VIEW POINT

GOING STRAIGHT FOR SMOOTH CROSS-BORDER PAYMENTS

WITH DIGITAL TO SIMPLIFY EXCEPTION HANDLING

Abstract

Today, the competitive landscape for cross-border payments is ever-growing, with customers inundated with numerous options. This point-of-view examines the challenges of payment exceptions and espouses how legacy financial institutions can use Digital to enable more straight-through processing, smoother transactions for customers, and thereby stay ahead of the competition.

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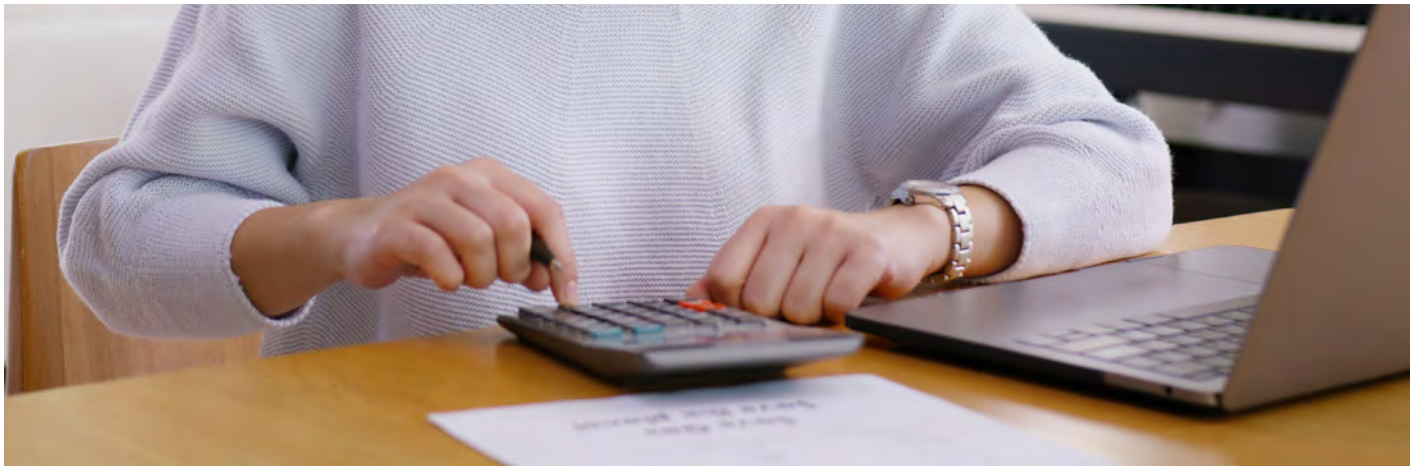


Cross-border payments and their challenges

In any cross-border payment, there are multiple participants (financial institutions, parties) who need to get involved to close a transaction. These include the debtor, creditor, debtor agent, creditor agent, forwarding agents, initiating party, clearing agent, and intermediary agent(s), among others. The role of each participant depends on the type, channel, and mode of the payment. However, for better understanding, the entire process can be simplified as depicted in the graphic below.

While prima-facie the flow appears simple, yet in actuality the overall process is quite complex. This is because of multiple time zones leading to delays in clearing and settlements, legacy systems causing challenges in real time processing, and participants using multiple data standards and formats. Adding to this complexity are local regulations and checks for sanctions or to prevent money laundering, sometimes leading to manual interventions.

Furthermore, multiple frictions can occur at any stage or step, from the debtor agent to the intermediary bank, or at the creditor agent's end, leading to the entire transaction being thrown out of the straight-through processing (STP) queue and into the exceptions queue.

Some key data on SWIFT transactions provides a deeper insight into the issues leading to payment exceptions[2]:

- 34% of exceptions occur because of formatting errors such as incorrect account formats or incorrect routing codes
- 21% of exceptions happen due to account issues like closed or blocked accounts, or account name mismatches
- 17% of exceptions are due to invalid or missing data such as missing regulatory information[1]

It is practically almost impossible to drive a 100% of all global transactions only through the STP queue. However, financial institutions around the world are currently working on multiple initiatives such as technology modernization, automation, standardization, and implementation of ISO 20022 standards. These will go a long way towards eliminating and/or simplifying payment processes to enable as much as 96-98% of transactions to be processed straight-through without any need for handling exceptions.

[1]https://www.paymentsnz.co.nz/documents/322/swift-ebook-frictionlesspayments.pdf

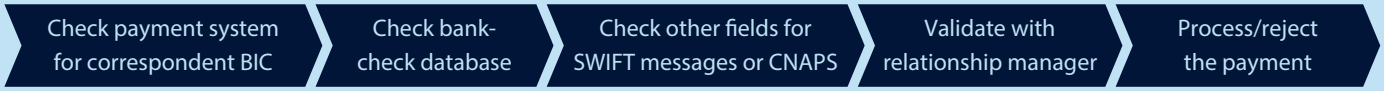
A deep dive into exceptions: repairs and investigations

Payment exceptions are those activities that involve teams manually validating and enriching missing or incorrect transaction details to enable further processing. In exception processing, the turnaround time is key as the end-customer experience gets impacted with every passing hour that the transaction is not successful, or when queries are not resolved. While "exceptions" is an umbrella term, there are primarily two different queues for its activities – payment repairs and payment investigations.

Understanding payment repairs

A transaction goes to a repair queue at the initiation stage as soon as the payment system is not able to recognize key data elements or is unable to proceed due to missing information. These are highlighted by error messages such as "No Agent bank found" or "Incorrect Bank Identifier," and are usually identified by error codes, for example 1003, 3221/3245/3043, and the like. At a high level, the manual repairs process for the error code 1003: "No Agent Bank found" may be depicted as in the graphic below.

Repair Code – 1003, No Agent Bank found

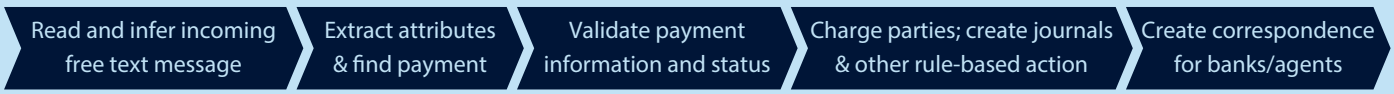


Payment systems over the years have made significant upgrades over the years to have inbuilt message repair facilities. However, the on-ground reality of success is still far from ideal, as the payment messages are either formatted incorrectly or do not automate as straight through. This makes the downstream process manual, and the payment teams are required to key in the correct information and resubmit the transaction for further processing.

Understanding payment investigations

Payment investigations, on the other hand, can happen at any time of transaction journey and are initiated by either the beneficiary/intermediary bank or the customer. The reasons could range from "Beneficiary claims non-receipt" to "Cancellation Request", which are identified through MT/MX messages MT199, 195, and the like. A common process flow for a payment nvestigation process may be depicted as below.

Payment Investigation – Common flow



Due to the underlying nature of investigation requests, financial institutions find it difficult to eliminate the queues and instead bring in automation for operations efficiency and process effectiveness.

A snapshot of queues for payment repairs and investigations

Both the queues – for repairs and for investigations – require different set of rules, validations, and enrichments for resolution. The process gets even more complex with the ageing of the queue, which makes it critical to reduce the manual effort involved through eliminating and optimizing the processes.

Top investigation types

- Return of funds
- Unable to apply
- Cancellation
- Unable to effect payment
- Beneficiary claims non-receipt

Top repairs types

- No agent bank found
- Cannot find account
- Incorrect bank identifier
- Interface error
- Onward bank cannot be reached

Cross-border payments and their challenges

Digital transformation use-cases

The complex challenges of payment repairs and investigations can be simplified to a great extent by deploying digital technologies such as smart API's and cognitive automation. Let's look at some use cases below.

Use case 1: Smart APIs and cognitive automation for payment repairs

APIs can extract, enrich, validate, and update data to and from underlying systems, thereby eliminating the repair queues. Thus, API's can be, for example, used for fetching a code from country-specific reference data to identify a local clearing code, or they can be used to integrate bank check databases with payment engines to accommodate real time changes. Additionally, artificial intelligence (AI), machine learning (ML), and natural language processing (NLP) can help with automated action reading through freeform texts and knowledge-driven responses built over time.

An example of such a use case is where the repair queue has a "No Agent Bank found" error message. Several current steps needed to accomplish the repair could be eliminated with API calls along with automation, to update the incomplete account number, name mismatch, or incorrect account number, as needed.

Use case 2: Auto case creation in payment investigations

Financial Institutions handle a lot of emails, most of them being from branches or relationship managers regarding customer queries on their transactions, with the rest being for the passing on of customer- or payment-related information. These numerous queries are first manually read and then manually converted into cases in the workflow, with the volumes fluctuating up by 40-60% and more in some cases.

Through NLP, such messages related to payment information such as date, currency, amount, channel, or issue can be automatically read and created into a case in the workflow system, thus saving all the time spent on this preliminary activity by agents in the back office

Use case 3: cognitive automation for payment investigations

Investigations have a longer turnaround time than repairs since intermediary banks must correspond with all the concerned parties – beneficiary, remitting, other intermediaries – to resolve the query and process the payment. Most of the messages received on SWIFT, CHAPS, or Fedwire are in freeform text. These are manually read and analyzed by agents after which correspondence is initiated with the parties concerned. Other activities like creating charges and creating journal entries for fund transfers make the process even more complex.

However, this is an area where cognitive automation – enabled with NLP, AI/ML, and RPA – can help automate a large portion of such repetitive manual activities. The activities to which cognitive automation can be applied include reading and inferring the meaning of incoming free-text messages, extracting attributes and assigning transaction to the case, validating duplicate requests, validating payment information, as well as creating correspondence and other rule-based actions.

Use case 4: Reporting and advanced analytics for payment repairs and investigations

The power of data mining in an exception processing area cannot be stressed enough. Here, a decision tree algorithm can lead to powerful outcomes. With input attributes like payment date, year, type, channel, value, location, status etc., teams can spot the root cause of certain error types. They can also dig deep into the data to identify operations bandwidth bottlenecks, improve guidelines, and create procedural documents for volume reduction.

An intuitive dashboard providing insights on volumes, the pipeline, agent productivity, and the like, at the start and end of the day can further enhance efficiency and bring effectiveness into the operations floor.

The smooth, straight road ahead

In 2019, before the pandemic engulfed the world, the value of cross border transactions crossed $130 trillion[2], indicating the key role cross-border trade plays in the global economy. Today, customers around the world are inundated with options when it comes to money movement. This is thanks to the ever-growing competitive landscape of smaller players who are faster, more efficient, and have simple offerings with less documentation and complete visibility into transactions.

However, legacy financial institutions too are adopting ISO 20022 standards, technology modernization, a data-driven approach, and digital technologies, and thus witnessing a gradual transformation in their processing of payment exceptions.

With their varying levels of digital maturity, it is now incumbent upon them to either take an exponential leap or small incremental steps to achieve the ideal of near-universal straight through processing. Either way, the competition will make this race tough, as the newer players continue to innovate hard towards smoother and near-instant cross-border payments.

[2]https://www.mckinsey.com/~/media/mckinsey/industries/financial%20services/our%20insights/accelerating%20winds%20of%20change%20in%20global%20payments/2020-mckinsey-global-payments-report-vf.pdf

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