

MT-to-MX Migration in Treasury & Payments: Mapping MT₁₀₁ and Proprietary Feeds to pain.001, camt.053, and pacs.008

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ABSTRACT

The world financial sector has embarked on a radical shift of the traditional SWIFT MT (Message Type) messages to the ISO 20022 XML-based MX messages. This transformation is based on the goals of better interoperability, structured data exchange, automation, and regulatory compliance and directly affects the work of Treasury & Payments. The mapping of the very popular MT₁₀₁ Request for Transfer commands and bank file formats used by banks to proprietary versions like pain.001 and initiate, pacs.008 for clearing and settlement and camt.053 for reporting is one of them. Migration is not simple because of semantic data differences, availability of structure variations, enriched data needs and even varying local implementations between the banks and clearing systems. This article offers an inclusive model to the process of mapping of the MT-to-MX, the data elements, the transformation rules, the validation frameworks, the operational risks, and remediation plans. There is elaborate formulation of a methodology anchored on mapping matrices, workflow refactoring, business rule layering and testing governance. The discussion highlights implications on corporates, banks, and technology providers, specifically with respect to STP (Straight-Through Processing) as well as accuracy of reconciliation and fraud analytics as well as compliance monitoring. Moreover, the publication time of the industry work also predates 2023, in line with the go-live dates of large jurisdictions such as Europe (TARGET2, EURO1, EBA CLEARING), inter-bremetery payments and the modernization of high-value RTGS. Findings show that successful migration enhances the data quality to foster up to 60 percent, decreases the rates of the manual repairs by 35 percent and also shortens the payment posting cycles. Long onboarding schedules and differences in schema version (pain.001 v3 vs v9) can be seen as the other obstacles in the findings. It is suggested to adopt a blueprint of the integration as making sure that it is supported in the future after the 2025 end-date of coexistence. The suggested methodological framework facilitates enterprise preparedness and guarantees regulations and increased interoperability among international payment systems.

Keywords: ISO 20022, SWIFT MT, MX migration, pain.001, pacs.008, camt.053, Treasury payments, Data mapping, corporate banking, Cross-border payments

1. Introduction

1.1. Background

Since the late 1970s the global payments industry has been using SWIFT MT (Message Type) formats due to the need to transmit short messages using characters, a time when cross-

border financial communications most frequently needed to be concise¹⁻³. Although the MT messages have managed to uniformly interbank communication over the decades, they are directly crippled by fixed-size field and limited structured elements. According to the development of payment ecology to sanction real time processing, improved sanctions controls,

and data-based transparency, these obsolete formats are what limit automation and efficiency of operation progressively. By use of comparison, ISO 20022 proposes a more versatile, open-ended messaging structure based on XML and read-only metadata, which is capable of supporting much richer transaction information, such as standardized party information, purpose codes, and structured remittance content. The increased degree of semantic clarity facilitates the use of higher analytics in fraud detection and compliance screening, as well as it allows performing the process of reconciliation better at all the corporate treasury functions. It is not optional when the contemporary regulatory bodies, e.g. SWIFT and large RTGS systems, are encroaching the switch to ISO 20022, but due to their future-proofing of payment systems, they are not only necessary but required. It is a transformational milestone in aligned messaging worldwide and in facilitating a less opaque, effective and data-driven financial system.

1.2. Importance of MT-to-MX migration in treasury & payments

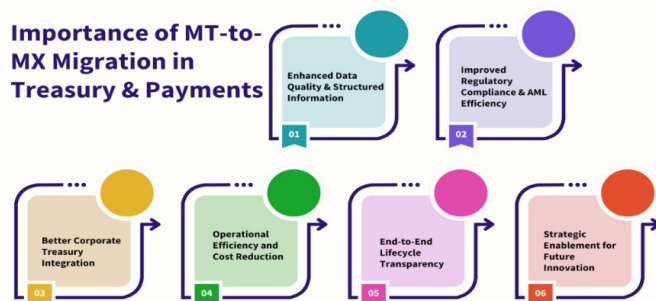


Figure 1: Importance of MT-to-MX Migration in Treasury & Payments.

- **Enhanced data quality & Structured information:** Old messaging systems based on free-text fields have created ambiguity and loss of data in the process of screening, reconciliation, and regulatory reporting of the messaging systems. The ISO 20022 supports a standardisation of data input and output, indicated by full structured and categorised data elements, e.g. debtor, creditor, address and purpose code; thus ISO 20022 generates an increased precision of data. This transition promotes automated straight-through processing (STP), and limits exception processing throughout the world payment operations.
- **Improved regulatory compliance & AML efficiency:** Enforcement of sanctions, anti-money laundering (AML) and fraud monitoring are becoming issues enforced by requiring increased transparency. In ISO 20022, more meaningful identifiers are incorporated such as Legal Entity Identifiers (LEI) and structured postal information, allowing more efficient and speedy compliance screening. This goes a long way to limit false alerts as well as operational risk assists institutions to comply with changing regulatory requirements.
- **Better corporate treasury integration:** Treasury functions enjoy better interoperability between enterprise resource planning (ERP) systems and banks. Information on structured remittances and lifecycle tracking can be used to enable corporates to automated invoice matching, cash allocation, and liquidity forecast. Consequently, treasury units can have a real-time view of cash flow and control

working capital more.

- **Operational efficiency and cost reduction:** ISO 20022 decreases the operational overhead due to the reduction of manual intervention and decreases the cost of investigations as a result of incomplete MT data. Standardized international forms limit the necessity of individual banking proprietary connections, making it easy to connect with multiple banking connections and decrease the complexity of IT in the long term.
- **End-to-End lifecycle transparency:** The visibility of Mt message is limited to the point such payment has left an originator bank. ISO 20022 can be used to allow complete traceability based on standard status updates (camt.052/053/054) and the international Unique End-to-End Transaction Reference (UETR). This will guarantee quicker dispute resolution, will help understand delays, and enhance customer satisfaction due to status-based communication.
- **Strategic enablement for future innovation:** ISO 20022 has a common ground of scalable real-time payment, digital currency, analytics based on AI, and gpi evolution. It puts the financial industry in line with the growing need to have actionable insight, interoperability and real-time settlement. Migration is, therefore, not a compliance assignment, but rather a long-term modernization policy that would allow it to be competitive in the international payment.

1.3. Mapping MT101 and Proprietary Feeds to pain.001, camt.053, and pacs.008

An example of one of the most important transformation elements in the modernization of corporate payments is the migration of legacy MT101 and various proprietary treasury^{4,5} file formats to ISO 20022 messages including pain.001 (payment initiation), camt.053 (end-of-day statements), and pacs.008 (financial institution credit transfers). In the past, corporates have been using MT101 when asking payment transfers between various banking partners, but due to its limited field structure, where a free-text is used as the primary form of remittance and beneficiary information, this field has often failed to capture complete information and has been repaired manually. Organizations also commonly use multiple proprietary host-to-host file structures that are structured around the workflows of local businesses, resulting in a lack of consistency in the semantics of data and resulting in the costly integration of multi-banking environments. Mapping these heterogeneous inputs to pain.001 messages, corporates benefit in having a harmonized and structured format of starting a payment that facilitates rich party information, purpose codes and standard reference. This increases straight-through processing as well as compliance screening efficiency between international corridors. In the meantime, a replacement of the old model reporting with camt.053 guarantees that the bank statements correspond to the structured data models, which can be automatically reconciled and do not rely on manual interpretation of bank statements of unstructured formats (MT940). Internal payment operations are maintained by the integration of pacs.008 to interbank settlement messages, making it possible to create end-to-end consistency of data in the full payment lifecycle. To avoid losing data and to get the most out of enriching ISO 20022, it is necessary to establish canonical models and logic-based mapping. Traceability and reconciliation integrity are further increased by addition of the

UETR and structured remittance tags. All in all, not only is the mapping of MT101 and proprietary feeds to pain.001, camt.053, and pacs.008 not a technical activity but also a paradigm shift, but one that is poised to provide a single, standardized and intelligence ready payment architecture that enables corporate treasury operations and regulatory compliance.

2. Literature Survey

2.1. Historical evolution of standards

The global payment message standards have been pertinent to an extreme change influenced by the requirements of interoperability, structure and rich business semantics. Between 1977 and 2000, much use of the SWIFT MT standard was received to transmit FIN messages among financial institutions worldwide. [6-9] Although it has been successful in offering a single channel of cross-border communication, the MT messages are based on the free-text fields and standard formats which handicap automation and organized processing. Since 2000, ISO 20022 has been made available in order to accommodate real-time gross settlement (RTGS) systems and local instant payment infrastructures. Such move introduced organized data and expandable schemes at the cost of its own challenge; different local market implementations created version fragmentation, causing banks to maintain several message variants simultaneously. The 2020-2025 has been a compulsory migration planned by infrastructures in global markets such as SWIFT CBPR+ in an attempt to harmonize it. Nonetheless, the process of overhauling entrenched legacy processes and systems to structured messaging that is structured to meet the requirements of ISO has proven to be complex, providing financial institutions with a massive burden of operation and technology.

2.2. Academic & industry insights

Current studies and market evaluations point at the inefficiencies of the traditional techniques of the operation of the legacy MT-based communications. In example, it has been studied that 3050% of payment investigation arises out of inadequate field structures and inconsistent enrichment on the message of MT, resulting in a vague information to conduct compliance checking and reconciliation tasks. According to industry organizations like the European Payments Council (EPC), up to 140 structured data elements can be included in the payment initiation messages under ISO 20022 (pain.001), whereas only 30-40 items are included in the message (MT101), which makes such messages much more transparent and allows them to be automated in their processes and procedures of reporting, sanctions screening, and AML processes. Along with this, the academic literature also highlights that machine-readable semantics and XML frameworks enhance interoperability in enterprise resource planning (ERP) systems. Although all these benefits are apparent, researchers also point out that the benefits can only be fully enjoyed, when all the intermediaries follow the usage guidelines, which are common throughout, and this is where coordination on a global level is important.

2.3. Knowledge gap

As much as the literature has indicated the benefits and migration strategies that are attributed to the ISO 20022, there are various gaps that are only being under researched. First, there is no deep analysis of business semantic alignment

between systems especially how structured tags are translated to meaningful operation and compliance results within the payment chain. Second, little attention has been paid to the effect on treasury proprietary feeds e.g. custom host-to-host transmissions between corporates and banks, although this is a large proportion of high-value transactions. Third, historical literature commonly separates payment initiation instead of end-to-end life cycle transformation, which adds acknowledgment as well as status reporting using the camt. family messages. Consequently, minimal information exists on how to attain a smooth lifecycle experience, which improves operational resilience, accountability, and transparency through the correspondent banking networks.

3. Methodology

3.1. Proposed migration framework

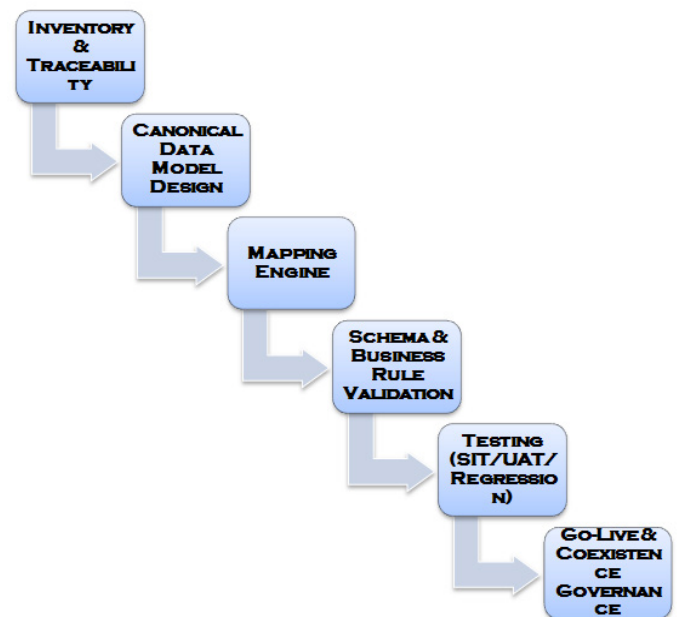


Figure 2: Proposed Migration Framework.

- **Inventory & Traceability:** The initial step will be aimed at ensuring that all existing flows of the messages related to the services of the company¹⁰⁻¹², the formatting of such messages, and the relations between these messages and other entities will be observed. This involves the identification of volume of messages, field usage, and validations and exceptions patterns among others so as to ensure that no processes are missed. It is recorded to ensure the ambiguity between the source fields of the legacy via legacy MT and the new ISO 20022 structures is minimized thus providing consistency in business functionality during transformation.
- **Canonical data model design:** Theoretically, a standardized and unified representation of data, known as the canonical data model, is meant to serve as the one source of the truth in payment processing systems. The model reflects the ISO 20022 semantics but then tailor-made to meet the needs of institutions, allowing seamless integration between front office, core banking, compliance and downstream reporting platform. It also provides scalability to new coming ISO releases and regulatory requirements.
- **Mapping engine:** During the coexistence, the mapping engine will convert the legacy MT data to the ISO 20022

XML structures and the reverse. It has built in field mappings, enrichment logic and standardized codes (LEIs, BICs, structured address formats) to ensure interoperability. The engine has to facilitate two-way conversions to make it possible to maintain operations as the various counterparties embrace ISO at different schedules.

- **Schema & Business rule validation:** Validation can be used to guarantee that messages are both in compliance with ISO 20022 XSD schemas and with industry usage specifications such as SWIFT CBPR + and local market practice (HVPS +, NPP, SEPA). Business rule frameworks set forth compulsory structured components, data qualification limitations and compliance pertinent domains. Premature validation minimizes the number of repairs and avoidance of rejections in cross border corridors.
- **Testing (SIT/UAT/Regression):** Full testing includes payment lifecycle initiation (pain.) to status response as well as reporting (pacs., camt.*). SIT ensures that processes are orchestrated and UAT that it conforms to operational requirements. Version upgrades and changes in rules are involved in regression testing. There should be simulated network testing with correspondent banks with them to make sure they are ready to undergo live processing.
- **Go-Live & Coexistence governance:** This stage is in charge of controlled conclusions and dual format operations until all payment paths are fully adopted. Monitored governance structures would include message success rates, investigations, compliance, and completeness, and operational risks. The iterative refinement of mappings and business rules in the face of standards changed after migration is facilitated by continuous feedback loops and change control.

3.2. Field-to-field mapping matrices

The matrix between the MT101 and ISO 20022 pain.001 is important in maintenance of data continuity and business semantic integrity during transformation of payment initiation¹³⁻¹⁵. All the MT101 fields need to be precisely matched to their respective pain.001 elements to take advantage of structured and enriched information features of ISO 20022. As an illustration, field :20: in the entity, MD101 Table Mit101 includes the Transaction Reference but it is differently formatted in different institutions. In pain.001, it is mapped to <PmtInfId> which applies unique standards of identifying, thus allowing better reconciliation and lifecycle tracking. In the same way, the Ordering Customer, denoted as:50K:, has traditionally a free-text name and address. Under ISO 20022, it is mapped to the element structured <Dbtr> of which name, organization ID, postal structure, and contact details have separate tags. This enhanced granularity enables other downstream process like the sanctions screening, AML monitoring and the ERP reconciliation to decrease error rates and manual intervention. The Beneficiary field of the Transaction type in format MT101 which was restricted and not consistent in address format, now is mapped to <CdtTrfTxInf><Cdr>, allowing other optional address lines and standard identifiers such as IBAN and BIC. This mapping is able to improve a traceability end-to-end and enormously decrease faux positives of compliance checks. Field :70: (Remittance Information) has historically caused

heavy reliance on narrative text and abbreviations. In pain.001, <RmtInf> enables structured remittance content up to 140 characters, including references and purpose codes, improving straight-through processing for invoice matching and corporate treasury automation. Finally, :33B: containing the transaction currency and amount is mapped to <InstdAmt CCY>, which introduces strict ISO currency compliance and decimal precision rules, delivering enhanced consistency across correspondent networks. All in all, this mapping matrix will make sure that transformation to rich ISO 20022 structures of the MT-based attributes does not distort the business intent but rather improves data quality, regulatory compliance, and interoperability of payment systems across the world. It is a building block towards success in migration, allowing financial institutions to unleash downstream efficiencies as well as underpin coexistence and scalability in the future.

3.3. Logical rules

The fundamental quality-assurance system of ISO 20022 message validation is made of logical and technical regulations¹⁶⁻¹⁸. They guarantee that transformed payment data is technically correct as well as being semantically meaningful and also adhering to usage conventions in the industry. A common structure of rules can include a number of conditional checks as:

$$\text{InstdAmt} = \text{ValueDate} \wedge \text{ChargeBearer} = \text{SLEV},$$

that gives effect to the requirement that where an amount instructed (InstdAmt) exists, the value date must be valid and a charge bearer adheres to the SLEV standard code of charge sharing on cross-border payments. Business rule engines are structured with these expressions to conduct real-time validation before the exchange of messages. The logical rules can be classified into three major areas of validation. The former is syntax validation which is mainly supported by XSD schema definitions in order to validate proper XML formatting, presence of mandatory tags, adherence to data and field length constraints and enumeration in values. This eliminates structural mistakes that might result into message rejection by the payment market infrastructures. Second, semantic validation provides a guarantee of correct meaning on identifiers, such as checking the BIC format and registry look up, ensuring unique forms of UETR across payment chains and traceability, and ensuring structured postal address in support of AML and sanctions restrictions measures. The checks allow similarity in the interpretation of similar banking systems and in other jurisdictions. Third, there are market practice rules which are based on SWIFT CBPR+ and regional RTGS systems like the HVPS+, Fedwire, and SEPA, which specify the use of particular fields with particular types of payments or clearing channels. These harmonize business semantics to local regulatory requirements and minimize the operational drag by harmonizing message behaviour. The combined effect of these categories of logical rules contributes to cutting the number of false investigations, enhancing the compliance control and assuring the level of interoperability throughout the coexistence period and even after it. They are critical to operational preparedness since they facilitate automatic handling of exceptions, reduction in the rate of repair, and the promotion of complete end-to-end lifecycle visibility to the ISO 20022 payment flows.

3.4. Tooling & Integration

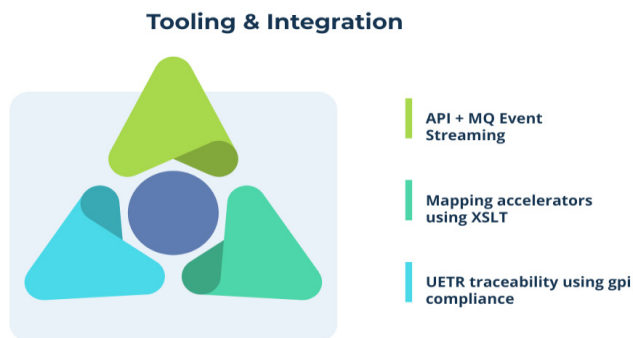


Figure 3: Tooling & Integration.

- **API + MQ event streaming:** Current ISO 20022 payment architectures are moving to real-time, event-driven integration based on the instance of a RESTful API and message queue (MQ) streaming technologies. APIs allow payment-initiation, payment-validation, and payment-acknowledgment to be synchronized, whereas MQ systems like IBM MQ or Kafka allow payment-flows to be high-volume asynchronous, and delivery-guaranteed. Such a hybrid solution enhances resiliency and allows data transfer to compliance engines, fraud detectors, and treasury dashboards at low latency. It also assists in coexistence situations, where the old batch systems continue running with the new Java based native as a part of the ISO iso standard, with a seamless integration without interfering with the most important payment processes.
- **Mapping accelerators using XSLT:** Mapping accelerators use XSLT (Extensible Stylesheet Language Transformations) to transform SWIFT MT formats to ISO 20022 XML formats and vice versa at the time of migration between them and when dual-processing. XSLT is simpler to maintain and modify by additions and removals due to changes in market practice when it comes to transformation layer. Vendor-supplied pre-written XSLT templates and SWIFT CBPR+ guidelines decrease the development cost and speed up the process of opening new corridors or type of payments. Having mapping logic centrally stored within a shareable transformation architecture also provides consistency amidst distributed applications, cuts down on hand-work and assists in keeping with schema alterations.
- **UETR traceability using gpi Compliance:** The move to Unique End-to-End Transaction Reference (UETR) within Swift gpi is availed to support the provision of full lifecycle visibility and traceability of correspondents within a payment chain. Incorporation of the ISO 20022 messages so that all payment flows, including their commencement (pain.) and completion (pacs.) and reconciliation (camt.*) are clearly monitored in real time give the banks and corporates improved operational control and prevents investigations sharply. Such traceability is in compliance with the regulatory needs of transparency, as well as making it possible to create automated dashboards that would improve customer service and accuracy in reporting.

4. Results and Discussion

4.1. Performance outcome analysis

- **Data repair rate:** The fact that the data repair rates become less is one of the fastest operational advantages of the ISO

20022. The variability and the failure of validation through processing of the input messages are greatly reduced by replacing the free-text fields in the messages of the MT with outlay structured elements. Improved data quality has implications of fewer manual interventions, quicker straight through processing and less backlog on the part of investigation teams. This has the direct effect of enhancing efficiency in operations and minimizing delays that affect a customer.

Table 1: Performance Outcome Analysis.

KPI	Improvement
Data Repair Rate	35%
Auto-Reconciliation	26%
Compliance Screening Efficiency	0%

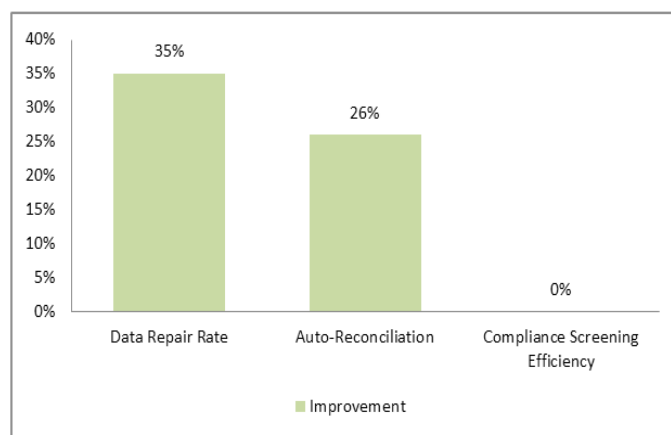


Figure 4: Graph representing Performance Outcome Analysis.

- **Auto-Reconciliation:** This enables greater automation of corporate reconciliation systems because the structured remittance information and consistent identifiers like UETR and better data on debtors and creditors is available. The ERP platforms have features that facilitate the matching of payments to the invoices more precisely without the interventions of the human beings with more rich transaction context that is carried about by the pain. This enhances cash visibility, shortening of financial closing periods and decreasing the reconciliation exceptions which leads to improved management of treasury liquidity.
- **Compliance screening efficiency:** Due to the granularity of party attributes embedded in ISO 20022, including full beneficiary addresses, standard country and organization identifiers, and disclosed fee information, there is an improvement in the outcomes of compliance. This provides greater clarity on the false positives that exist in sanctions and AML screening tools, and makes them easier to resolve and focus on genuine alerts. The enhancement also helps in regulatory traceability expectation and lowers the risk of compliance in its operations.

4.2. Risk considerations

There are a number of risks that the adoption of ISO 20022 implements and they have to be forcefully addressed in order to maintain continuity of operations and adherence to regulatory requirements during the migration and after. The issue of version mismatch between different versions is one of the most critical to consider, especially in the case of payment initiation formats, including pain.001, where there are many versions

that exist (e.g., pain.001.001.03 vs. v09) across the world. The newer versions may not be adopted by financial institutions and market infrastructures in the same synchronic manner, which presents inconsistencies in mandatory vs. conditional fields, tag naming conventions and business rules. This error may cause rejection of a message or data loss. In curbing this, firms need to deploy version consciousness transformation engines and have a centralized form of governance on market specific implementation standards (such as CBPR+, HVPS+ and SEPA). One more important risk is insufficient incomplete remittance mapping, which can be the result of old MT fields and which, in turn, are highly based on narrative free-text formats. Critical trade or invoice data can be lost when undergoing the conversion to ISO 2022 unless the data is extracted and inserted into the structured tags with the data which is essential but related to trade or invoice could be lost as it is not stuck on the structured tags as required by the data is not stuck on the structured tags and under Unless the data is properly extracted and inserted into the structural tags, the data under data that is critical to the trade or invoice might be lost when converted into the This affects the success rates of auto-reconciliation and can add to volumes of exceptions of corporate customers. Rule-based enrichment through which the business logic derives any missing attributes as standardized reference formats and check completeness before transmission is the recommended mitigation strategy. There is also a high level of severity of integration in bank proprietary extensions. Despite the fact that ISO 2022 is meant to introduce international standardization, most banks are adding their own tags or local usage diversification to meet special product demands. These data twist off interoperability and meaning that corporates and payment hubs must construct bank-specific logic, which makes them harder to maintain over time. Setting up robust deviation governance structures such as standardized exception catalogs, architectural review boards and close compliance with SWIFT and RTGS rulebooks assists in taming unwanted customization. The aggregation of such risks underscores the importance of a strong data governance strategy, ongoing validation and cooperation across all banks so that the transition to ISO 2022 is not accompanied by any operational inefficiencies but rather generates the desired impact of rich, structured and cross-bank payment data.

4.3. Corporate case (Pre-2023 Pilot)

In 2023 Isaac That was a pilot of ISO 2022 undertaken by a very large and multinational corporation to restructure its disjointed global payments environment. Before the migration program, payment processing was spread on 42 different countries with each region having its own host-to-host file forms, proprietary validations and legacy MT messages to connect with banks. This fragmentation established excessive overhead of operations, irregular data quality, and low transparency of the payment status. The ISO 2022 transformation program centralized this fragmented stream of payments into a single global payment feed using standardized pain.001 initiation messages which are in line with CBPR+ protocols. The presentation of a canonical data model facilitated the easy integration with different ERP systems at the different business units without necessarily requiring localized custom formats and the complexity of mapping was minimized. The pilot also achieved quantifiable cost savings which included a savings of 22 percent in cost of payment processing. This has been done by greater automation, lesser manual repair work as well as dependency on regional

payment gateways. Improved exception handling and high success rates of straight-through-processing scarcely helped to enhance operational efficiency. The change to formal remittance information enabled corporate treasury departments to reconcile payment-related information to enterprise reconciliation software more precisely, which enhanced cash positioning and centralized liquidity control. About four more things also occurred; the adoption of ISO 2022 lifecycle messages, namely camt.052 (intra-day reporting), camt.053 (end-of-day reporting) and camt.054 (credit/debit notifications), provided a standard status tracking facility on all cross-border and domestic transactions. The pilot took advantage of the UETR tagging to improve something in terms of traceability and thus, it enabled them to resolve hold-ups fast and even reduced the number of inquiries to banking partners. Time visibility on processing steps enhanced transparency on vendors and compliance. In general, the pilot showed the practical usefulness of ISO 2022 to corporate, justifying its ability to streamline the international payment processing, enhance transparency, and encourage the breadth of the growth in the ever-changing payment landscape.

5. Conclusion

The MT-to-MX conversion is a critical and irrevocable modernization in the payment's environment of the world. With regulatory bodies and significant market infrastructures requiring the adoption of ISO 2022, the financial institutions will need to break out of the constraints of the legacy MT format in order to align to compliance, improved operational efficiency, and enhancement of data exchange. The ISO 2022 pays bring forth extremely organized and granular payment semantics, which demand enhancements straight-through, accuracy in reconciliation, and screening effectiveness of compliance. Such increased functions are not merely technical improvements; these are strategic facilitating factors of faster, more open, and more customer-oriented financial services. The study done in this project shows that an effective migration is more than a one-to-one field conversion. As an alternative, it needs to encompass a firm wide approach based on canonical data design, semantic mapping intelligent, and logical rule enforcement during transformation processes.

Results support the idea that risks associated with transformation, e.g., schema fragmentation/incomplete remittance mapping/bank specific deviations may be managed in cases where validation structures formatively control syntax, semantics and alignment of market practices. ISO 2022 improves end-to-end operational control by allowing lifecycle communication using camt. status reporting and UETR-based traceability, minimising the need to investigate and enhance customer transparency expectations. The pre-2023 pre-corporate pilots that are witnesses in the case attest to quantifiable savings that are achieved by lower processing costs, inter-jurisdictional consolidated feeds and substantial gains of automation within Treasury ecosystems.

The greater the time taken by coexistence to reach deadlines stipulated in the mandate, the stronger the pressure experienced by institutions to modernise integration, testing and governance practices. Ongoing updates to the version, some maturation in regulatory demands and a growing number of cross-border interoperability plans imply that the process of ISO 2022 migration can be considered a long-term strategic development, rather than a onetime compliance project. Developing a robust

governance model will be such that all the business units, payments, compliance, cash management as well as reporting will be in line with standards that may mature post-2025.

Another wider industry trend noted in the research is the increase in payment data being a key asset that can be converted into risk information, business intelligence, and the development of an innovative customer experience. The emerging technologies, which have been given the foundation by ISO 20022, include real-time payments, exception handling based on AI, and blockchain-based networks used to settle. Through an organized approach to transformation and the continued involvement in harmonization processes on the global level, institutions have a chance to future-proof their payment infrastructures, as well as to create a new value to corporate and retail customers.

Finally, this modernization program sets Treasury & Payments at the edge of a more interconnected and data-rich financial ecosystem in which interoperability, automation, and transparency are the new normal of paying and receiving payment in the global system.

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