# Non-Pay Disconnect (NPD) Mitigation Strategy

## Telecommunication Company focused on the U.S. Rural market

Analyzed the early indicative characteristics of NPD customers to enable proactive identification and implement effective treatment mechanism to enhance bill closure rate and reduce non-pay disconnects (NPDs)

# Non-pay Disconnect (NPD) Mitigation Strategy for a Telecommunications Company

**Situation**

- The client lacked visibility into the drivers of the recent uptick in Non-Pay Disconnect customers (NPDs) resulting in an unchecked increase in losses due to non-payment of bills

- The existing treatment steps taken to address NPDs were reactive and manual leading to inefficiencies and increase in operational costs.

- Partnered with the client to identify early indicative characteristics of NPD customers to enable proactive identification and implement effective treatment mechanism to enhance bill closure rate and reduce non-pay disconnects (NPDs)

**Accordion Value Add**

- Analyzed the characteristics of NPD customers to track customer health and identified early behavioral and demographic indicators

- Recommended an optimized outbound communication strategy to target a high bill payment rate based on historical responsiveness to various modes of communication

- Developed an automated Tableau-based dashboard to monitor the health of customer payments and prompt early deviations in payments to initiate a proactive mitigation strategy

**Impact**

- Potential ~30% reduction in Non-Pay Disconnects through early identification of customers by monitoring and proactive initiation of mitigation tactics

- Identified opportunity for 5% increase in on-time bill payment compliance and 25% improvement in bill closure rate of customers with a bill over-due

- Identified ~$8M potential annualized revenue uplift due to mitigation of Non-Pay disconnects

# Methodology/ Approach

## Leading behavioral characteristics of NPDs

- Analyzed the life-cycle of NPD customers to identify unifying characteristics and built an **indicative persona for potential NPDs**

- Enhanced the analysis to capture transaction/payment behavior of customers to **identify leading indicators of non-pay** in early lifecycle period of customers

## Potential NPD customer identification

- Developed a Tableau dashboard to **monitor the health of customer payments in their early life cycle** on an ongoing basis, i.e., identify the critical period to address potential NPD customers

- Provided the **visibility into segments with high share of potential NPDs** based on acquisition channel and the key customer quality index (credit rating)

- Identified a list of prioritized customers with a high risk of becoming NPDs to **enable proactive initiation of mitigative measures**

## Communication strategy for NPD treatment

- Analyzed the outbound communications to **quantify the historical success rates for various modes of communication** (text and call)

- Analyzed the incremental bill payments based on the mode of communication to understand the **potential uplift in revenue** due to successful communication

- Recommended an **optimized outbound communication strategy to target a high bill payment rate** based on historical responsiveness to various modes of communication.

# Critical Timeframe to Mitigate Potential Non-pay Disconnects (NPDs)

## NPD Rate over Months Since Acquisition



High NPD rate within 2-months since acquisition, i.e., early customer lifecycle
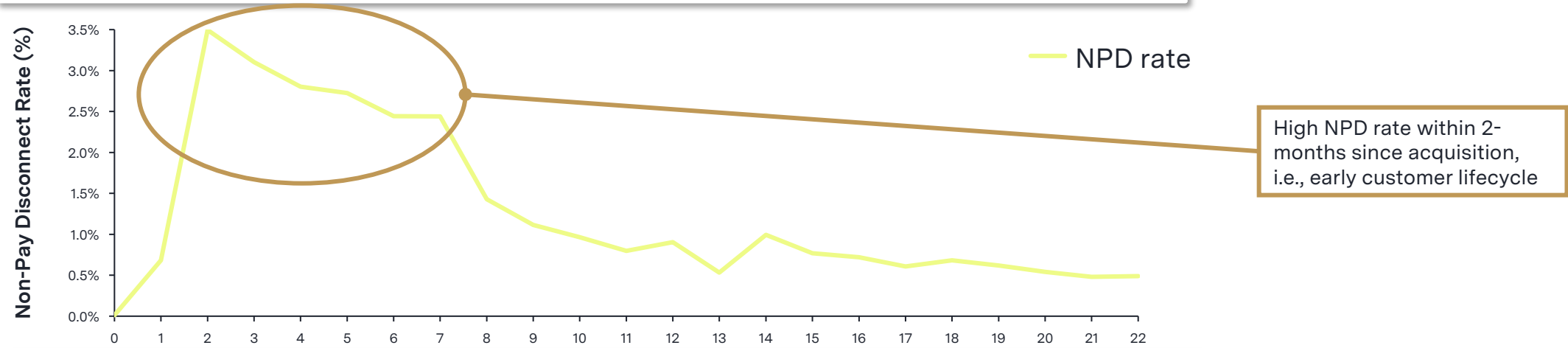
## Bill Payment Rate over Days Past Bill Date



Target payment within ~30 days past bill date to mitigate potential NPD

# Monitor Early Life-cycle Payment Behavior of Customers

## Early life-cycle bill payment

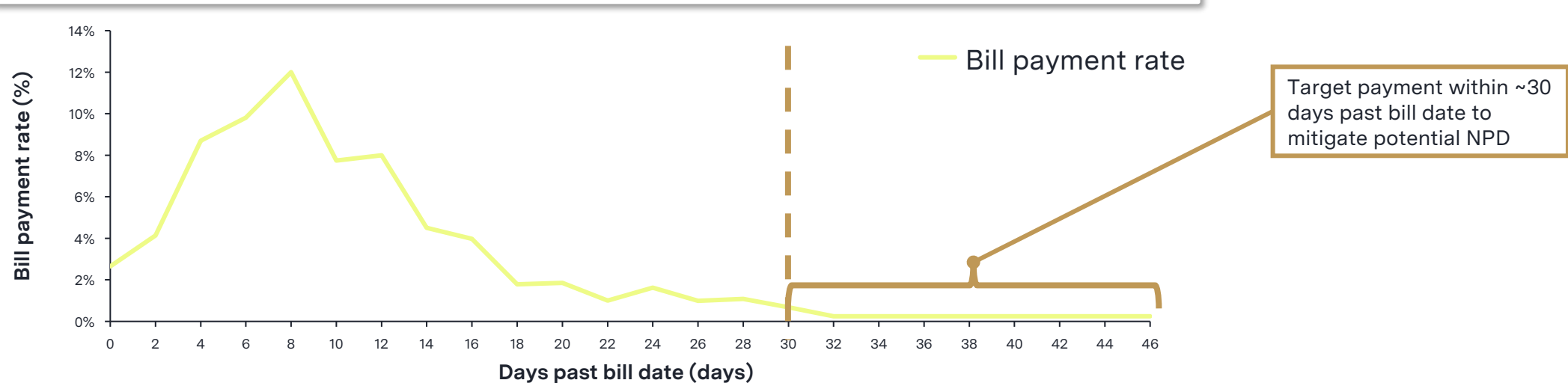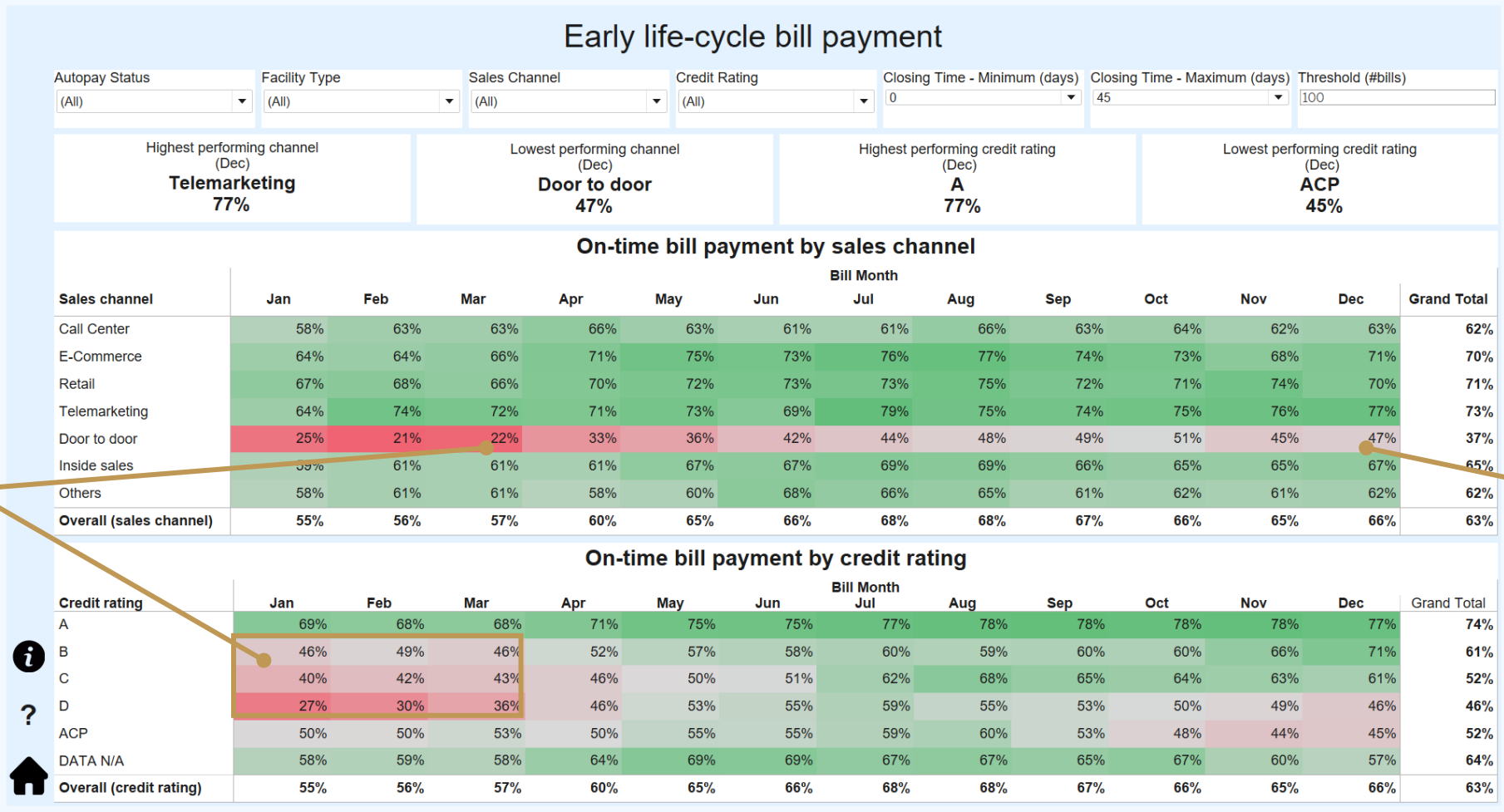| Autopay Status | Facility Type | Sales Channel | Credit Rating | Closing Time - Minimum (days) | Closing Time - Maximum (days) | Threshold (#bills) |
|---|---|---|---|---|---|---|
| (All) | (All) | (All) | (All) | 0 | 45 | 100 |

| Highest performing channel (Dec) | Lowest performing channel (Dec) | Highest performing credit rating (Dec) | Lowest performing credit rating (Dec) |
|---|---|---|---|
| **Telemarketing** **77%** | **Door to door** **47%** | **A** **77%** | **ACP** **45%** |

### On-time bill payment by sales channel

| Sales channel | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Grand Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Call Center | 58% | 63% | 63% | 66% | 63% | 61% | 61% | 66% | 63% | 64% | 62% | 63% | **62%** |
| E-Commerce | 64% | 64% | 66% | 71% | 75% | 73% | 76% | 77% | 74% | 73% | 68% | 71% | **70%** |
| Retail | 67% | 68% | 66% | 70% | 72% | 73% | 73% | 75% | 72% | 71% | 74% | 70% | **71%** |
| Telemarketing | 64% | 74% | 72% | 71% | 73% | 69% | 79% | 75% | 74% | 75% | 76% | 77% | **73%** |
| Door to door | 25% | 21% | 22% | 33% | 36% | 42% | 44% | 48% | 49% | 51% | 45% | 47% | **37%** |
| Inside sales | 59% | 61% | 61% | 61% | 67% | 67% | 69% | 69% | 66% | 65% | 65% | 67% | **65%** |
| Others | 58% | 61% | 61% | 58% | 60% | 68% | 66% | 65% | 61% | 62% | 61% | 62% | **62%** |
| **Overall (sales channel)** | **55%** | **56%** | **57%** | **60%** | **65%** | **66%** | **68%** | **68%** | **67%** | **66%** | **65%** | **66%** | **63%** |

### On-time bill payment by credit rating

| Credit rating | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Grand Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 69% | 68% | 68% | 71% | 75% | 75% | 77% | 78% | 78% | 78% | 78% | 77% | **74%** |
| B | 46% | 49% | 46% | 52% | 57% | 58% | 60% | 59% | 60% | 60% | 66% | 71% | **61%** |
| C | 40% | 42% | 43% | 46% | 50% | 51% | 62% | 68% | 65% | 64% | 63% | 61% | **52%** |
| D | 27% | 30% | 36% | 46% | 53% | 55% | 59% | 55% | 53% | 50% | 49% | 46% | **46%** |
| ACP | 50% | 50% | 53% | 50% | 55% | 55% | 59% | 60% | 53% | 48% | 44% | 45% | **52%** |
| DATA N/A | 58% | 59% | 58% | 64% | 69% | 69% | 67% | 67% | 65% | 67% | 60% | 57% | **64%** |
| **Overall (credit rating)** | **55%** | **56%** | **57%** | **60%** | **65%** | **66%** | **68%** | **68%** | **67%** | **66%** | **65%** | **66%** | **63%** |

Identified the area of concerns based on low on-time bill payments during early life-cycle

Initiated mitigation strategy and monitoring improvements over time

# Prioritized Customer List for Proactive NPD Mitigative Measures

## Potential NPD customers based on early life-cycle

| Bill Month | Customer Status | Days to Close Bucket | Autopay Status | Facility Type | Sales Channel | Credit Rating |
|---|---|---|---|---|---|---|
| (All) | (All) | Not Closed in 45 days | (All) | (All) | (All) | (All) |

High priority customers to mitigate potential NPDs

| CUSTOMER ID | BILL MONTH | DAYS PAST BILL DATE | CREDIT RATING | SALES CHANNEL | AUTOPAY STATUS |
|---|---|---|---|---|---|
| 1795371190 | Jun | 71 | B | Door to door | Never had Autopay |
| 1795370926 | Jun | 71 | Other | Door to door | Autopay is on |
| 1795370695 | Jun | 71 | ACP | Inside sales | Never had Autopay |
| 1795370607 | Jun | 71 | Other | Door to door | Autopay is off |
| 1795370552 | Jun | 71 | C | Inside sales | Never had Autopay |
| 1795370310 | Jun | 71 | ACP | Inside sales | Never had Autopay |
| 1795370200 | Jun | 71 | Other | Door to door | Autopay is on |
| 1795370156 | Jun | 71 | Other | Door to door | Autopay is off |
| 1795370112 | Jun | 71 | Other | Door to door | Autopay is on |
| 1795370090 | Jun | 71 | Other | Door to door | Autopay is on |
| 1795370068 | Jun | 71 | ACP | Inside sales | Autopay is off |
| 1795369639 | Jun | 71 | ACP | Door to door | Autopay is off |
| 1795368924 | Jun | 71 | Other | Door to door | Autopay is on |
| 1795368704 | Jun | 71 | Other | Door to door | Never had Autopay |
| 1795368616 | Jun | 71 | Other | Door to door | Autopay is off |
| 1795368495 | Jun | 71 | Other | Door to door | Autopay is off |
| 1795368440 | Jun | 71 | Other | Door to door | Autopay is off |
| 1795368264 | Jun | 71 | Other | Door to door | Autopay is off |
| 1795368253 | Jun | 71 | Other | Door to door | Autopay is on |
| 1795368176 | Jun | 71 | C | Inside sales | Autopay is off |
| 1795368110 | Jun | 71 | Other | Door to door | Autopay is on |
| 1795367901 | Jun | 71 | Other | Door to door | Autopay is off |
| 1795367857 | Jun | 71 | D | Door to door | Autopay is off |
| 1795367835 | Jun | 71 | Other | Door to door | Never had Autopay |
| 1795367824 | Jun | 71 | A | Door to door | Never had Autopay |
| 1795367802 | Jun | 71 | Other | Door to door | Autopay is on |
| 1795327344 | Jun | 71 | A | Inside sales | Never had Autopay |
| 1795327135 | Jun | 71 | A | Inside sales | Never had Autopay |
| 1795326706 | Jun | 71 | D | Inside sales | Never had Autopay |
| 1795324726 | Jun | 71 | ACP | Door to door | Autopay is off |
| 1795324627 | Jun | 71 | D | Inside sales | Autopay is off |
| 1795324341 | Jun | 71 | Other | Door to door | Never had Autopay |
| 1795324264 | Jun | 71 | ACP | Inside sales | Never had Autopay |
| 1795324022 | Jun | 71 | ACP | Inside sales | Never had Autopay |
| 1795323593 | Jun | 71 | ACP | Inside sales | Never had Autopay |
| 1795321459 | Jun | 71 | A | Inside sales | Never had Autopay |
| 1795321305 | Jun | 71 | A | Inside sales | Never had Autopay |
| 1795321030 | Jun | 71 | ACP | Inside sales | Never had Autopay |
| 1795320678 | Jun | 71 | Other | Door to door | Autopay is off |
| 1795320645 | Jun | 71 | D | Inside sales | Never had Autopay |
| 1795320579 | Jun | 71 | Other | Door to door | Never had Autopay |

# Identifying Effective Communication Modes for NPD Mitigation

High Responsive mode of communications

High incremental bill payments
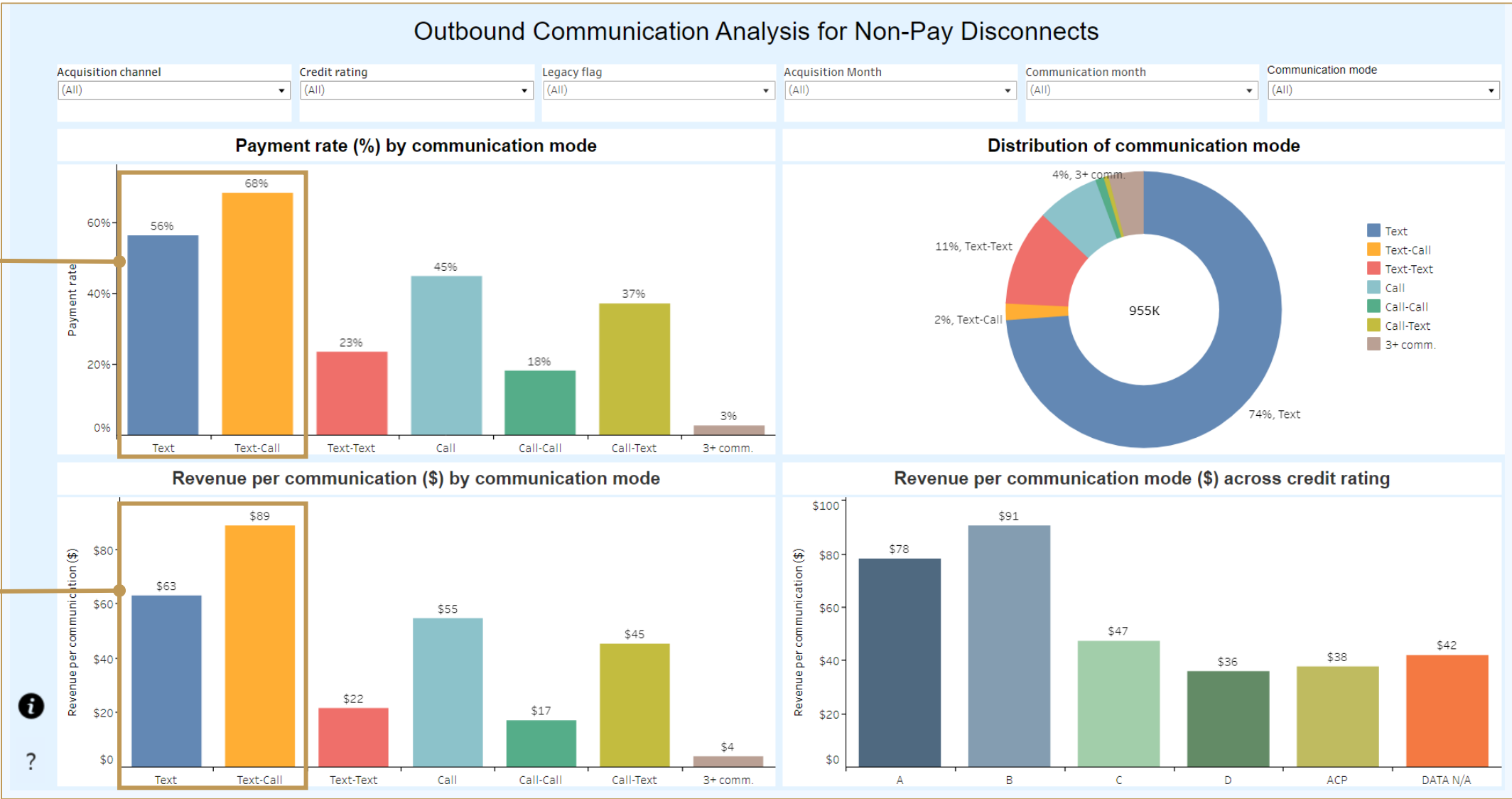
# Optimized Communication Strategy Towards NPDs for High Bill Payment Rate