhances risk assessment, ensures better compliance, and helps streamline regulatory processes.

CGI-MP – Enabling greater standardisation and simplification

The CGI-MP was formed in October 2009, with Swift hosting the inaugural meeting of an inclusive collaborative group of key stakeholders, including banks, software vendors, corporates, national payment associations, that would redefine the competitive boundaries within the multi-banking cash management environment. From these humble beginnings, the CGI-MP now has 160 members globally and has leveraged its domain expertise to create and publish implementation guidelines covering core cash management messages.

The group has learned valuable lessons since the original implementation guidelines (Version 3, released in 2009), which showed how bank-proprietary implementations often caused friction in the cash application and accounts receivable reconciliation process. To address this, the new guidelines (from the 2019 ISO maintenance release) emphasise a 'change of mindset' required from the banking sector, prescribing a structured data-first approach over the traditional reliance on unstructured data fields. This shift helps to remove the numerous friction points that currently exist in the reconciliation process.

Partner banks that embrace the new CGI-MP implementation guidelines enable corporate clients to achieve not only a simplified and standardised multi-bank cash management environment but also the opportunity to accelerate and elevate operational and financial performance.

> The work of the CGI-MP is about helping all stakeholders – corporates, banks and systems vendors to have a more simplified and standardised implementation of the core functionality to remove friction through proprietary interpretations and enable greater end to end automation.

Peter Noonan
CGI-MP Working Group 3 Convenor and
Group Treasury Solutions Senior Analyst, GF Finance, IT & Legal
Electrolux AB

The broader corporate digital transformation agenda

As corporates continue to undergo digital transformation, the adoption of structured data standards, such as ISO 20022 XML messaging, not only simplifies processes like cash application and accounts receivable reconciliation but also unlocks the full potential of advanced technologies, including artificial intelligence (AI) and machine learning (ML). By standardising data formats and ensuring consistency across systems, ISO 20022 XML provides a robust framework for enhancing data quality, which is critical for driving innovation in corporate treasury functions.

Structured data serves as the backbone for predictive and prescriptive analytics, offering treasurers unprecedented insights into cash flow trends, liquidity management, and risk mitigation. AI and ML thrive on high-quality, organised datasets, using them to identify patterns, predict future outcomes, and recommend actionable strategies. For example, with structured data as its foundation, an AI-driven system can analyse historical transaction data to forecast cash flows with greater precision or optimise liquidity across global operations in real time.

Given this, the shift toward structured data, powered by ISO 20022 XML, represents a major milestone in corporate treasury development. It not only streamlines existing operations but also lays the groundwork for a more data-driven future, where AI and ML technologies drive smarter, faster, and more effective decision-making across the financial value chain. For corporates aiming to thrive in a rapidly evolving digital landscape, structured data is not just a tool — it is a competitive advantage.

In summary

The new ISO 20022 XML camt.053 and camt.052 bank statements, with enhanced structured data options represent a transformative opportunity to accelerate and elevate the reconciliation process and redefine best-in-class reconciliation practices.

Combined with the CGI-MP Group's implementation guidelines and a prescriptive "structured data-first" approach, this will drive further standardisation and simplification and unlock the full potential of ISO 20022 XML for corporate community. Additionally, as corporates undergo further digital transformation, embracing structured data through ISO 20022 XML messaging will not only streamline reconciliation but also power the use of AI and ML, marking a major milestone in corporate treasury development.

This milestone will extend beyond the corporate treasury function, as there is now also a significant opportunity for innovation within the banking sector. The next Chapter examines how banks and fintechs can capitalise on ISO 20022 XML capabilities to offer value-added solutions and differentiate themselves in a competitive market.

Chapter 4:

A catalyst for innovation in the banking community

The payments industry has experienced remarkable evolution over the past two decades, particularly in terms of the number of available payment methods and the ways payments are made. The migration to ISO 20022 XML is possibly the most significant transformation to global cross border payments since Swift first introduced electronic messages back in 1977.

Coupled with the increasing adoption of ISO 20022 XML in domestic payments systems, it is clear why ISO 20022 XML has become the global language of payments. This transformation is set to redefine the competitive and collaborative dynamics within the cash management banking landscape and in this chapter, we explore some key drivers that will spur further innovation.

A shift in the competitive landscape

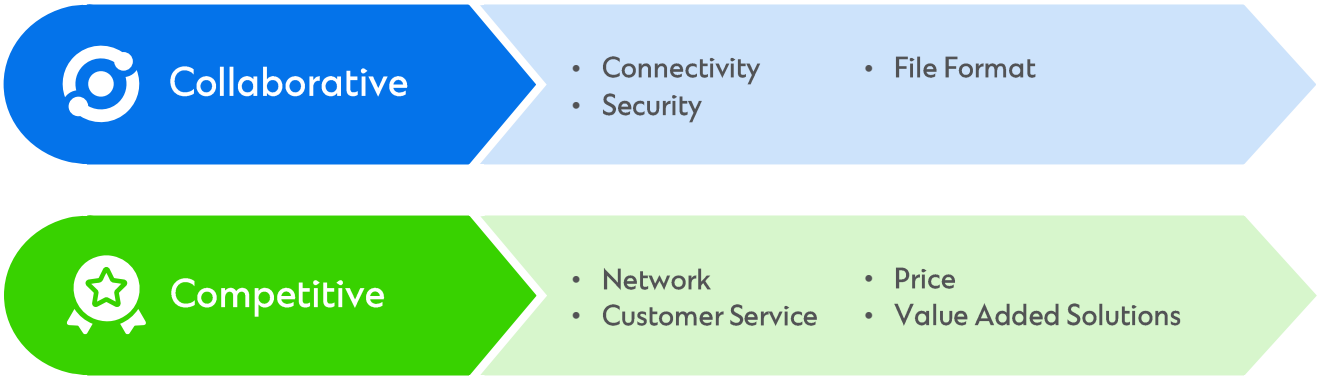
Despite the advancements in payment technologies, friction remains in the corporate-to-bank space, particularly across payment initiation and reconciliation. Much of this friction is linked to bank-proprietary implementations of earlier versions of the ISO 20022 XML messages. In Chapter 2, we discussed the complexities, inefficiencies and costs stemming from this fragmentation, which has led to a sub-optimal multi-banking environment. It is this adverse experience within the corporate community combined with the efforts of the CGI-MP Group that is now acting as a catalyst of change.

The demand for standardisation and simplification in the corporate-to-bank space was given significant voice at the end of August 2024 in a webinar by the Association of Financial Professionals (AFP)[9]. A pulse check on the corporate motivations for adopting the new 2019 ISO maintenance release message, commonly referred to as Version 9 from the payment message version, revealed that 48% percent of the participants are seeking greater standardisation and simplification in the corporate-to-bank space with 25% looking for improved structured remittance information.

48%
of Corporates want Greater Standardisation and Simplification

25%
of Corporates want improved Structured Remittance

This corporate positioning is expected to be amplified through further industry polls, which will confirm a clear shift in the boundaries from present thinking to this new modus operandi:



The above diagram highlights that the core elements around the corporate to bank space – connectivity, security and the file format will be more standard and harmonised in interpretation and implementation, with the banking sector focusing its competitive dimension around network coverage, customer service, price and importantly its delivery of value-added solutions. This focus will help the corporate community re-define what is possible, resetting perceptions around what is best in class.

Banking innovation as the competitive edge

Cash management banks that recognise the migration to ISO 20022 XML as an opportunity to deliver new value-added solutions, rather than viewing it solely as a compliance change, will be better positioned for growth. By building new cash management service propositions on an ISO 20022 XML foundation, banks can help corporates to automate, accelerate and elevate existing processes, driving both operational and financial efficiencies. Key areas where we expect to see innovation through the ISO 20022 XML Version 9 messages, are highlighted below:

Global consistency and delivery

One of the key friction points today is the lack of consistency around payment method codes, address logic, referencing, and central bank information across multiple countries, even when working with the same banking partner. Regional and country-specific variations add to the complexity on the corporate side in terms of the design, development, testing and ongoing maintenance. With ISO 20022 XML becoming the standard for interbank messaging and the CGI-MP publishing guidelines around local country rules, banks now have a clear opportunity to standardise the data requirements and deliver a more consistent global experience.

Structured data-first approach

Banks that can normalise reporting data based on the different in-country back-office systems will be better positioned to support a structured data-first approach. This will be coupled with much richer statement reporting capabilities, including the use of various references that can now be captured in the new camt.053 and camt.052 statements. For instance, the inclusion of the UETR (Swift GPI payment tracking reference) will enable more efficient and timelier inquiry processing when a payment is delayed. Additionally, customer-generated unique end-to-end references will facilitate automated accounts payable (A/P) reconciliation. The inclusion of applied FX rates in correct structured tags will also help to automate the FX loss/gain calculation within ERP systems for timelier and accurate accounting.

Granular consistent bank transaction codes

Another challenge corporates face is the inconsistency in terms of the BTCs used for the same payment or collection methods across multiple countries. This problem is compounded when less granular BTCs are available, which is typically linked to the statement reporting format. A more granular BTC code allows corporates to set efficient automated posting rules to the correct G/L, accelerating the reconciliation process.

Beyond addressing the need for global consistency, richer structured data and the fine-tuning of existing capabilities, ISO 20022 XML should be viewed as an essential foundation technology, enabling banks and corporates to innovate further with solutions that enhance end-to-end efficiency. For example, Global Business Services (GBS) and Shared Service Centres (SSC) can benefit from more efficient On-Behalf-Of (OBO) transactions, as the ultimate party (ultimate debtor/creditor) is supported within the payment message.

Moreover, compliance and control functions will become more streamlined with structured data that covers the originating and beneficiary parties, as well as the transaction's purpose. The ISO 20022 XML foundation will also drive innovation in areas such as on-demand data combined and improved alerting, empowering more informed decision making and redefining best in class operating models.

Fintech innovation and collaboration

The global adoption of ISO 20022 XML messaging also presents an opportunity for the fintech community to contribute, and collaborate on, innovative, market-leading solutions. Fintechs are already delivering agile, expert-driven solutions that appeal to a global market, and the ongoing digital transformation of global payments is only expanding this opportunity.

> At Necto, we welcome the wide adoption of ISO 20022 modern formats. We often have had to explain why some banks provide limited information in their APIs, while others, like Standard Chartered, are able to provide rich information, such as detailed transaction descriptions. The downstream impact of something as simple as this is huge, as many of our clients use that level of detail to perform advanced automations like real-time reconciliation of AP/AR. Ultimately, the structure and details in the modern formats are setting a new standard for what's possible for banks, fintech's, corporate clients and the daily operations being powered.

Nuno Jonet
Head of Product and Technology
Necto

The opportunity to innovate in the receivables reconciliation space is particularly promising. The richer structured information available in the ISO 20022 XML bank statements can be leveraged to enhance automation, speed, and accuracy in reconciliation. AI can be used to review data, detect anomalies, and make recommendations for further review, while ML algorithms automate the process in addition to identifying trends and patterns in the structured data. These learnings will be applied to future reconciliations, and the insights can help improve DSO by speeding up cash application, reducing errors and enhancing cash flow visibility.

Moreover, as mentioned earlier the paper, AI and ML combined with richer structured data such as that provided by ISO 20022 XML, can also be used as the foundation for predictive and prescriptive analytics for corporate treasury functions. While banks may seek to embed these capabilities within their own proprietary internet portals, corporates are often hesitant to share all the required data points with a single banking partner. Fintech solutions may overcome this by aggregating structured data feeds from multiple sources and harnessing technology to deliver advanced reporting capabilities. This can power many use cases, including a significant improvement in cash flow forecasting, providing a clear competitive advantage for corporates.

Fintechs are also benefiting from an increasing number of bank collaborations as ISO 20022 XML messages redefine the competitive landscape. Partnering with a fintech allows banks to quickly access capabilities that might otherwise take longer to develop in-house.

In summary

The migration to ISO 20022 XML is not just a corporate imperative but a broader industry shift poised to redefine the competitive landscape of banking. With the corporate community firmly focused on achieving greater standardisation and simplification in the corporate-to-bank space, bank alignment with the CGI-MP published guidelines will become table stakes in the achievement of a more frictionless cash management environment.

Banks will need to compete through innovation and must view the transition to ISO 200022 XML as a strategic opportunity, not merely as a mandatory compliance change. The transformative impact of structured data on innovation, with the potential to enhance customer experiences, streamline compliance, and drive collaboration between banks and fintechs is not to be underestimated. Banks can now leverage ISO 20022 XML to differentiate themselves by delivering value-added solutions, such AI-powered receivables automation.

Fintechs are also using the adoption of ISO 20022 XML to drive innovations across cashflow forecasting, and to power prescriptive and predictive analytics.

As the competitive boundaries within the banking sector continue to evolve and new value-added solutions leveraging ISO 20022 XML are delivered in receivables management, it is important for corporates to be in a position to take advantage of this change. The next chapter provides a practical blueprint for corporates seeking to navigate the ISO 20022 XML adoption journey to accelerate and elevate their operational and financial performance.

Chapter 5:

Blueprint for adoption

Standardisation and structured data quality are key enablers of an efficient end-to-end process. Global initiatives present a significant opportunity for the corporate community to recalibrate their accounts receivable and bank statement reconciliation processes, unlocking significant benefits across financial operations.

Whilst there is no mandatory requirement for corporates to migrate from their existing XML, Swift, BAI, or EDI-based statement reporting formats, one of the most compelling benefits of adopting ISO 20022 XML lies in the richer, structured data in the latest ISO 20022 XML bank statement messages from the XML Version 9 message set.

A recent Forrester report[10] highlights that enhanced automation of the cash application function can boost efficiency by 69%, reducing manual effort from 16 hours per day to just 5 hours. Additionally, optimised cash application can reduce interest payments by over USD200,000 for a composite organisation over three years. For global corporates who spend between USD50 and USD60 million annually on manual cash application processing, the cost impact is far more significant, as estimated by Genpact[11]. For this reason, the current Swift MT-MX migration should be viewed as an opportunity rather than a challenge.

In this final chapter, we explore the critical considerations for senior decision-makers as they develop treasury and banking technology strategies to meet the opportunities and challenges of ISO 20022 XML migrations sweeping the financial industry.

A 5-point evaluation blueprint

Regardless of your organisation's size, geographic footprint or systems landscape, the following blueprint provides a framework to make informed decisions regarding the optimal way forward. It is important to recognise that there is no "one-size-fits-all" approach – each organisation will need to tailor its strategy based on unique circumstances.

1. Identify current friction points

The first step is to understand the current reconciliation friction points. Where do manual interventions and delays still occur, and what processes create a drag on operational and financial efficiency? For example, are the bank statements received complete, truncated, or formatted in a way that makes automation difficult or costly? Often, information is presented as unstructured data strings that complicate and increase the design and maintenance effort.

It is important to detail all the data related friction points as these will form the basis of the user requirements – the must-have items that will enable the automation, acceleration, and elevation of the current reconciliation processes.

2. Assess the need to upgrade bank statement formats

Today, Swift MT940 is still the most common statement reporting format, primarily due to partner bank capabilities and legacy system capability. However, the shift towards XML bank statements, driven by the digital transformation agenda, has accelerated. While no mandatory migration exists from legacy statement file formats to the new camt.053 end-of-day bank statement, the decision to upgrade should be driven by the additional capabilities this upgrade offers at an enterprise level.

The Swift MT940 format supports only limited data for reconciliation purposes – providing a 16-digit core reference (in tag 61 sub-field 7) and a maximum of 390 additional characters (tag 86) which typically consist of unstructured free text captured at the ERP/TMS system level as notes to payee. This forces corporates to rely on time-consuming manual reconciliation processes. Moreover, the MT940 format offers an extremely limited range of bank transaction codes, making it difficult to identify the nature of the transaction and automate the posting to the GL.

For users of the old camt.053 end-of-day bank statement format, the decision to upgrade is more nuanced and will ultimately be linked to the way the cash management partner banks implement the new camt.053 message. The table below provides a simple high-level comparison of the two versions, outlining key data elements that will significantly improve automation logic:

Functionality	Old camt.053 camt.053.001.02 (2009 Maintenance Release)	New camt.053 camt.053.001.08 (2019 Maintenance Release)
Message size	c.1,600 elements	c.1,600 elements
Structured remittance information	Yes	Yes
End-to-end transaction reference	Yes	Yes
Source/target currency	Yes	Yes
UETR optional element	No	Yes
LEI optional element	No	Yes
Proxy to specify an alternate account ID	No	Yes
Structured remittance information alignment between payments and stand-alone remittance advice messages	No	Yes
Tax element to the interest sequence	No	Yes

However, the benefits of upgrading depends on how cash management partner banks implement the new XML camt.053 end-of-day and camt.052 intraday bank statement messages. If the partner bank adopts the CGI-MP implementation guidelines[12] and follows the structured data-first model, then the corporate will be able to truly harness the benefits of this new XML statement version.

3. Assess partner bank's capabilities and roadmap to adoption plans

A critical component of the adoption strategy is engaging your cash management partner banks to understand their capabilities and roadmap for adopting the new camt.053 and camt.052 messages. As mentioned earlier, adoption of this latest version requires a change in mindset within the banking community, as they must embrace a structured data-first approach, as prescribed by the CGI-MP Group.

Understanding how banks generate the camt.053 statement message is crucial, as banks that have already implemented a data warehousing model to normalise statement data will be best equipped to deliver a structurally enriched camt.053 bank statement. However, some banks have only taken a light-touch approach, simply mapping the MT940 statement data into the camt.053 format – which significantly limits the benefits to corporates.

4. Evaluate current systems and capabilities

When considering the adoption of the new camt.053 and camt.052 bank statements it is important to conduct a full end-to-end review of your current technology stack. Engage with your existing ERP and/or TMS providers and any additional strategic software solution providers, to assess the opportunities, challenges and limitations surrounding adoption. Some software systems still only consume the Swift MT940 bank statement, meaning that any upgrade to ISO 20022 XML may require a broader discussion around updating the systems landscape to support evolving business needs.

For example, the table below examines three common friction points surrounding reconciliation with a high-level overview of the steps typically required to enable these features within the SAP ERP system.

Category	Reconciliation friction point	ISO 20022 XML solution	Typical system configuration required
International payments, with auto-FX rate applied by bank	Manual support required to complete the FX loss/gain calculations.	Use of the dedicated FX rate element within the XML bank statement	• Map FX rate reported in CAMT • Link to specific posting rule, which calls the algorithm to calculate countervalue and FX gain/loss and create correct postings • Apply dedicated BTC code to link to specific posting rule
G/L posting rules	Incorrect posting and manual intervention due to the limited granularity of bank transaction codes.	Use of the granular ISO 20022 XML Bank Transaction Codes that enable more efficient and automated posting to the correct G/L account	• Standard posting rules linked to specific 12-digit BTC code • No requirement anymore to use search strings to recognise the correct posting rule • SAP now has Intelligent Automation in the background, that will propose corrections to the user, where they repeat the same manual re-allocation
Cash application (self-payers)	Delays and manual intervention around the application of receipts.	Use of the structured remittance information block within the XML bank statement including invoice level details	• Dependency on 3rd party payer behaviour, as they will need to use structured remittance • Map the invoice data • Call dedicated posting rule (with the relevant algorithm) to facilitate the postings in posting area 2 (AR level) • Different use cases can occur, as the total amount can be different to the sum of the different invoices reported in the bank statement

The above example is based on an SAP configuration.

5. Decide on a strategic or reactive approach

The global financial industry migration to ISO 20022 XML presents an opportunity for the corporate community to both accelerate and elevate current reconciliation processes. The final question in this blueprint helps determine whether corporate treasury views this change as a strategic imperative or simply as a reactive response to industry trends.

We believe that this is an opportunity to finally address longstanding friction within the reconciliation space, and advocate for the strategic approach. However, given the typical technology adoption curve, we expect many corporates to take a more reactive approach – waiting to see if the predicted benefits materialise and learning from the experience early adopters.

Your opportunity awaits

The adoption of ISO 20022 XML offers a unique opportunity to transform the accounts reconciliation and cash application processes, turning the dream of frictionless reconciliation and cash allocation into reality. For years, corporates have faced inefficiencies in these processes, driven by manual interventions, fragmented data formats, and inconsistent practices across markets. These challenges not only result in operational delays but also limit financial performance by tying up working capital and slowing down cash flow.

ISO 20022 XML stands at the forefront of this transformation, enabling organisations to move from legacy, unstructured data formats to a standardised, structured approach. With enhanced data richness, including detailed remittance information, payment references, and granular foreign exchange data, ISO 20022 XML facilitates faster, more accurate reconciliation and cash allocation. This data-first approach reduces manual errors, accelerates payment matching, and ensures greater STR, allowing businesses to optimise their cash application processes.

However, realising the full potential of ISO 20022 XML requires more than just a technological upgrade. Banks and corporate alike must undergo a mindset shift, moving away from legacy practices and embracing structured data as a strategic enabler. This shift will not only improve reconciliation speeds but also enhance liquidity management, providing businesses with the flexibility to make more informed decisions.

Ultimately, ISO 20022 XML offers more than just a solution to operational and financial inefficiencies. It provides the foundation for a new era of banking and fintech innovation in the accounts reconciliation and cash application space. By embracing this change, corporates can be more agile and better prepared to adapt to future trends and industry challenges, to stay ahead in a rapidly evolving digital economy — making this the perfect moment to redefine best-in-class practices in the industry.

The time to act is now, and those who take a strategic approach in embracing this transformation will lead the way to turning the dream of frictionless reconciliation and cash allocation into reality.

Notes

1. In this paper, the terms “ISO 20022” and “ISO 20022 XML” are used interchangeably. While ISO 20022 refers to the broader messaging standard for financial services, ISO 20022 XML refers to its implementation using XML (Extensible Markup Language). Both terms are referenced in the context of financial message formats under this standard.
2. https://acarp-edu.org/on-demand-training-copy/resource-library/
3. https://www.fsb.org/2020/10/enhancing-cross-border-payments-stage-3-roadmap/
4. https://www.bis.org/cpmi/publ/d193.pdf
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8. https://www.gleif.org/en/about-lei/introducing-the-legal-entity-identifier-lei
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10. https://www.versapay.com/resources/total-economic-impact-cash-application
11. https://www.genpact.com/solutions/the-digital-way-to-face-down-cash-application-challenges
12. https://www.swift.com/standards/market-practice/common-global-implementation

Glossary of terms

API	Application Programming Interface.
Camt.052.001.02	XML Intraday bank statement included in the 2009 ISO maintenance release.
Camt.052.001.08	XML Intraday bank statement included in the 2019 ISO maintenance release.
Camt.053.001.02	XML End of day (prior day) bank statement included in the 2009 ISO maintenance release.
Camt.053.001.08	XML End of day (prior day) bank statement included in the 2019 ISO maintenance release.
CGI-MP Group	Common Global Implementation Market Practice Group.
ISO 20022	A single standardisation approach (methodology, process, repository) used by financial standards initiatives.
MT940	Swift End of day (prior day) bank statement.
MT942	Swift Intraday bank statement.
Pain.001.001.03	XML Payment initiation message included in the 2009 ISO maintenance release.
Pain.001.001.09.	XML Payment initiation message included in the 2019 ISO maintenance release.
Pain.002.001.03	XML File and transaction level status reporting message included in the 2009 ISO maintenance release.
Pain.002.001.10	XML File and transaction level status reporting message included in the 2019 ISO maintenance release.
ROSETTANET	Vertical high-tech industry collaboration around standards.
TWIST	Transaction Workflow Innovation Standards Team. A not-for-profit organisation which develops and rationalises existing XML-based standards that connect the financial and physical supply chain.
XML	Extensible Markup Language (XML) is a markup language that provides rules to define any data.

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