HOW FINANCIAL SERVICES FIRMS CAN EFFECTIVELY MANAGE DIGITAL FRAUD DISPUTES AND CHARGEBACKS

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Abstract

A key concern raised by customers who use cards for payments is the lack of prompt chargeback dispute resolution by the concerned financial institutions (FIs). FIs' current chargeback management process and platform have several deficiencies — such as the lack of complete visibility of the filed chargeback disputes, poor user experience, inefficient and ineffective workflow, and more. Also, FIs have been grappling with surfeit of friendly frauds related to chargebacks. As per estimates, in 2021, around 80% of chargebacks are related to friendly frauds.[1]

To counter these shortcomings, FIs should enable effective management of digital fraud disputes and chargebacks through a platform. This paper shares insights on the key challenges in FIs' existing chargeback management process and offers recommendations on how FIs can implement a digital fraud and chargeback management platform.

Context

In today's fast paced world, cash payments have declined considerably. Its erstwhile predominant position has now been taken over by card payments — executed through point of sale (POS) machines or via online payments.

Unfortunately, card payments face several challenges around chargebacks. A chargeback — also known as "reversal" — is the return of credit card funds utilized for making a purchase back to the buyer (i.e., the card owner). A chargeback happens if, for example, a card owner disputes the purchase made utilizing their credit card — claiming that the purchase was fraudulent or made without their permission or knowledge. When a card owner disputes a purchase, the concerned credit card issuer reverses the charge, and reimburses the card owner in full and debits the associated business' account of the seller (i.e., the merchant). Naturally then, retailers and other merchants dislike chargebacks as it reduces their income, and it may also result in penalties if too many chargebacks occur.

Chargeback typically occurs when the concerned card owner contacts the card issuer to request for money back for the goods or services purchased using their card. This request for chargeback is not made directly to the merchant to whom the payment is made by the card owner — but only to the card issuer.

Transaction Units (Millions)
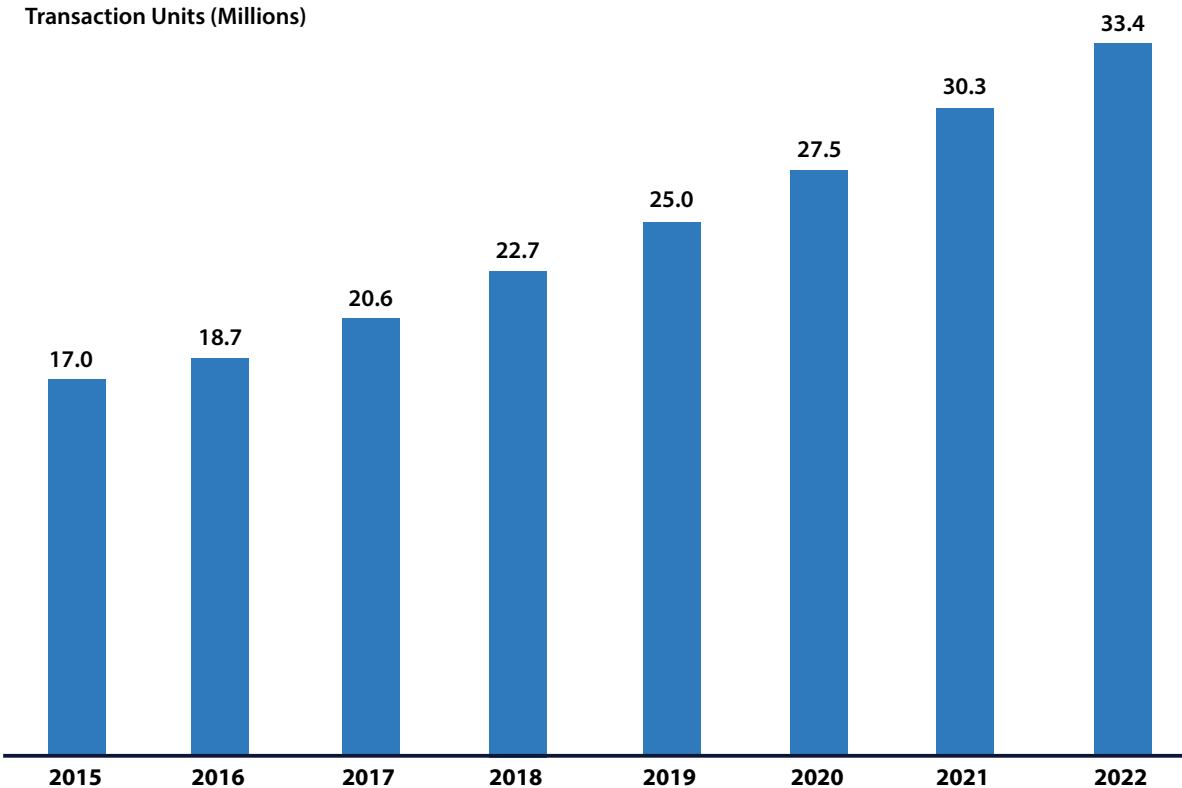
Source: Mercator Advisory Group; paymentsjournal.com

Figure 1: Rise in Card Disputes in U.S. Over The Years [2]

Chargeback has become one of the biggest challenges for card issuers due to the sheer volume of transactions that are getting disputed. In the U.S., it is estimated that in 2022 there will be around 33 million disputed transactions.[2] This number is expected to grow substantially in future, as the usage of card payments continue to rise. Figure 1 depicts the rise in chargeback volumes over the years.

The Need for Chargeback

There are various reasons for customers to request a chargeback. These can be broadly grouped under the following categories.

| Merchant error	• Issues due to technical or human error are part of this category. For example, the customer might get billed twice due to technical glitch or the customer is under the impression that they have cancelled a particular subscription, but they are still getting billed for it.
Product quality	• Issues raised due to poor quality of the product come under this category. This could be because the promised or displayed product is not in line with product that was delivered. Or the shipping or intermediary company has not handled and shipped the product properly thus leading to damage of the product.
Fraud	• This category includes chargeback request when the fraud has occurred. This could be related to identity theft where an unauthorized person has made transactions on behalf of the card owner without their knowledge. It could also be a result of 'friendly fraud' — a type of fraud in which the customer raises the chargeback request just out of convenience.

Current Chargeback Workflow
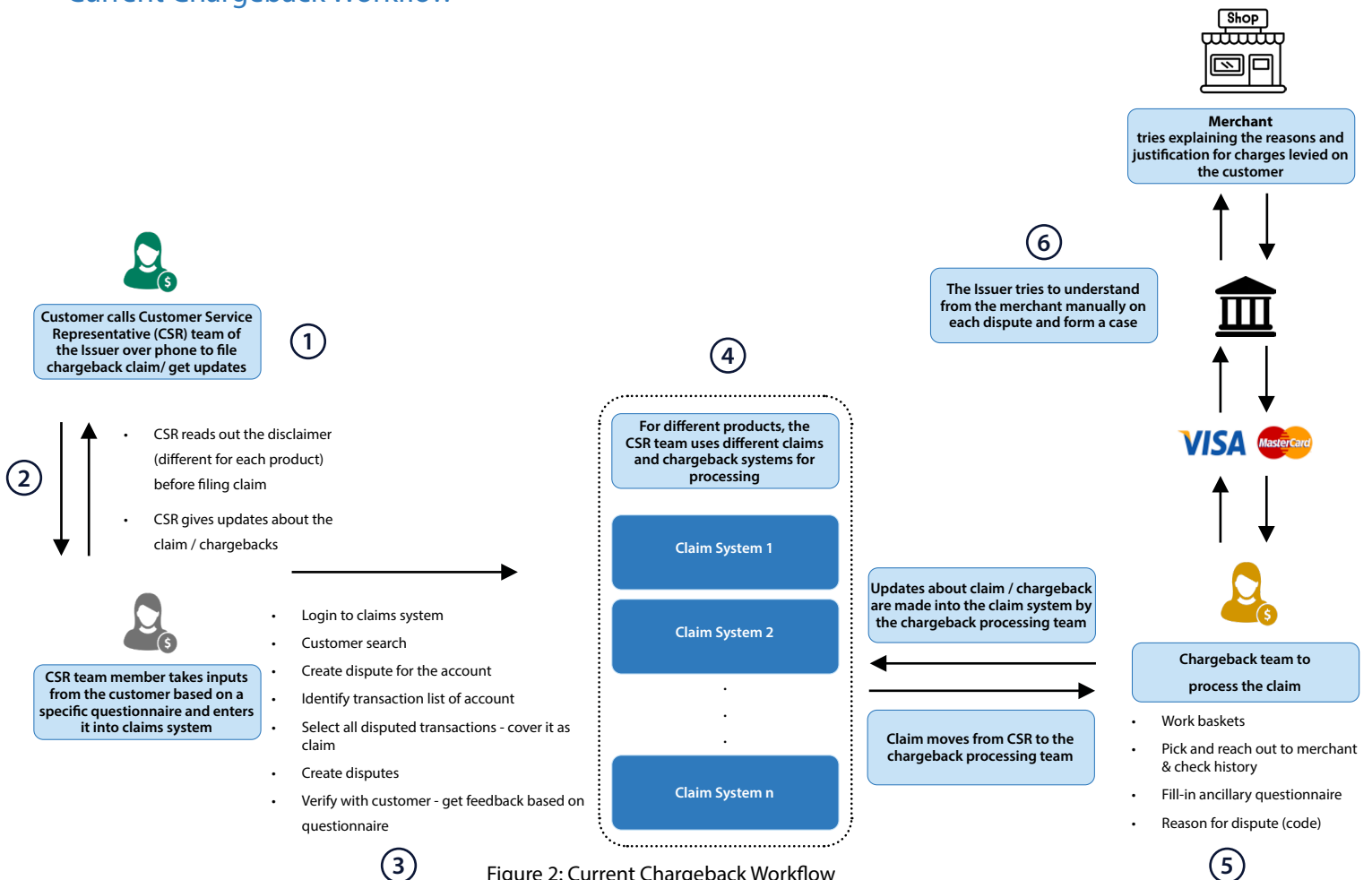
Figure 2: Current Chargeback Workflow

There are five main parties involved in the chargeback workflow.

1	**Customer or card holder**	• Customer does the purchase and then makes the payment through the card. Later the customer can raise the chargeback request, which is then processed, as appropriate.
2	**Issuing bank or the cardholder's bank**	• The customer calls the customer service representative (CSR) of the issuing bank to raise chargeback request. The CSR takes all the inputs from the customer based on predefined questionnaire and then logs the response in the chargeback system. All the transactions that are disputed are marked by the CSR for chargeback processing.
3	**Card network (Visa, Mastercard, etc.)**	• The card network provider receives the chargeback request from issuing bank and forwards it to the merchant's bank. Later the response from merchant's bank is also sent back to the card issuing bank.
4	**Acquiring bank or merchant's bank**	• The merchant's account is with this bank, and they provide the POS machine to the merchant. Card network forwards the chargeback request to the acquiring bank who further connects to the merchant for more information.
5	**Merchant or vendor**	• The amount for a transaction is deposited to the merchant's account and response around the chargeback is provided by the merchant to the acquiring bank.

Challenges With Existing Chargeback Workflow

Following are the specific pain points in the existing chargeback workflow (refer the corresponding numbers in the Figure 2 above).

Reference # in Figure 2	Pain Points
1	• The customer needs to explain the whole issue to the CSR who doesn't have any insight into the customer or the transaction.
2	• Lack of targeted / contextual inputs provided to customer from the disclaimers / FAQs.
3	• Manual process of entering the details in the claims systems. • No insight on whether the claim is a genuine one or a scam. Even friendly frauds are not detected early, and a dispute is created.
4	• For majority of issuers, there are multiple claims and chargeback systems for different products (credit card, wire, Point of Sale (POS), Automated Teller Machine (ATM), etc.) causing lack of holistic view of customer / merchant.
5	• The claims management system is not intelligent enough to identify issues for which the merchant need not be contacted.
6	• Manual tasks with multiple handoffs to identify the root cause of the dispute. • Lack of insight into the past behaviour of merchant.

Broadly, there are several challenges in the existing chargeback workflow.

In offering context	• When the customer raises chargeback request with the FI, they can face issues in trying to explain their concern to the CSR — who might have limited understanding of the client transaction pattern. Resultantly, CSR might provide only limited inputs around the disclaimers and FAQs.
Manual process	• The entire chargeback process is very manual; all details provided by the customer are entered manually in the claim system. • It is also possible that the FI might not have a unified claim system. Depending upon the product for whose transaction the chargeback is raised, the FI might have to log into different systems. Such usage of multiple systems prevents the FI from gaining a holistic view of the customer's transactions history.
Data challenges	• To investigate any case or to process the chargebacks, teams face several challenges with data such as — a) manually making sense of the huge amount of data, b) needing to rely on multiple internal / external data sources for the missing data, c) lack of trust in the data generated (as the datasets maybe inaccurate or incomplete), d) manually linking of different fraud reason codes to the chargeback to be issued, e) difficulty in clearly articulating the datapoints to be gathered from front office teams, card networks or merchants, and f) lack of holistic view of the fraudulent event or the impacted customer.
Difficulty in ascertaining friendly fraud	• A key challenge faced is the lack of timely intelligence to identify or flag whether a particular chargeback is a friendly fraud. Resultantly, without such insight, even friendly fraud requests need to undergo the entire chargeback workflow. This increases the workload of the concerned teams and delays the processing of genuine fraud complaints.

Chargeback Process Transformation: Solution Recommendation

There is no one-size-fits-all approach to transforming the chargeback process. Depending upon their specific circumstances, the approach would vary from one FI to another. However, following (refer Figure 3) are some of the key considerations for FIs to enable an effective digital fraud claims and chargeback management platform.
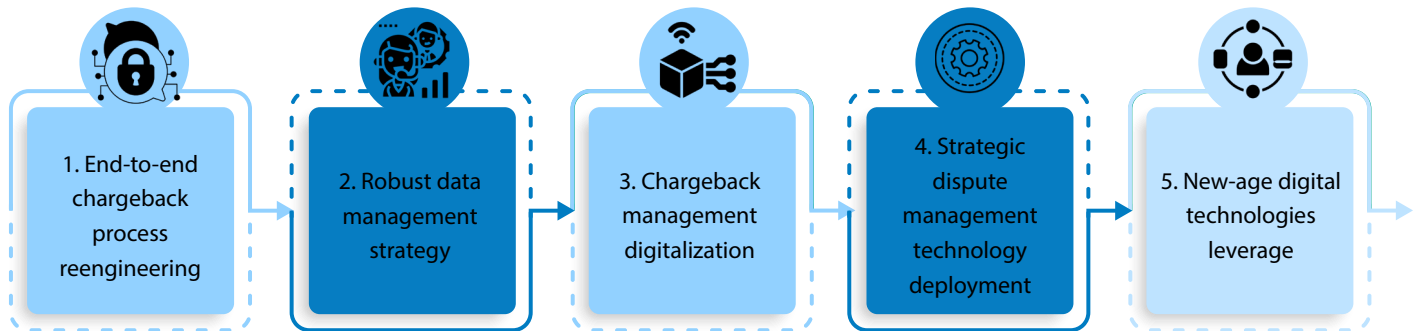

1. End-to-end chargeback process reengineering

2. Robust data management strategy

3. Chargeback management digitalization

4. Strategic dispute management technology deployment

5. New-age digital technologies leverage

Figure 3: Key Considerations to enable an Effective Management of Digital Fraud Disputes and Chargebacks Platform

1. End-to-end chargeback process reengineering:

For major transformation endeavors, FIs have traditionally procured best-in-class solution from the market (in case of large FIs) or developed an in-house solution (in case of mid- and small-sized FIs). Importantly, either of the two approaches involve huge investments, efforts, and/or dependence upon external solution providers.

Hence, before undertaking their chargeback management transformation, FIs should first focus on thoroughly and strategically redesigning their entire chargeback management process. The objective should be to optimally reduce the redundancies and duplicate tasks, identify the automation opportunities that could lead to 10X benefits, and substantially improve the overall process efficiency and effectiveness (through usage of a data-driven approach). To achieve this, FIs should focus on the following aspects:

As-is process study	• There are several customer-facing teams in an FI that cater to different products or various dispute issues. Hence, the transformation team must first study and document the as-is chargeback management process and create the process maps applicable for various products. • To achieve this, the team should interview and shadow the concerned process owners and the key agents. Also, they should proactively verify any hypothesis by consultants or senior stakeholders at this stage.
Application walkthrough	• In a typical large FI, there are different case and claims management systems used for specific products. • Hence, it is important that over and above the concerned chargeback management process, the transformation team also analyze and understand in detail the existing chargeback systems and the associated features — that are utilized by the dispute resolution. • Team should also ascertain the useful features as well as the pain points of the existing systems.
Data gathering	• While studying the as-is chargeback management processes and systems, the team should also analyze the key metrics and KPIs related to each of the steps (e.g., related to cycle time, handoffs required, upstream / downstream linkages and dependencies, resolution quality, etc.). This would help the team understand the choke points in entire workflow.
Process redesign	• After gaining a holistic view of the as-is chargeback management process and system, the team should work towards redesigning the as-is process. • The objective of the to-be process should be to enable improved efficiency and effectiveness, reduced cost, and enhanced customer satisfaction. Robust FAQs, questionnaire optimization, and rule-based automated prioritization of cases, are just few of the several improvements that the to-be process could entail.
Prioritization	• As the final step, the transformation team should analyze all of the process redesign aspects that were identified earlier — vis-à-vis complexity, cost-benefit analysis, etc. • Basis the above, the team can create a prioritization matrix of the process reengineering activities — and differentiate between quick wins and long-term strategic undertakings. • Further, the team should brainstorm with senior management and other concerned stakeholders to finalize a process reengineering roadmap.

A well-developed and implemented end-to-end process reengineering of the chargeback management process can yield substantial benefits for FIs — without the need for incurring massive upfront cost. Once the end-to-end process has been streamlined and standardized, FIs can focus on making further strategic technology investments. Refer Figure 4 for an illustrative to-be state of the chargeback management process.
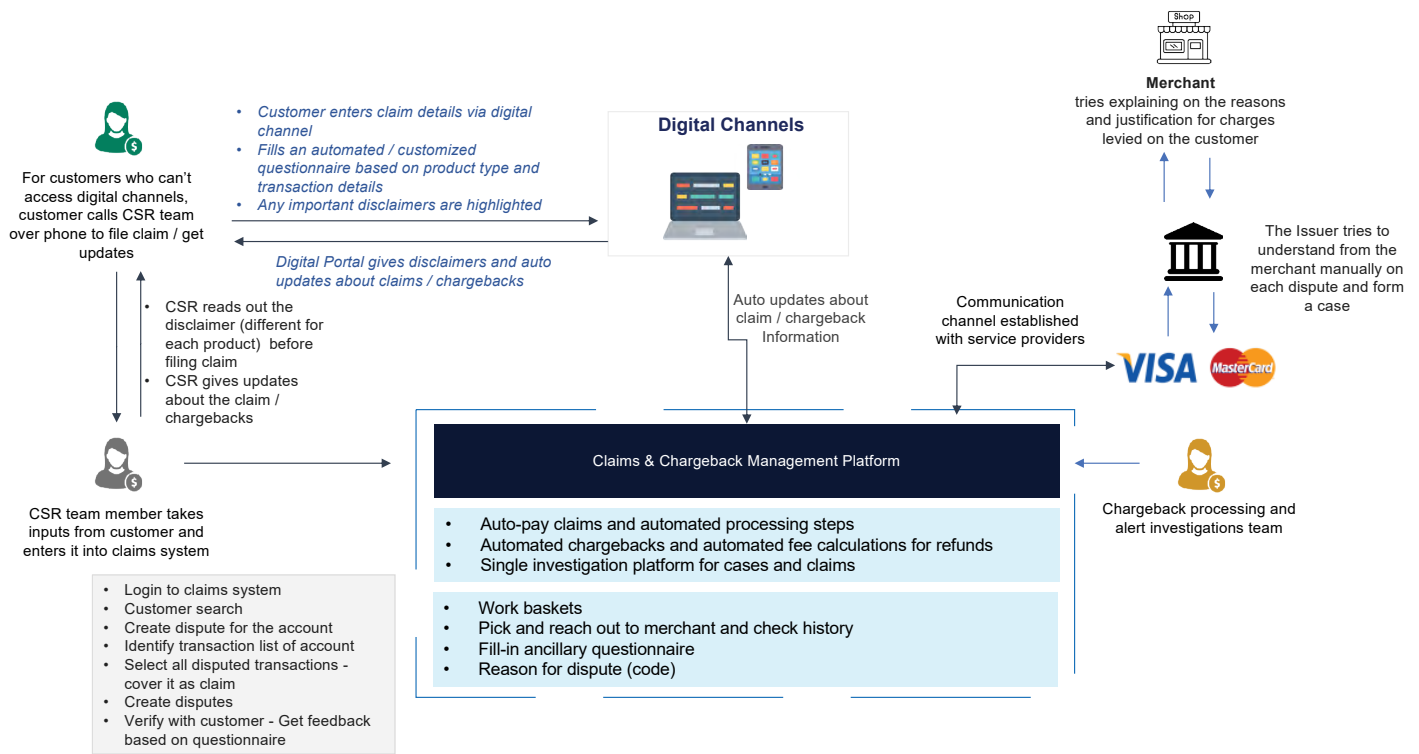
Figure 4: Illustrative To-Be State of the Chargeback Management Process: Current Chargeback Workflow

2. Robust data management strategy: Before investing in new technology solutions to transform their chargeback management platform, FIs should first ensure that robust data management strategy has been implemented — to enable proper handling of a wide array of data that are generated during the transactions (both offline and online). To enable robust data management, FIs should focus on the below key aspects:

a) Identify all relevant data points: With the rise of digital channels, there has been a dramatic rise in the data generated during payment transactions. Hence, to effectively resolve the chargeback disputes, FIs need to — above and beyond the information generated in their fraud disputes and chargeback management systems — do a complete rethink of the various data point generated in the entire payments transaction and chargeback workflow (including payments execution, customer's reach out to FI for chargeback claim, raising of claim, chargeback analysis and processing, and case closure). Focus should be on identifying all useful data points (including related to device

identification, IP address, authentication, behavioral biometric, etc.) that can be effectively leveraged by FIs in next-generation case management solutions.

Also, FIs should bolster their system capabilities to effectively process the relevant unstructured data points. For example, Capital One has utilized machine learning (ML) algorithms to fetch relevant data from card and demographic data sources in their fraud management system.

b) Focus on data quality: Many FIs' chargeback management functions have to grapple with myriad banking and communication channels (including mix of online and offline touchpoints), product types, systems, teams, and digital devices. Poor data quality can be a huge dampener in optimally managing the chargeback process.

Hence, FIs should focus on bolstering their data quality. Towards this, FIs can consider implementing compliance data lake or warehouse — that links to and houses the various relevant data

points required to offer holistic view of customer and for effective chargeback management. Also, to bolster the data quality of data lake or warehouse, FIs' data engineering teams must work closely with the chargeback management teams.

c) Leverage 3rd party databases: FIs can subscribe to relevant 3rd party databases to augment their internal data for effective chargeback management. Third-party databases, for example, can offer useful data points such as on merchant, transaction, POS, ATM location; on customers' ID from government registries; for address verification; merchant reference number; etc.

Many countries have also setup fraud registries comprising databases on fraudulent websites, phones, digital fraud methods, etc. FIs should leverage these databases as well to improve the effectiveness of their chargeback management process.

d) Modernization of legacy data management capabilities: To build a next-gen dispute resolution platform, FIs need to modernize their data management capabilities to enable an open, flexible, and all-inclusive data management solution. Following are the key capabilities that a next-gen data management platform should possess:

- Support open data formats. Product vendors typically require FIs to abide by specific predefined data format. This results in FIs becoming over-dependent on the vendors. FIs therefore should insist upon the vendors and move towards storing data in open data formats. This will allow them to make their data architecture future proof.

- Ability to scale. FIs need to factor in the growth in number of customers, products offered, digital transactions, transaction channels, etc. Hence, it's important that FIs ensure that their data management solution is highly scalable — by utilizing low-cost scalable storage and on-demand elastic compute.

- Direct connection to BI tools. FIs' data management solution should support direct connection to popular BI tools such as Tableau, PowerBI, etc., to enable proper control over data and the effective management of KPIs.

- Support for advanced analytics. Solution should support a unified and streamlined end-to-end data workflow — including related to data preparation, modeling, insights sharing, models training using large datasets, and the tracking of data versions utilized to build the models.

3. Chargeback management digitalization: After having reengineered the end-to-end chargeback process and having implemented robust data management strategy, FIs can now focus on strategically transforming and digitalizing their end-to-end chargeback management workflow.

As part of their digitalization endeavor, FIs should focus on integrating their chargeback dispute processing and the fraud case management. This is because, in many FIs (especially the large ones), their existing chargeback claims and dispute processing, and the fraud case management solutions work in silos — this results in suboptimal insights sharing between the two systems.

Refer below some of the key capabilities expected from a digitalized chargeback management process:	
Robust integration	- Integrated and adaptive chargeback claims management — that leverages a) application programming interface (API)-based real-time integration between the claims management system with the front-end channels, b) real time API-based integration with relevant internal back-office systems and with external systems (e.g., credit card networks such as Visa, MasterCard, American Express), and c) robust inbuilt rules to seek optimal level of information from the concerned parties (as far as possible, information should be fetched by the system automatically from the various relevant datastores). - Integrated customer journey during chargeback — that offer customers prompt guidance and support, using relevant contextual information, across the entirety of the chargeback process.
Clear signposting	- To ensure customers can easily navigate the chargeback process using the various concerned channels at their disposal.
Sophisticated tools	- Robust tools to effectively support the chargeback process (e.g., tools for document scanning, information extraction from bills, chatbots (to answer customer's queries, aid in prefilling forms, communicate resolution, etc.), automated online ID verification, etc.) - For example, Erica — a chatbot within Bank of America mobile banking app — helps customers resolve their queries, prevent fraud related losses, and gain insights on potential frauds and remedial measures.[3]

Refer Figure 5 for an illustrative UI navigation flow of a digitalized fraud disputes and chargeback management solution. This flow closely resembles the dispute management process executed via digital channels by leading fintechs such as Monzo and Halifax.
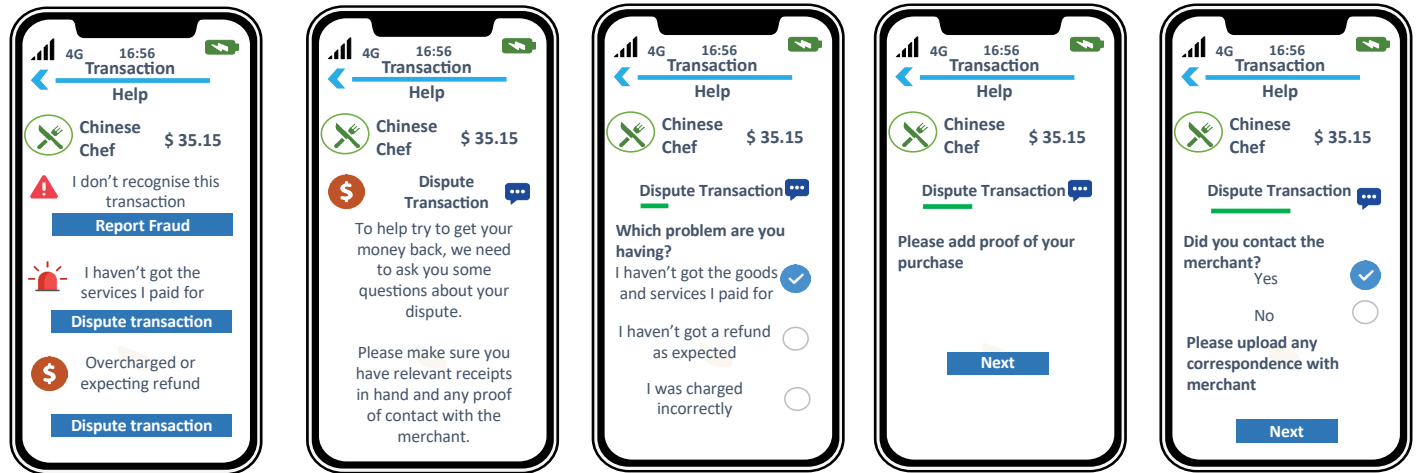

Figure 5: Illustrative UI Navigation Flow of a Digital Fraud Disputes and Chargeback Management Solution

4. Strategic dispute management technology deployment: In most large FIs, there is a distinction between the case management system (which handles the alerts generated from fraud detection systems) and the claims management system (which handles the disputes raised by customers). Also, many times, there are different vendors for the case and the claims management systems.

The problem with the above is that dispute processing and fraud case management happens in silos. Resultantly, information on a fraudulent merchant or entity identified in one system don't pass on to the other system.

To address this shortcoming, FIs should work towards:

- Building a strategic integrated case management platform across products.

- Enabling the ability to automatically link the related cases to claims.

- Enabling automated and straight through processing of majority of the chargebacks.

Refer below some of the high-level capabilities that a strategic dispute management system should ideally support:

a. Flexible and contextual data model. System should be able to support unstructured and on-demand data ingestion, with contextual data model, to offer real-world meaning to data and help fill the gaps in poor-quality or incomplete records, thereby making them more representative of real-world entities.

b. Various products. The cases or claims generated from the ATM, POS, Automated Clearing House (ACH), wire, credit card, etc. transactions need customization in not only the data being consumed but also in the different functionalities of the system to offer insights into how the customer has operated all products historically. The system should therefore be able to offer a view of the flow of funds from/into the different products, any associated non-transactional behavior of the customer, and the network of customer data generated from multiple product-related systems.

c. Integration with relevant systems. The integrated system should have real-time API-based connectivity to front office systems (which gather information provided by customer), as well as real-time interfaces with a) internal back-office systems (to fetch customer and transaction information), b) FI's various fraud detection systems, and with the card networks (VISA, Mastercard, etc. to enable 2-way communication on transactions). Robust integration with the card networks can enable FIs to timely gain the relevant information, thereby helping prevent the number of chargebacks and in turn reduce the time and effort spent in analyzing and processing the chargebacks.

d. Dynamic entity resolution and network generation. To investigate the claims effectively, it is important for FIs to be able to clearly identify the concerned entities associated with the historical fraudulent cases and the claims processed. Also, the network to which the entities are connected need to be assessed. In this context, FIs should focus on adopting a solution that offers automatic dynamic entity resolution capabilities — to help

ascertain customer's identity based upon parameters defined at multiple fuzziness levels. For example, a combination of forename, surname, date of birth, and telephone number offers a strong identification of an entity. On the other hand, when an entity is defined as combination of surname and date of birth, fuzzy matching capability can be utilized.

Post the identification of entity, solution should be able to build an entity centric network — to offer a single enterprise-wide identity across datapoints from various sources. This network is required to allow the investigators to understand all the connections (historic frauds, locations, IP address, accounts, card details, etc.) of the entities involved in transaction, before they take a decision. It is also needed to score the likelihood of fraud or claims for the given case and offer guidance to investigators based upon connections in the network.

e. Automation. Once the dispute has been confirmed by the customer, the system should offer an end-to-end automated workflow to extract information from the customer's transactions / documents and auto populate the dispute form. The customer may add additional details, post which, the RPA-based solution would collect the customer's dispute data to automatically process the chargeback without human intervention. The bot would be capable of logging into the service provider's site to submit the chargeback data. A report could be published on the cycle times of each of the processes — to help management identify the steps where efficiency is low and automation desirable.

Refer Figure 6 for an illustrative functional architecture of a digitalized fraud disputes and chargeback management platform.
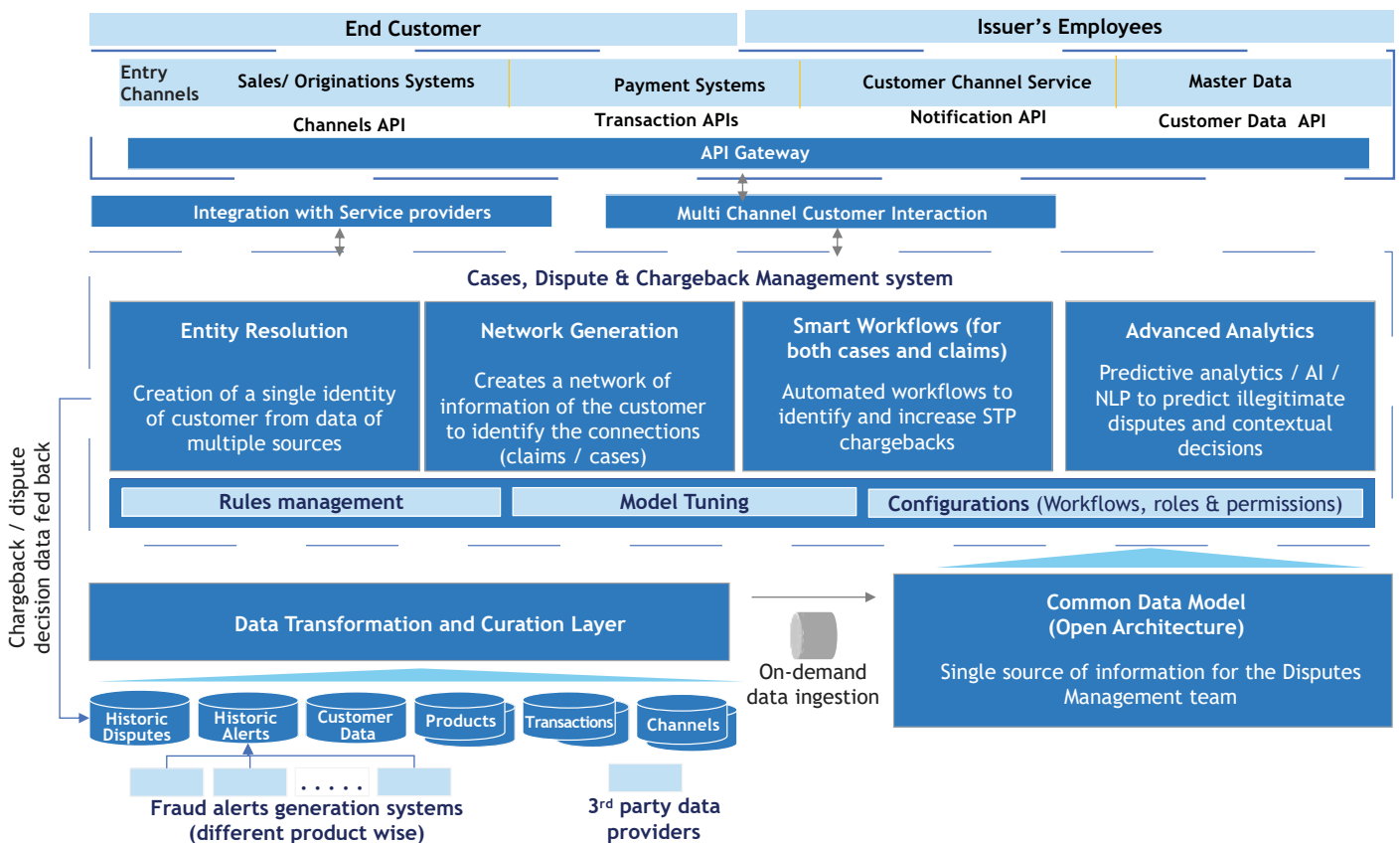

Figure 6: Illustrative Functional Architecture of a Digital Fraud Disputes and Chargeback Management Platform

5. New-age digital technologies leverage: To realize the full potential of their chargeback management digitalization undertaking, it is important that FIs leverage new-age technologies such as predictive analytics, artificial intelligence (AI), machine learning (ML), natural language processing (NLP), robotic process automation (RPA), etc. Refer below some of the key capabilities that these new-age technologies can enable

- Realtime bidirectional sharing of relevant data — both historic and current — between the chargeback management system, transaction processing system, and other relevant systems.

- AI-based intent identifier that leverages Natural Language Understanding (NLU) — over the relevant structured and unstructured data (such as transaction information, customer communication, payment receipts / bills, correspondence with the merchant, etc.) — to detect the true intent of the customer who has raised the chargeback dispute. As an example, NucleusTeq has delivered a semi-supervised learning-based NLP solution to aid in detecting fraudulent activity.[4] This helps ensure that communications from customers are monitored to avoid penalties and reputational damage.

- Offering of timely inputs to the service providers or the acquiring banks — by utilizing NLP and Optical Character Reading (OCR) capabilities — to ensure quick dispute resolution.

- Effective leverage of Intelligent Process Automation (IPA) and RPA capabilities to a) predict potentially fraudulent transactions before they occur, b) automatically flag genuine chargebacks and link them to specific reason codes, c) auto analyze the dispute resolution process (TAT for specific acquirers, etc.) to enable further improvements, d) automatically process low-risk chargebacks without the need for human intervention, etc. As an example, Quavo QFD Disputes Management Platform has partnered with KeyBank to automate the manual tasks and have a streamlined workflow — transforming the client and staff experiences in managing disputes while improving the back-office processing and chargeback recoveries. [5]

- AI-enabled guidance to investigators on the decisioning of chargeback cases. As an example, Justt.ai is another FinTech that offers AI-based solution that gathers evidence and refutes illegitimate chargeback claims on behalf of merchants.[6]

- Sophisticated scoring of chargeback cases; enabling reduction in frauds.

- Robust audit trail.

- Advanced real-time reporting and dashboards.

Conclusion

As the number of users dealing in cashless transactions — in person or online — grow substantially, it is essential that FIs address their complaints around chargeback promptly and effectively. To achieve this, FIs should undertake a strategic and holistic approach to enable effective management of digital fraud disputes and chargebacks. Those FIs that do, will gain immense business benefits — in terms of improved user experience, reduced cost, and better process efficiency and effectiveness. This would in turn help them gain a significant edge over their competitors and in turn increase their customer base in the cards and payments domain.

Reference

1. 8 Out of 10 Merchants Have Seen an Increase in Friendly Fraud, According to the 2021 Chargebacks911 Field Report, June 02, 2021, businesswire.com

2. Chargebacks and Disputes: Strategic Solutions, February 2020, paymentsjournal.com

3. BofA rolls out AI assistant Erica to all mobile customers, Caroline Hudson, May 22, 2018, bizjournals.com

4. Detection of Intent to Fraud using NLP, nucleusteq.com

5. Quavo Fraud & Disputes Partners with KeyBank to Automate Credit Card Disputes, East Lansing, MI, and Cleveland, OH, July 28, 2022, quavo.com

6. Melio knocks out Chargebacks with Justt, justt.ai

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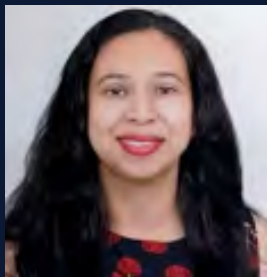
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