



Building a Credit Card Analytic Reporting Program

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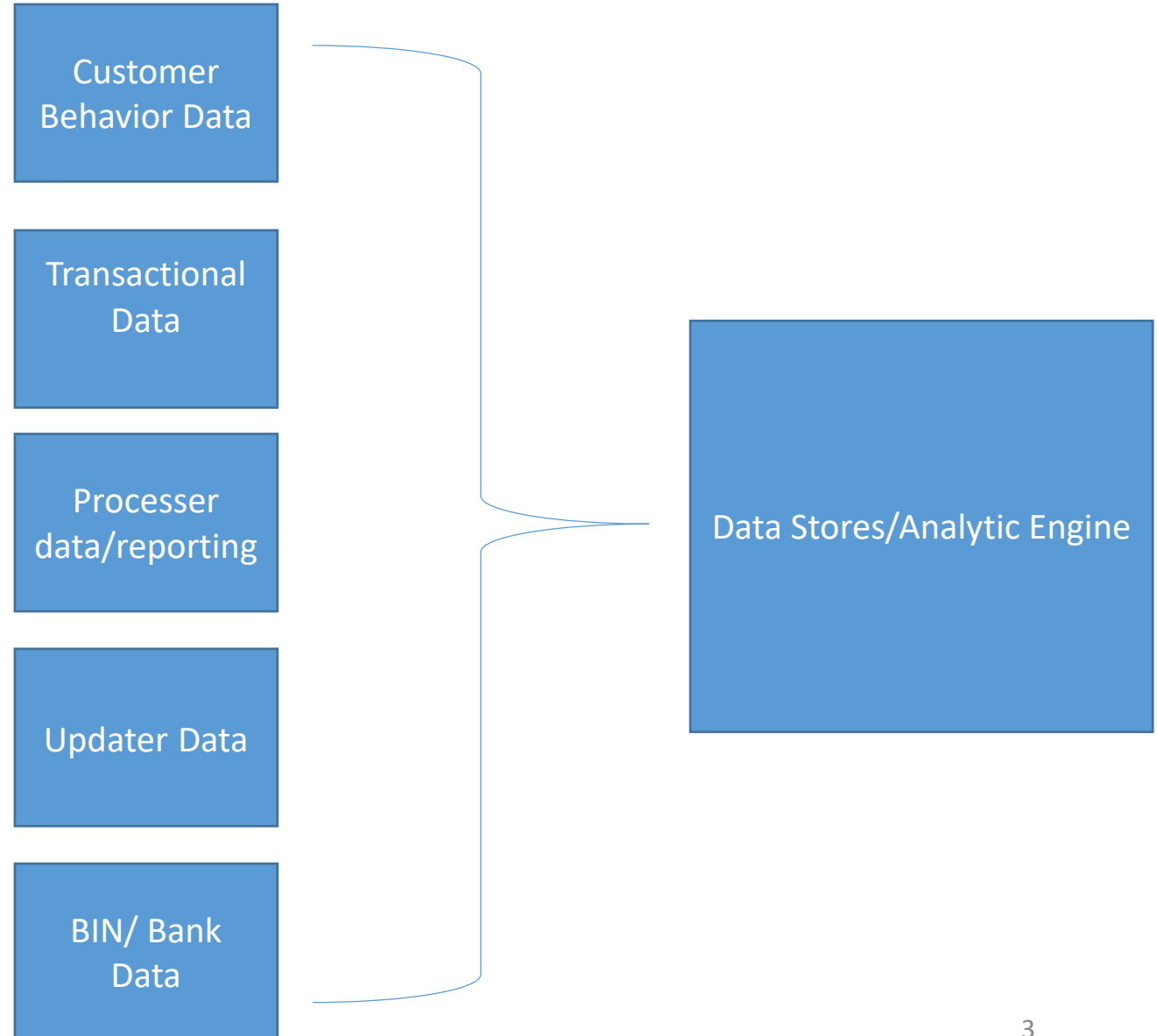
Agenda

1. Sourcing Data
2. Standard KPIs in Transactional Data
 - A. Marketplace vs Recurring Variation
3. Building an analytic program
 - A. Handling “big” transactional data
 - B. Customer analytics
 - C. Card on File analytics
 - D. Account Updater analytics
4. Key Improvements/ Takeaways

This session will look at BIN analytics between Recurring vs Marketplace merchants and ways to turn your reporting into actionable strategies for improved payment performance.

Data Sources

- There are sources all over the place , but not in a single place. Start Small - inventory what data sources you have
- Understand your billing system, order to cash and look for artifacts of the process to leverage
- Investigate what elements you can “link” to a payment attempt: CustomerID, DeviceID, payment token ID, BIN, fraud score, etc
- Leverage your processor data, and reports for information.
- Where possible validate data via multiple sources (e.g., BIN files!)



Standard KPIs in Transactional Data

Data Points

- Transaction volumes
- Bank/Bin card distribution in your base
- Decline/Approval rates
- Issuer and processor decline codes
- Reject rates
- Refund rates

Dimensions

- MOP
- Issuing BANK
- BIN
- Debit/Credit/Prepaid
- Reloadable
- Affluence
- Country
- Acquirer/Gateway

Recurring vs Marketplace Data

Recurring – add'l considerations

- Time of day / day of week / day of month
- Account updater responses
- Subscription opt outs
- Billing record deletion

Marketplace – add'l considerations

- MCC
- Electronic Commerce Indicator
- Line of Business / Product Type
- Platform/device type
- Price point

Note the deltas between the two and how this indicates variance between each billing model.

Transactional Data

- We are talking about BIG data here. Thousands of transactions a day. Eyeballing is not an option!
- Dashboards are a great start, but you'll need a flexible process that allows you quick access to your data to confirm findings and determine impacts.
- Build normalized trends for each dimension: what is common for one BANK/BIN might be a sign of disaster for another, and results can vary when adding additional dimensions!
 - Some banks don't use hard declines, some routinely use generic "Do Not Honor"; some may hard decline based on the AVS response and impact your retry strategy!
 - Decline rates and trends are different for Debit and Credit, Prepaid Cards, by bin/bank – and will even vary with additional dimensions reviewed (e.g., Debit as Recurring vs Debit as eCommerce). While different they all have normal trends.
 - Know what to expect by building trends at each dimension
- Identify deviations from the norm and manage by exception.

Know Your Customer Data

- Billing Cycles & purchase frequency
- Payment Plans & lifecycle events
- Retry Strategy – frequency and timing
 - Milliseconds, hours, days? Break down outcomes by the dimensions you have available.
 - Strategy will differ between Recurring and Marketplace merchants – is your customer seeking product right now?
 - When do your customers purchase vs when do you resubmit on their behalf?
- Card on file data – implement a maintenance and cleanup strategy
 - Improved approval rate
 - BIN/BANK closure/consolidation

Cards on File analysis

- Know your BINs/BANKs on file – your biggest BINs matter the most. 100% decline rate on a BIN that has 5 customers is irrelevant, 5% increase on decline rate for BIN that has thousands of customers is worth researching. Set monitoring thresholds!
- Changes in BIN on file numbers often indicative of changes that could impact the approval rates.

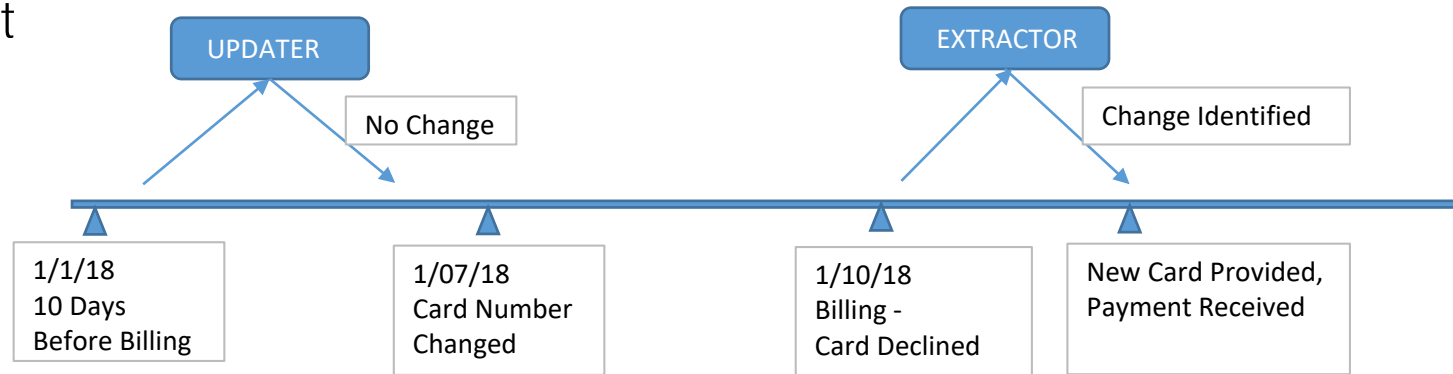
BIN	1/1/2018	2/1/2018	3/1/2018	4/1/2018	5/1/2018	6/1/2018	Change Since 2018	Change Since 2018, %	Change since last month	Change % since last month
414729	30,000	25,997	20,342	20,202	16,434	13,959	16,041	53%	2,475	15%

- Watch what is being added and more importantly watch where they are going
- How are customers exiting collections? Are they adding new cards, or updating exiting cards on file?

Original BIN	414729		
Switch To BIN	Accounts Switched	Accounts Switched, %	
379306	3,351	21%	51%
379308	1,748	11%	
379307	1,736	11%	
379301	1,415	9%	

Updater Data

- Processors provide different levels of Credit Card number updating programs, some of them are automatic updates, others require a push or pull of data by the merchant
- Updater to clean up your wallets/ cards on file is essential for quality of the cards on file. It is also valuable source of analytic data.
- Use of both Updater and Extractor further improves your chances of obtaining the payment



- Expand the use of the updater to bring cards into the process outside of scheduled billing interval. The data can be leveraged to assess if there is an issue, and the potential future impacts to approvals. This would allow for a proactive response to the issue and possibly remediate prior to billing

Updater Analytics

- Updater – is a PT program providing canceled, fraud or credit card number/expiration date changes on an account level
- Pivot that data to track BINs with high cancelations, credit card number changes or fraud indicators to anticipate forthcoming changes to the portfolio at large.

BIN - BANK	Canceled Cards	Canceled, %
546249 - Comuter Services	5,861	37.4%
On Demand	3,043	
Extractor	1,745	
Updater	1,073	
433177 - AMERICAS FIRST FEDERAL CREDIT UNION	4,820	31.2%
Updater	2,564	
Extractor	1,808	
On Demand	447	
480636 - LANDMARK CREDIT UNION	2,648	30.4%
Updater	1,199	
Extractor	859	
On Demand	590	

- Note that the ROI of Account Updater will vary between Recurring and Marketplace merchants – how “sticky” is your customer? When could a (cheaper) zero-dollar authorization work instead?

Key Improvement Strategies

- Updater/Extractor process is key to maintaining accurate card on file, up-to-date wallets
- Create a process to deliver customers into the update outside of a normal cycle, for example ensure that customers with past due expiry dates or customers that have not billed for a longer period have up to date cards in their wallet
- Leverage all the codes from the updater, and create a strategy for communication based on these, e.g., reach out to customers with cancelled cards to avoid preventable declines and drive down collection costs
- Use fraud alerts and algorithms to maintain “trusted merchant” status with processor
- BIN level optimization – work with processors & issuers to understand auth responses and optimize authorization messaging; benchmark your baseline against implemented improvements!
- Constantly tweak and test your algorithms used to identify issues in the data set

Summary & Takeaways

1. Understand your billing systems and processes to identify actionable data that you can leverage for a bin analytic program- Start small
2. Build your transactional data mart
3. Build your trends and know what is normal, in both the customer and payment transactional data
4. Cross reference your data to uncover actionable insights
5. Customize your strategy to your own business needs – Recurring vs Marketplace merchants will have deltas in payment optimization strategy!

Thank you

Don't forget to submit your session evaluation!

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