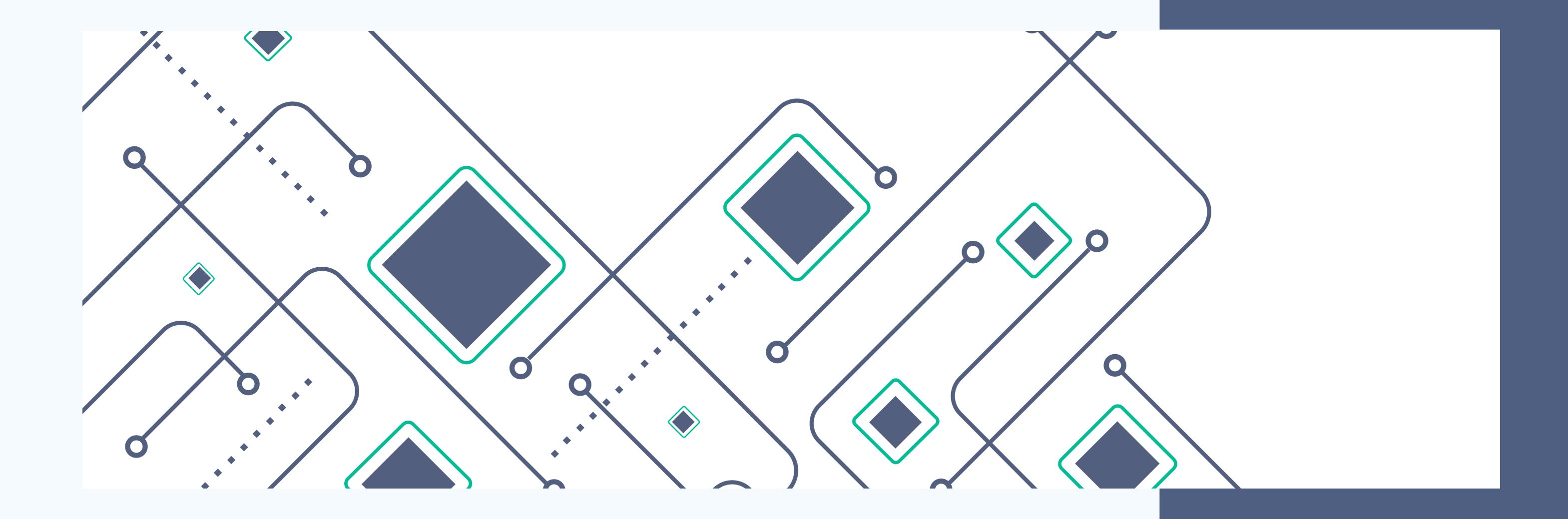


White Paper



Executive Summary

Pharmaceutical manufacturers often use revenue management systems (ex. Model N, Vistex/SAP, iContracts and others) to manage revenue processes that determine which customers should receive which pricing discounts for which products.

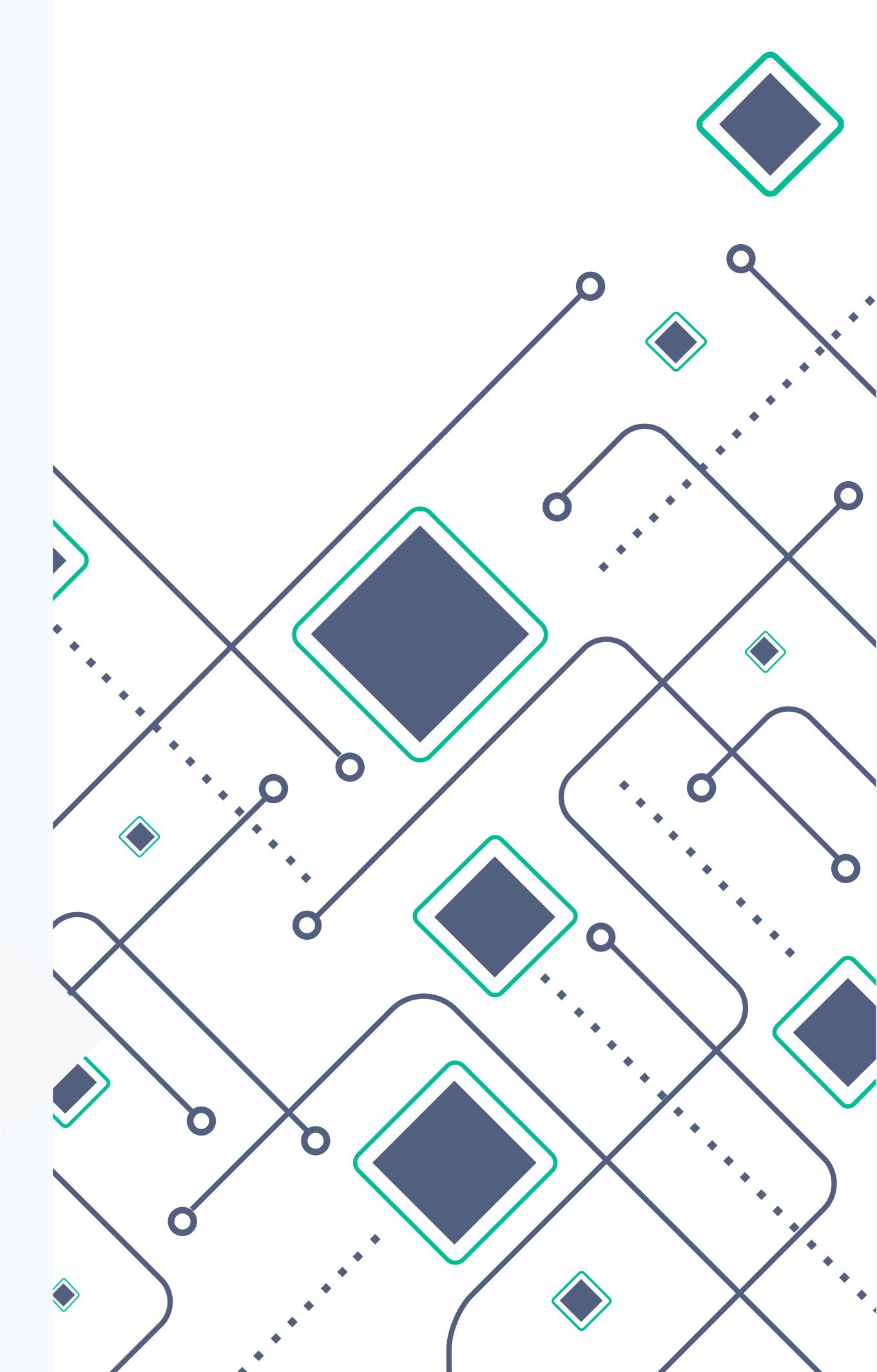
The contracting and chargebacks revenue process, in particular, dictates pricing for dispenser customers (hospitals, clinics, pharmacies, etc...). Today, even with revenue management systems well established, manufacturers still require substantial manual processing to evaluate customer contract eligibility and resolve chargeback errors with wholesalers. The result - unnecessary manual effort, revenue leakage and customer add/re-bills that nobody wants.

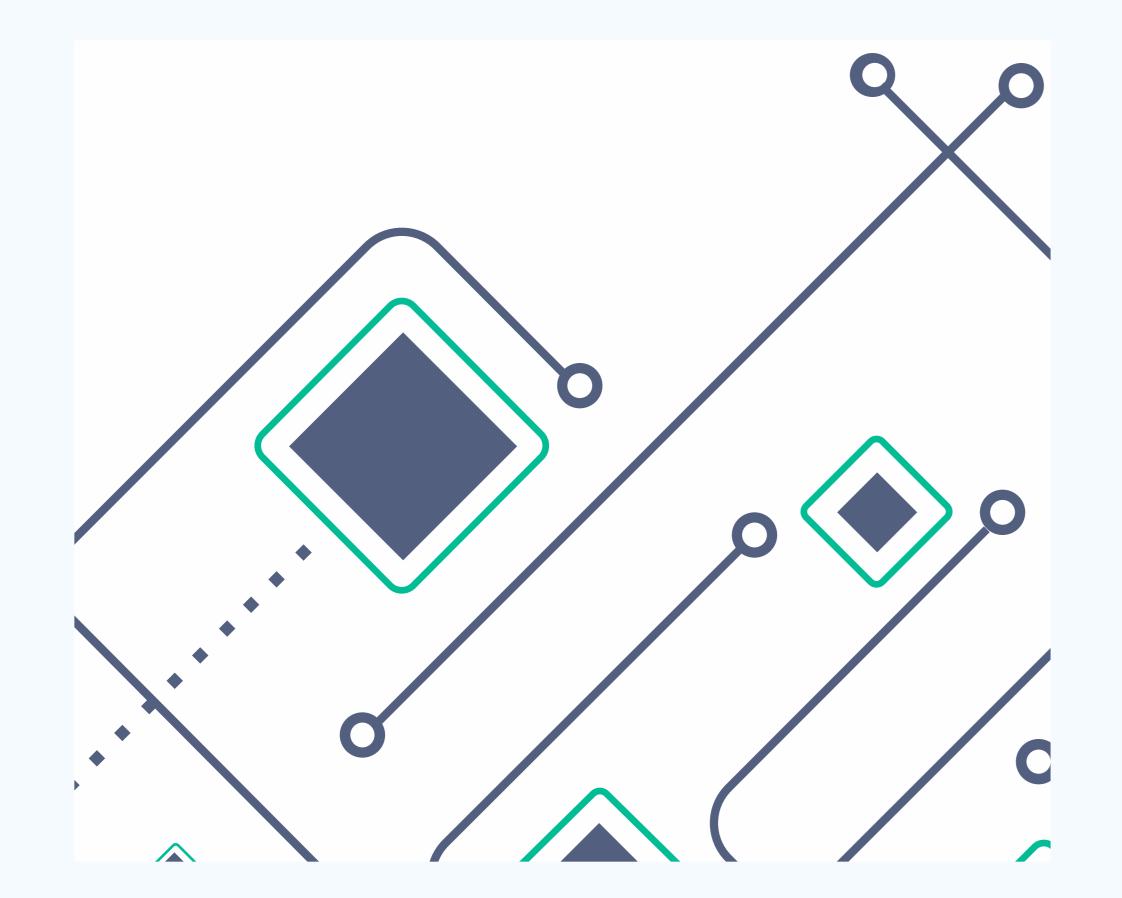
No matter how much revenue management systems are optimized and fine-tuned, the majority of challenges faced by manufacturers today must be fixed inside their trading partner's system. This is where the blockchain-powered MediLedger Network comes in.

The purpose of this whitepaper is to explain the differences between the MediLedger Network & revenue management systems as well as the value generated from combining them to create industry wide automation, visibility and trust.

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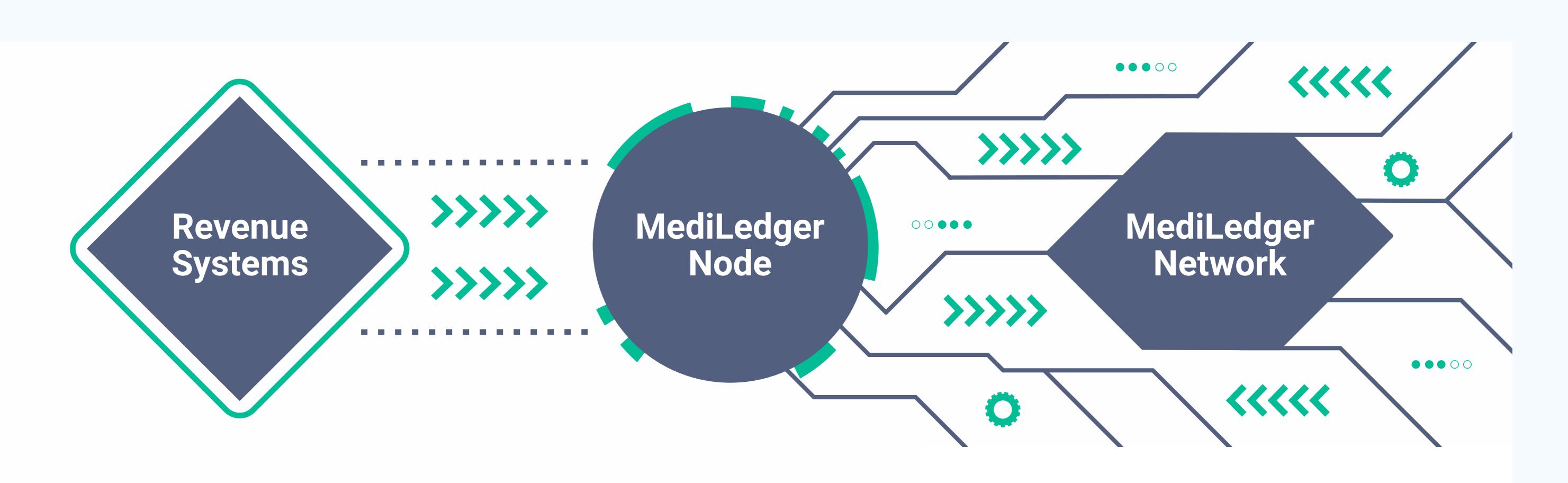
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Amplification, not Replacement

Your revenue management system, MediLedger Node and the MediLedger Network create a streamlined process for contracting and chargebacks across the industry



The revenue management system

holds customer and contract
master data and runs logic for
contract eligibility and chargeback
adjudication

- Customer Master Data
- Customer Eligibility
 Automation
- Contract Management
- Chargeback Management

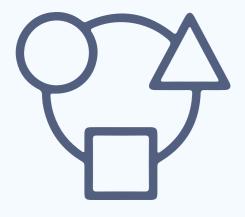
The MediLedger Node is run by each participant as the gateway to industry data and trading partners.

It also automates customer evaluation providing proposals for new/updated customers

- GPO Rosters, HIN, DEA, 340B
 & Other 3rd party data
- Generates automated New/
 Updated Customer Proposals
- Stores Customer, Contract & Chargeback History

The MediLedger Network enables
rules enforcement on data shared
between trading partners and
ensures complete alignment in realtime on all chargeback-related data

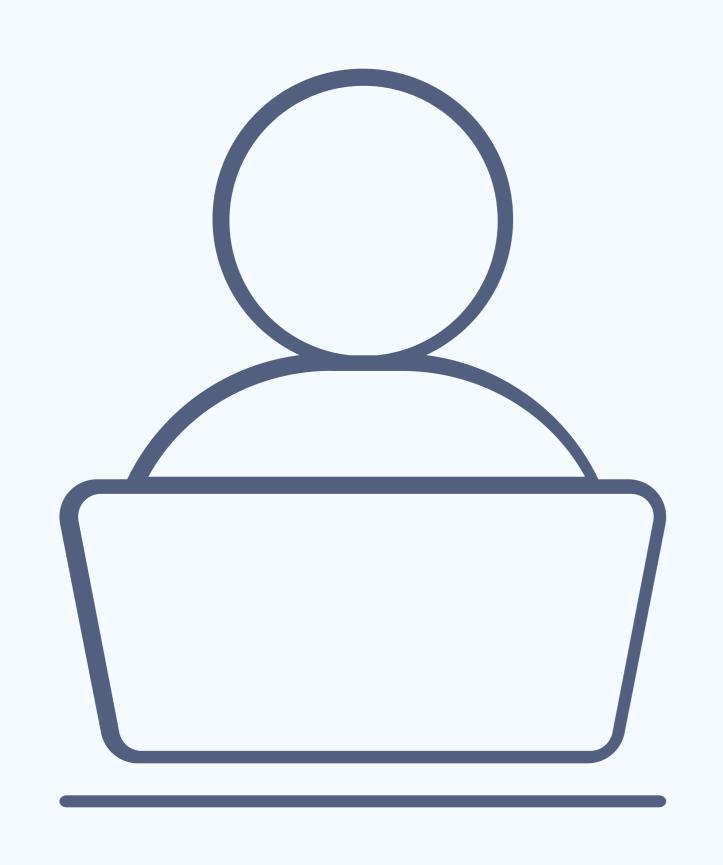
- Validation and business rule enforcement for shared data (Rosters and Contracts)
- Real-time contract,
 membership and identity
 data alignment



IMPORTANT NOTE: MediLedger integrations are NOT intended to write/send information back to the customer master data or revenue management systems. Instead the value comes from pulling existing data in order to automate manual processing, evaluation and research activities that exist today.

Current State

How the process works today



Raw Customer Data

Today, manufacturers make pricing and product decisions internally where integrations often pull updates directly from the ERP into a revenue management system. However, customer eligibility depends on inbound customer data, from GPO trading partners and other identity sources (like HIN, DEA & 340B), where manual processing/evaluation is necessary before feeding it into a revenue management system. Only after this manual evaluation has been done, can revenue management system help determine contract eligibility and place customers in to contracts

Contract Misalignment

Manufacturers send eligibility and pricing contract updates from their revenue system to wholesalers through EDI 845, so wholesalers know how to invoice customers. The challenge is that manual processing of customers, EDI batch-messaging and differing formats across trading partners all cause delays and contract misalignment between manufacturers and wholesalers. This causes pricing/chargeback errors.

GPOs also have no insight into contract eligibility of their customers and so constantly ask manufacturers for the eligibility status updates.

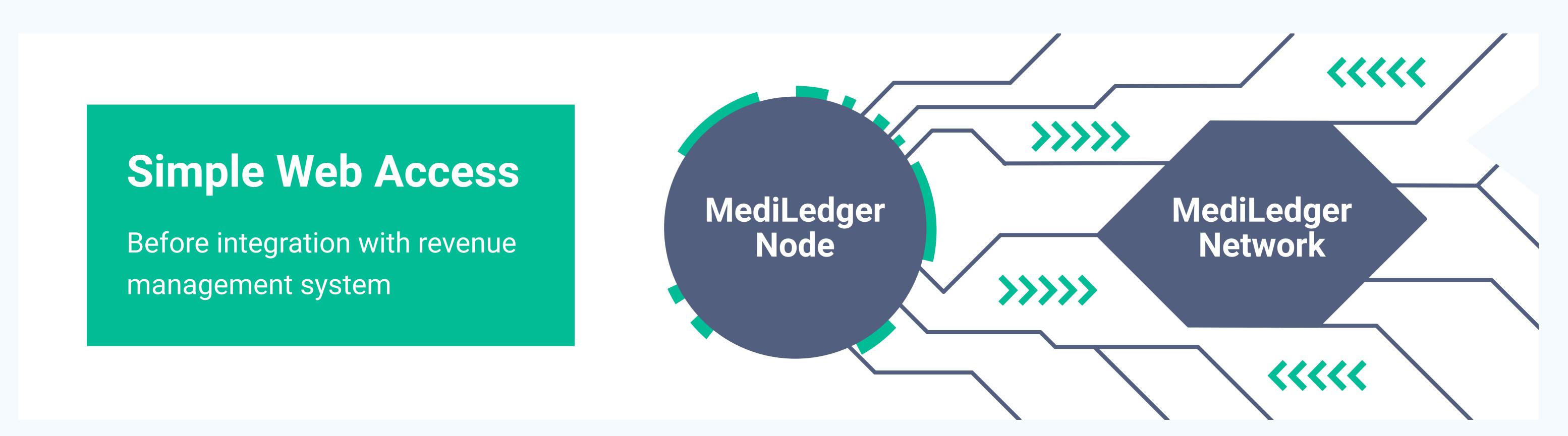
Lengthy Chargeback Disputes

After invoicing a customer, wholesalers submit chargeback claims to manufacturers. Across the industry, roughly 4% of these chargebacks result in an error on first pass, forcing manufacturers, wholesalers and in many cases GPOs to go through a manual resolution process that requires customer/contract research and back-and-forth between all parties.



GPOs also have no insight into contract eligibility of their customers and so constantly ask manufacturers for the eligibility status updates.

Roster Management



GPO Membership Data

Through the MediLedger Network, manufacturers receive updates to GPO rosters all in one place and in real-time. GPOs on the MediLedger Network are able to pre-validate their rosters against identity databases like HIN, DEA and 340B in real-time, which gives manufacturers clean and validate GPO rosters that can be automatically evaluated.

MediLedger also consolidates rosters from GPOs not yet on the MediLedger Network and then automatically checks those rosters against the same identity databases in real-time, providing alerts to make lingering manual processing fast and easy.

Customer Identity Data

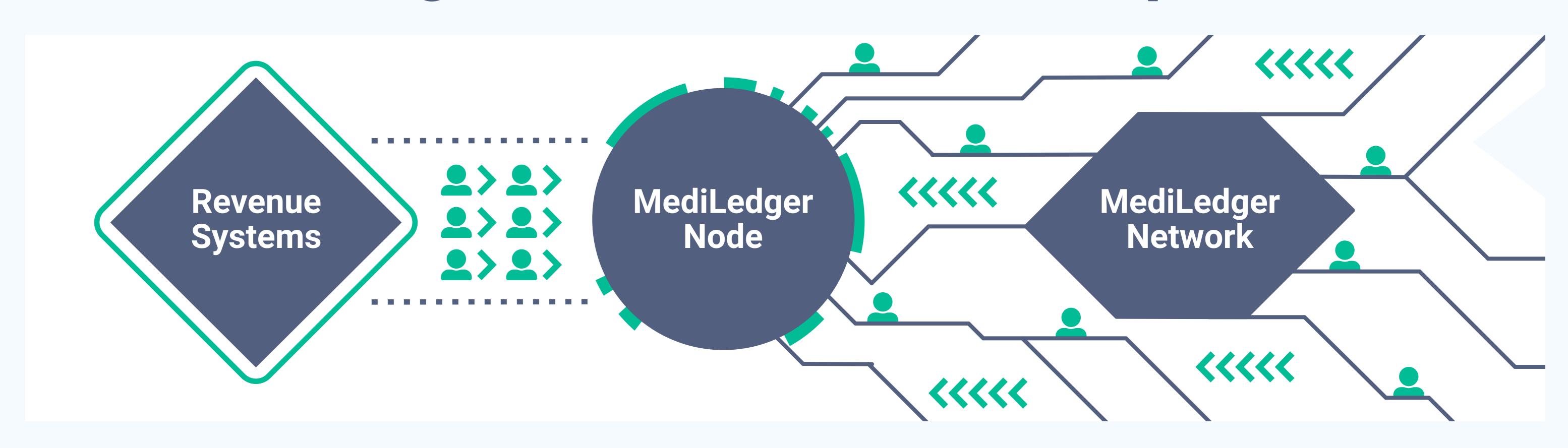






Through the MediLedger Network, manufacturers have full access to all relevant 3rd party customer identity information, kept updated in real-time, including HIBCC's HIN database, DEA identifiers and HRSA's 340B database. Unique to MediLedger is that this identity information is published to all participants at the same time, eliminating misalignment on customer identity between trading partners. As these databases are updated new data is published to all participants in the MediLedger Network.

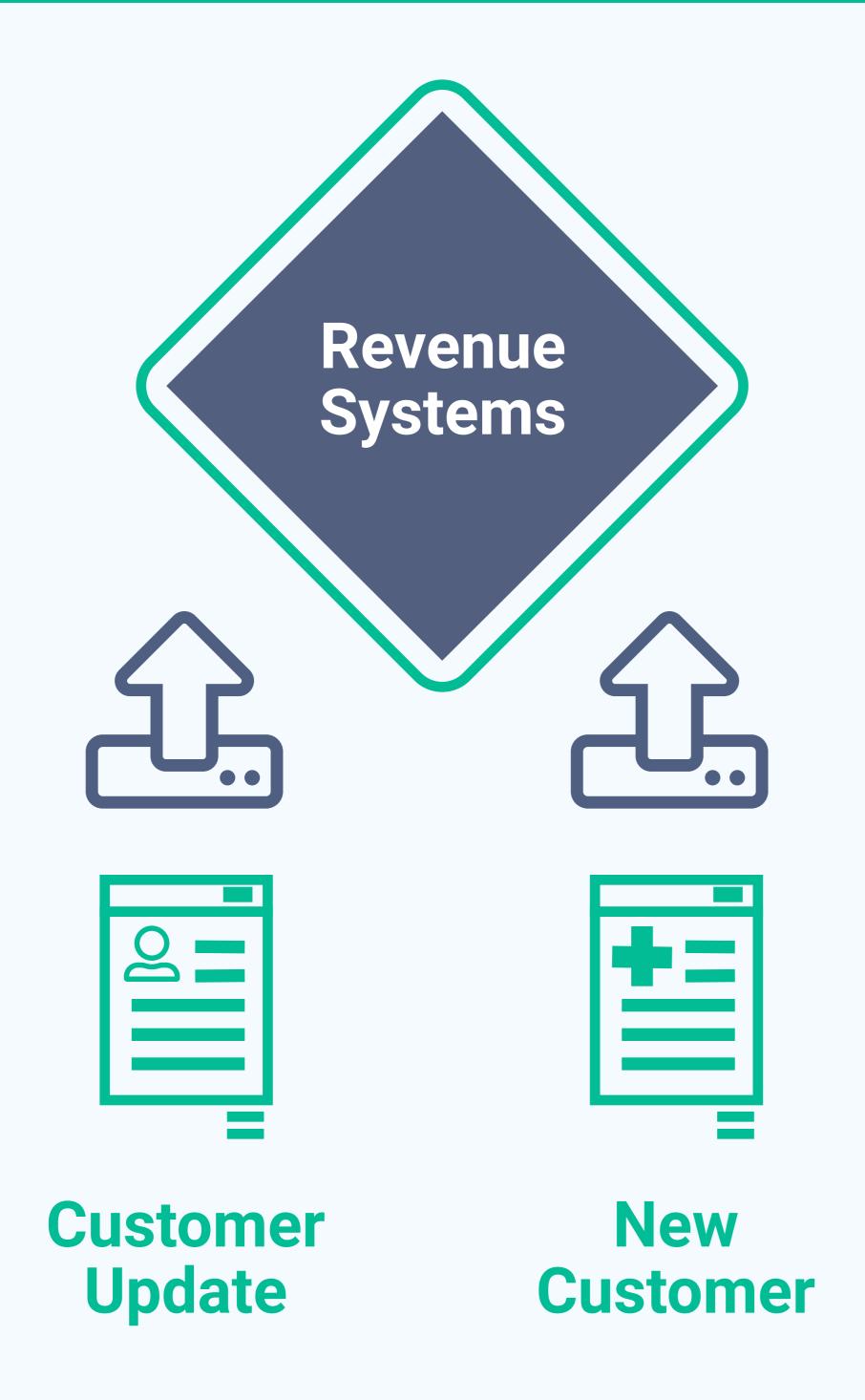
Roster Management + Customer Proposals



Customer Integration

Customer data pulled from revenue management system.

Proposals created for manual review and import back to revenue management system



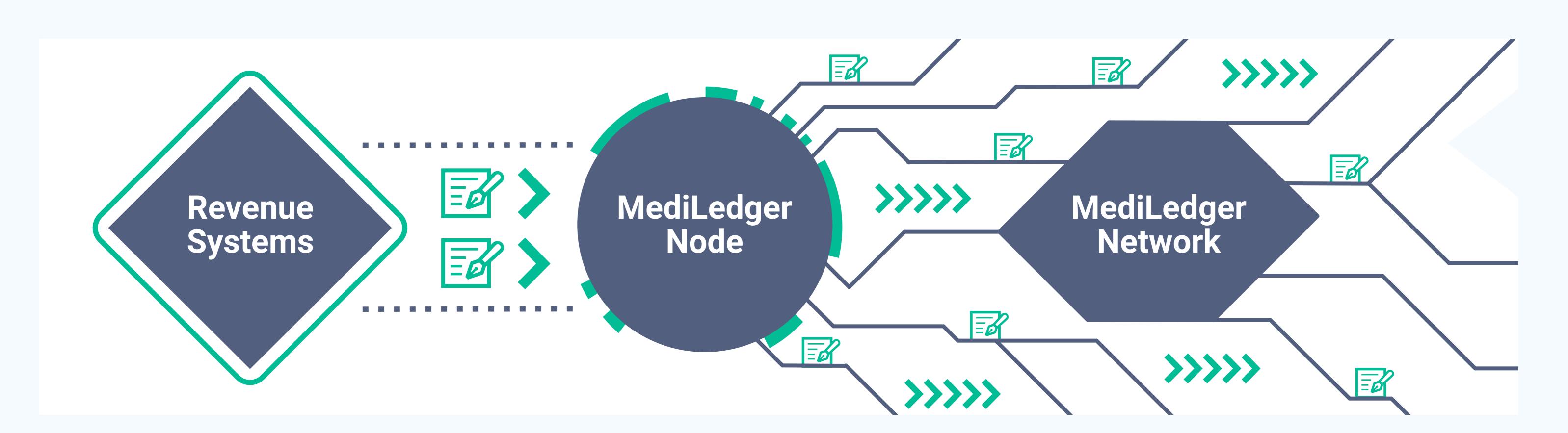
Customer Update Proposals

Integrating the MediLedger Node with a revenue management system's customer data, enables manufacturers to pull existing customers into MediLedger to compare against live versions of the identity databases (HIN, DEA, 340B). Questions like "Does this ID exist?" and "Is this ID active?" can be automatically answered within MediLedger through alerts tied to each customer record. No changes are made to customer data in MediLedger, instead MediLedger can propose updates as downloadable files to be reviewed before being uploaded into revenue management or customer master systems. This process can also provide automation to customer master auditing.

New Customer Proposals

MediLedger automatically compares identifiers on GPO rosters with your existing customer data in order to generate proposal files for new customers found. Included in these new customer proposals can be name, address, GPO affiliation and other attributes based on identity data sources and the GPO roster the customer came from. New customer proposals can automate much of the processing and evaluation process so when they are uploaded into revenue management systems, internal automation or logic flows can automatically run to place customers in contracts.

Contract Communication

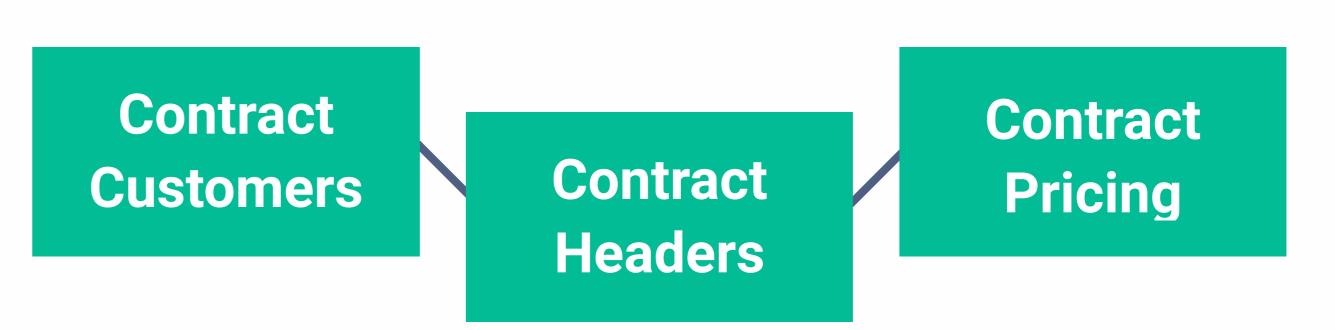


Contract Integration

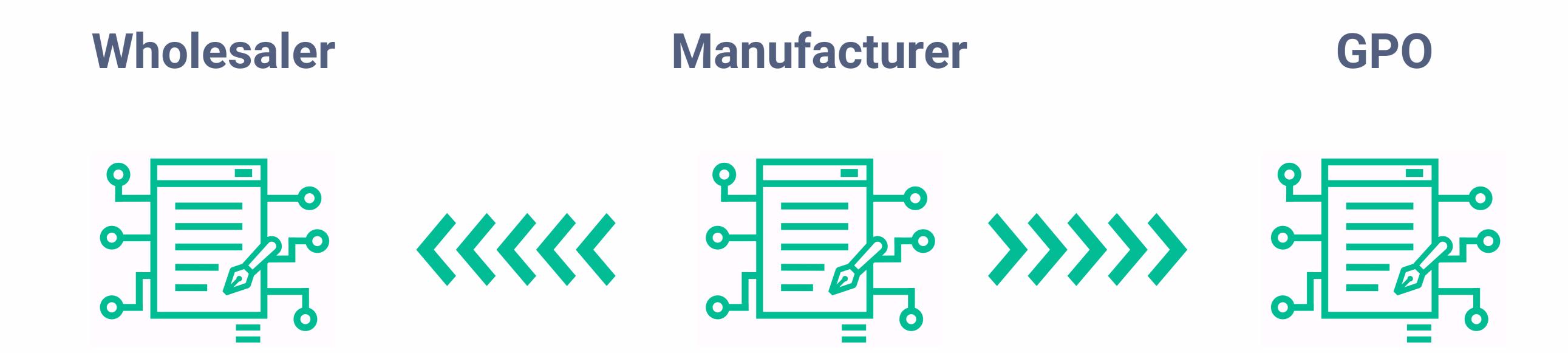
Contract data pulled from revenue management system to be aligned with trading partners

Contract Alignment

A Unified View of Contracts Among Trading Partners

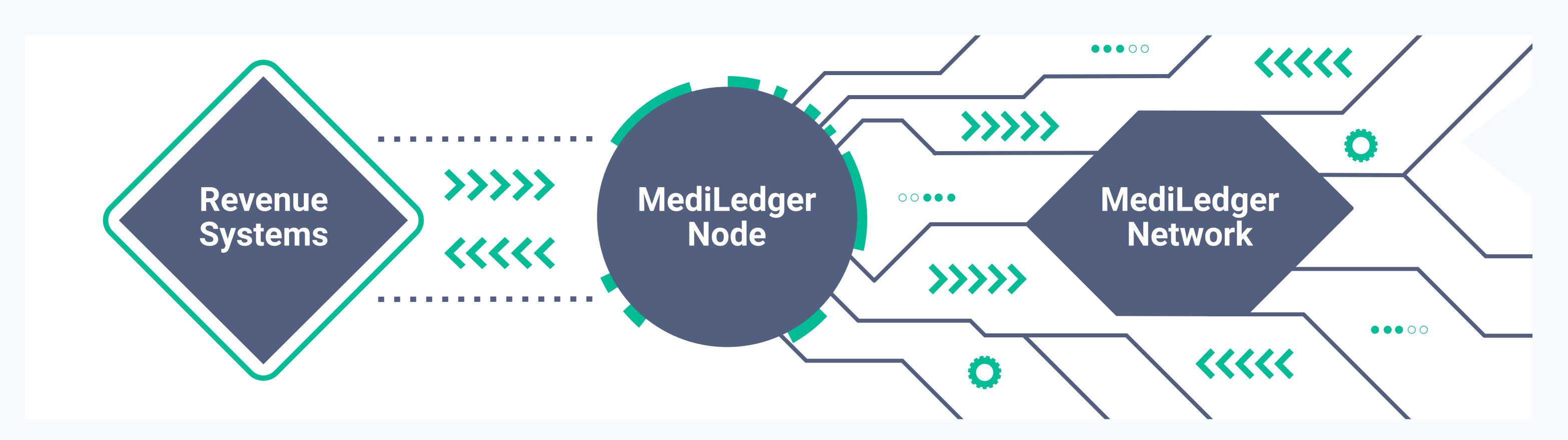


Integrating the MediLedger Node with a revenue management system's contracts module, enables manufacturers to pull contract data into MediLedger to share it with trading partners in real-time. Through customized data sharing rules built in to MediLedger, manufacturer contract updates are immediately and securely shared with all relevant wholesaler and GPO trading partners. Contract updates are also validated by the MediLedger Network before being shared so that wholesalers can eliminate variances between manufacturer contract updates and potential load delays in wholesaler systems. Manufacturers have certainty that wholesalers and GPOs have the exact same contract data as them, eliminating contract misalignment with wholesalers and eligibility inquiries from GPOs.



Contract Communication

+ Chargeback Error Resolution



Contract Integration

Contract data pulled from revenue management system to be aligned with trading partners



Chargeback Errors Eliminated

Wholesalers submit chargebacks based on the latest state of the contract. With contracts aligned through MediLedger, chargeback errors related to misalignment on contract eligibility, effective dates and retroactive updates could be eliminated. Validated GPO rosters and customer identity data are also aligned in real-time which can eliminate certain chargeback errors related to customer identity confusion.

Rapid Dispute Resolution

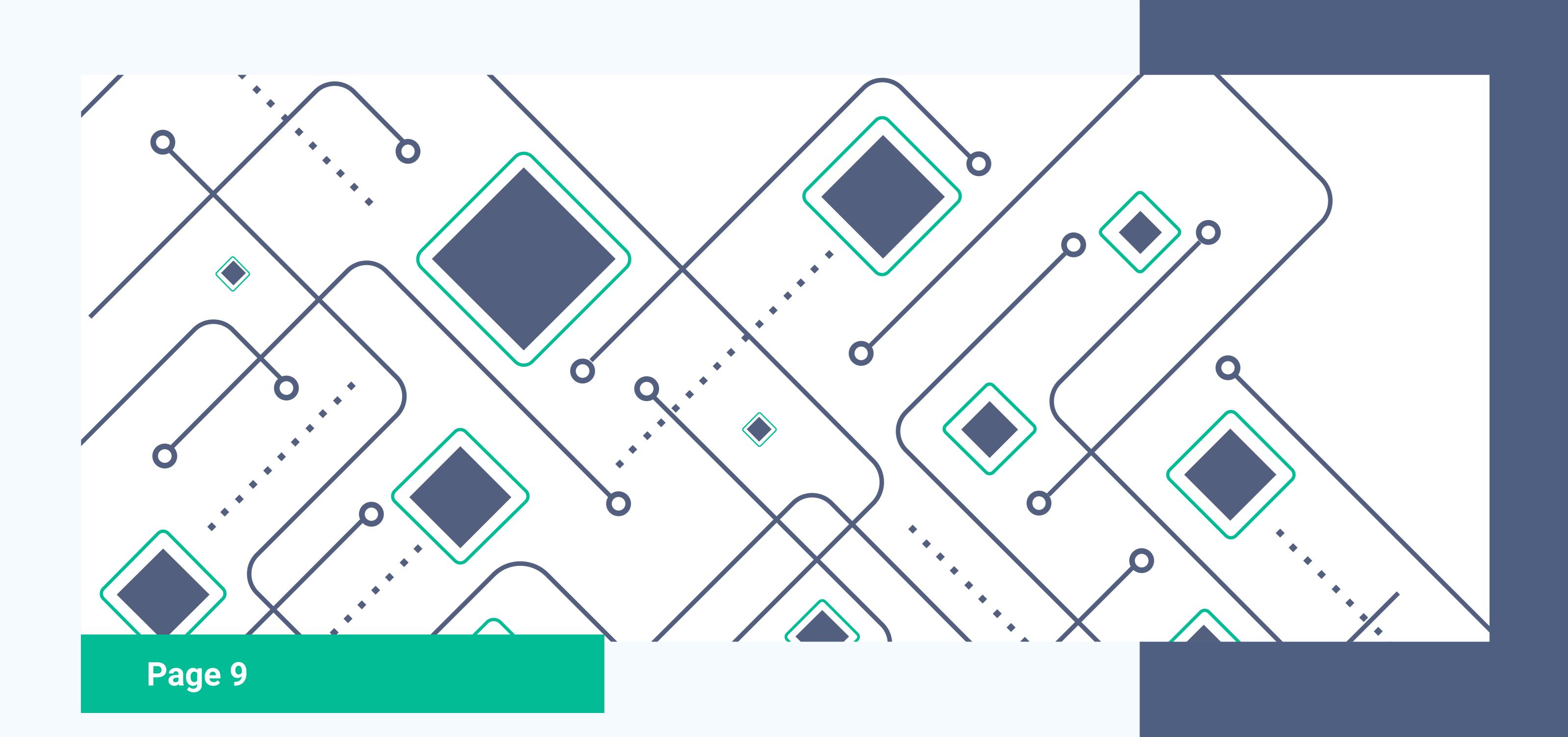
For all chargeback errors that remain, the MediLedger Node provides powerful tools for manufacturers, wholesalers and GPOs to rapidly resolve chargeback errors and disputes. All past contract, customer and roster updates shared through the MediLedger Network are stored as historical versions of each record, accessible easily through an interactive timeline. This data history also stays aligned between trading partners enabling easy research into effective dates and other contract updates. MediLedger also offers advanced search technology enabling sub-second search of all contract, customer, roster and identity data, making MediLedger the fastest way to resolve disputes.

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The Future of Pharma

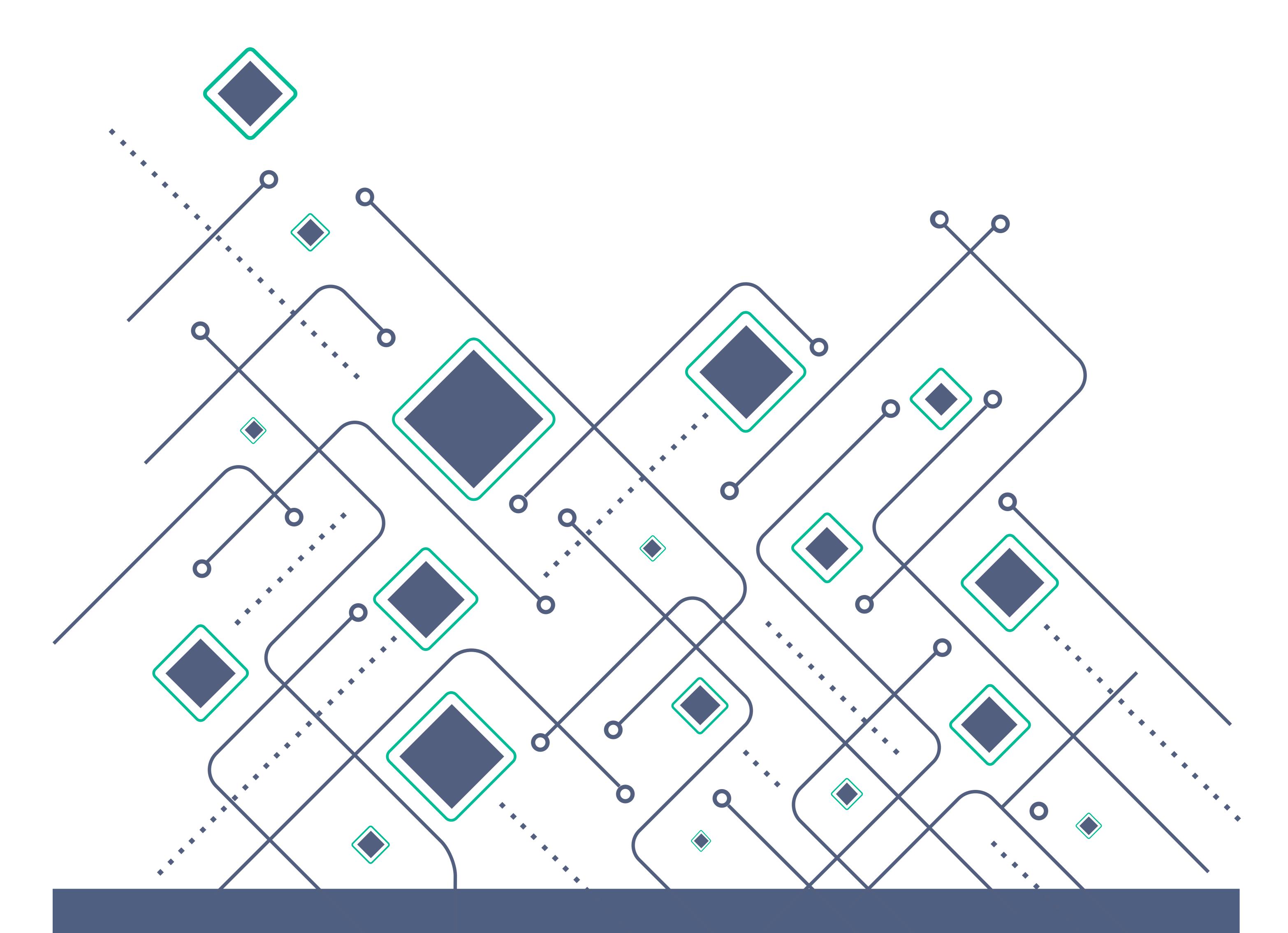
Beyond chargebacks, all shared data and transactions between trading partners can be aligned and automated through the MediLedger Network. Rebates, admin fees and pricing levers can all be aligned, automated and accurate as if the industry were sharing one ERP system. Advanced Cryptography within the MediLedger Network prevents any sensitive business intelligence from being exposed to competitors, while providing industry wide rule enforcement on contract updates inside each participant, without any 3rd party involved. Once contract updates have been recorded on the blockchain, the MediLedger Network will also be able to automatically adjudicate chargebacks, and even handle credits, rebills and other resubmissions and retroactive updates automatically.

Trading partners in the life sciences industry operate independently, with revenue management viewed as a siloed function. Through the MediLedger Network companies can streamline revenue management at the industry level, and supercharge, not only their own revenue management systems, but their customers as well.









How to Supercharge your Revenue Management System through MediLedger

Whitepaper - May, 2021

Chronicled Inc.

To learn more about the Contracts & Chargebacks Solution on the MediLedger Network visit www.chronicled.com or reach out to contact@chronicled.com

White Paper