

# HOW *DATA ANALYTICS* IS REDEFINING COLLECTIONS



**IMPROVED  
PORTFOLIO  
MANAGEMENT**



**ENHANCED ROI  
PROJECTIONS**



**R•D•S**  
RECOVERY DECISION SCIENCE

## INTRODUCTION

**One of the biggest challenges in the debt management and collection industry is effective assessment of projected returns on a debt portfolio.**

- What are the variables that go into the decision to litigate?
- How do you determine the true value of a portfolio with regard to the return you are likely to realize if you move forward with litigation?

**A major problem in the industry is that a fair amount of outdated, inaccurate or unverified data is often used to guide multi-million dollar decisions. Using such data leads to myriad problems:**

- Pursuing the wrong accounts is time-consuming
- Relying on poor data can lead to wasted court costs and effort
- Focusing on the wrong accounts results in missed opportunities

In response to the industry's call for better information, Unifund created Recovery Decision Science. RDS's mission is simple:

***Provide debt portfolio managers with a data-driven model to guide the portfolio management process and maximize the return on their treatment decisions.***

RDS developed two proprietary analytics models that have begun to pay dividends for our clients:

- 1. Paymetrix AD (Account Decisioning):** identifies and prioritizes legal collection decisions
- 2. Paymetrix AI (Asset Identification):** gives portfolio managers the power to identify previously undiscovered consumer assets.

Paymetrix AD and AI are now featured within the portfolio of financial analysis products offered by LexisNexis Risk Solutions. To learn more visit: [lexisnexis.com/risk/receivables-management](https://lexisnexis.com/risk/receivables-management)

This white paper shows how the Paymetrix suite of advanced data analytics can be used to maximize decision-making and returns at every stage of managing a debt portfolio.

**IMPORTANT:** The examples you will see in the following pages are composites of actual portfolio cases from the RDS files and illustrated examples.



## SECTION I

### PORTFOLIO EVALUATION

#### PURPOSE OF EVALUATION

Evaluating the portfolio allows us to estimate its future value based on its characteristics. Specifically, it gives us the basis we need to measure success, whether looking at return on investment (ROI), internal rate of return (IRR), or another indicator. For purposes of this paper, we will use ROI to measure the return on our portfolio. To do this we will need to answer some basic questions, such as:

- How many accounts do we estimate will pay?
- How many accounts qualify for litigation?
- How many accounts should be placed with collection agencies for contact collection?

These questions help us to determine the ROI that we should expect on the portfolio.

Ability to Pay	High <b>Ability</b> Low <b>Willingness</b>	High <b>Ability</b> High <b>Willingness</b>
	Low <b>Ability</b> Low <b>Willingness</b>	Low <b>Ability</b> High <b>Willingness</b>
Willingness to Pay		

## **ACCOUNT TYPES**

Each account can be categorized based on the consumer's willingness and ability to pay, as follows: Ideally, the consumer will begin to pay voluntarily once a collection attempt has been made, which saves you both the time and additional costs of pursuing further collection efforts. But most often when dealing with accounts for which previous agencies have made multiple collection efforts, consumers do not pay voluntarily and they stop responding to collection attempts. The more times that prior collection efforts have been made, the lower the likelihood of a consumer paying voluntarily. Eventually, an account reaches a point where collection attempts have been exhausted. One avenue that can be very effective on these accounts is litigation.

## **SUIT-DECISION PROCESS**

One difference between older, outdated approaches and newer, innovative approaches is how accounts are selected for litigation. In the past, it was difficult for collectors to know which consumers had the ability to pay vs. not have the ability to pay, primarily due to insufficient technology and data. Without using data and technology, collectors are left blind as they target a percentage of a portfolio for litigation without knowing if those accounts selected were the best candidates for litigation. This is commonly referred to as a "suit-rate" and is not an optimal solution. Every account that is litigated costs time and money. Court costs and attorney's fees are costly and require an up-front investment with no guarantee of recovery. Spending valuable resources litigating the wrong account results in not only a loss of the related costs but also a missed opportunity to litigate another, more suitable account. It is crucial to choose the right accounts for litigation and to assign the rest to receive other, more appropriate treatments.





## SECTION II

### PAYMETRIX AD: ACCOUNT-DECISIONING REDEFINED

#### RAINFALL MODEL

Recovery Decision Science developed Paymetrix AD (Account Decisioning) by analyzing, testing, and transforming years of collection data into a suit-decisioning model.

Paymetrix AD is built around RDS's exclusive rainfall analytics model. As the name suggests, rainfall is patterned after the process weather analysts use in forecasting. When assessing the viability of legal action, this methodology offers two insights:

- 1. What is the probability of "rain?"** Using a logistics regression of numerous variables, we are able to project the likelihood of an account paying (i.e. what's the chance of rain?)
- 2. How much rain will fall?** Once we've determined the probability of someone paying, we use a linear regression to determine how much that account is likely to pay, more specifically, the probability-adjusted, net-present value of each individual account.

An important element in this analysis is estimating the cost to litigate the account. As shown in the chart below, the final result of using rainfall is a **profitability index** that provides unparalleled insight into:

- Litigating more of the right accounts with a high probability to pay and a higher NPV related to costs in order to maximize revenue
- Eliminating costs by not wasting valuable resources on the wrong accounts

$$\frac{\text{Probability Adjusted NPV}}{\text{Court Cost + Information Cost}} = \frac{\$1,900}{\$276 + \$175} = 4.2 \text{ Profitability}$$

The Profitability Index defined: Present value of cash inflow/Present value of cash outflow

(NOTE: See Profitability Index case studies in the Results section at the end of this paper)

## TREATMENTS

Experienced analysts work with this information to separate the accounts into appropriate treatment tracks, primarily:

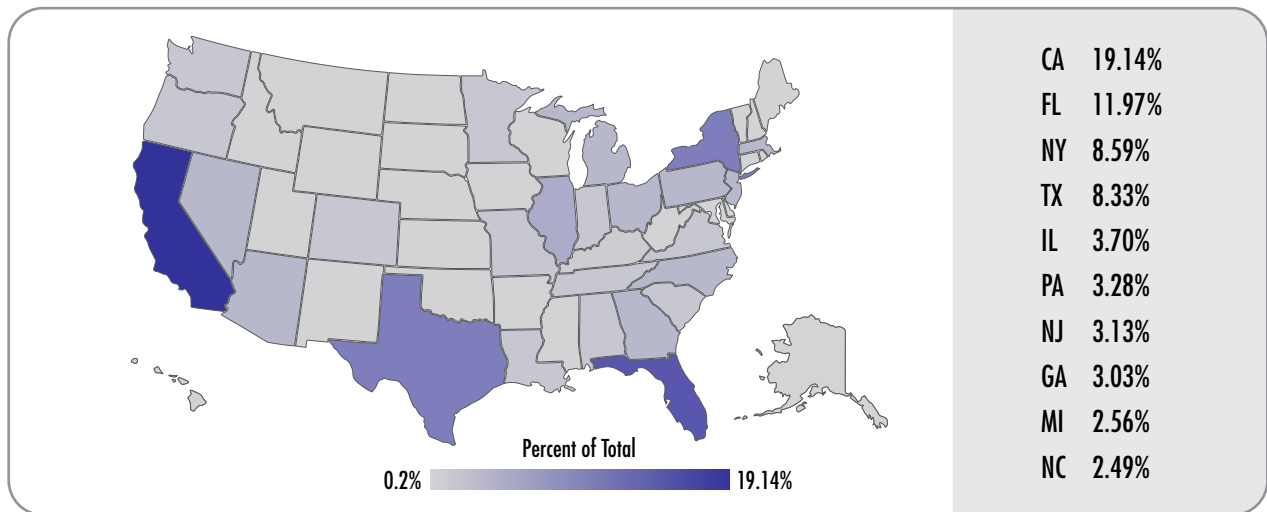
- Contact Collections
- Litigation
- Other

Contact Collection treatments are designed to handle accounts with a **low Profitability Index**. While these accounts might still be within the statute of limitations and otherwise appear on the surface to qualify for litigation, Paymetrix AD tells us that litigation is not predicted to be cost-effective. Knowing this information prior to litigation saves you from wasting court costs and time that could be invested more profitably elsewhere. Instead, you can use those resources to pursue legal collections for those eligible accounts that have a high Profitability Index. Lastly, the Other treatments are designed to handle accounts that are ineligible for Litigation/Contact Collection treatments.

## PORTFOLIO SUMMARY

Now that we have given a quick summary of the purpose of an evaluation, account types, account treatments and suit-decisioning using Paymetrix AD, we turn to the summary of the portfolio. Once our client has uploaded the file to our secure FTP site, our team performs and summarizes the evaluation. In this example, we are using a portfolio with the following characteristics:

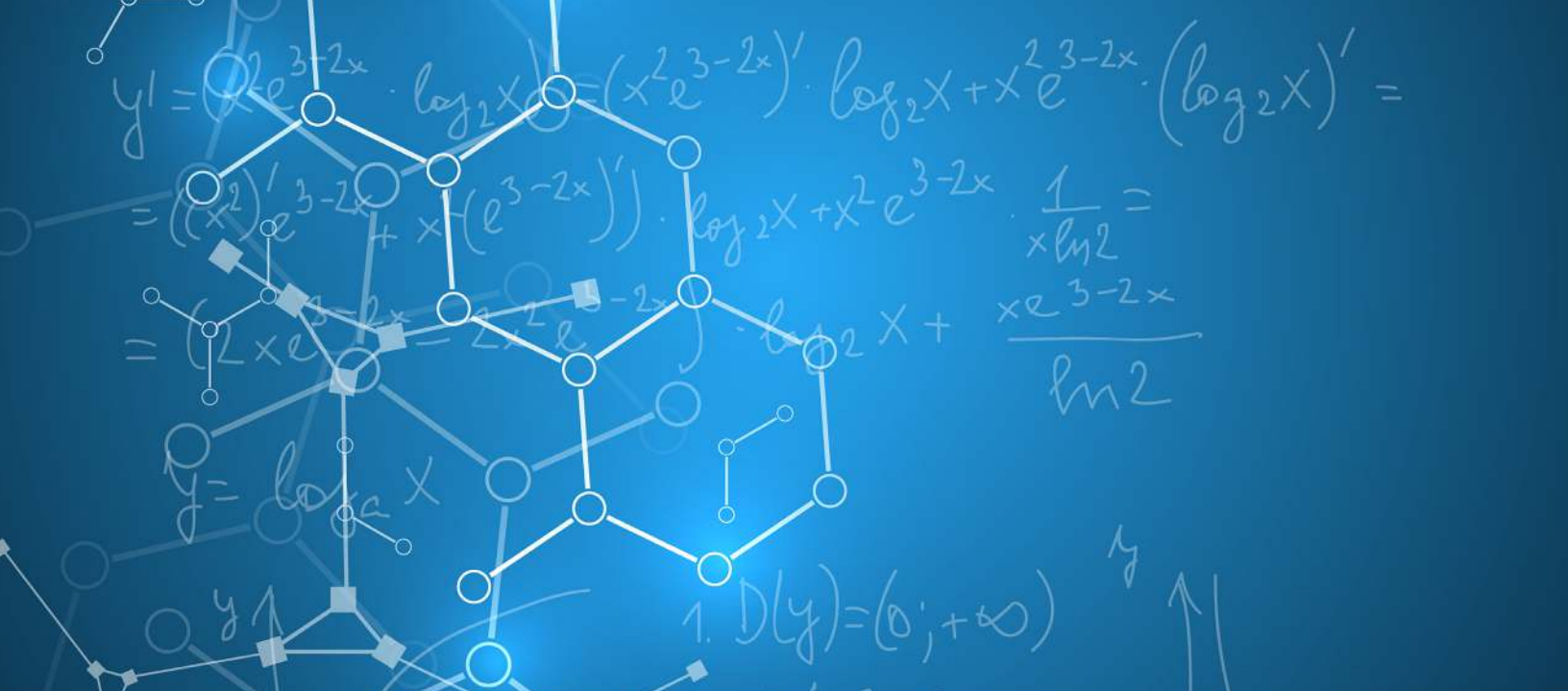
- Total Face Value: \$100 M
- Total # of Accounts: 14,200
- Average Balance per Account: \$7,042
- State Breakdown
- Top 10 States



The next step is to apply Paymetrix AD to the portfolio data and determine the following projections with each treatment track for our sample portfolio:

- Contact Collection: 65% of accounts predicted to return \$3M
- Litigation: 30% of accounts predicted to return \$8.3M
- Other: 5% of accounts predicted to return \$100K

No forecasting method will be 100% accurate. However, we have found that Paymetrix AD projections have proven very accurate over time and provide a successful placement guide to optimize recovery.



### SECTION III

#### PAYMETRIX AI AND THE POWER OF ASSET VERIFICATION

In Section I on Portfolio Evaluation, we reviewed the importance of identifying the appropriate treatment for accounts that have not paid voluntarily. The first step in RDS's proprietary rainfall model, Paymetrix AD, analyzes each account to determine its profitability for litigation. Ineligible accounts (deceased or bankrupt consumers, for example), will receive other treatments.

A Profitability Index, as referenced in that section, is then assigned to all eligible accounts to determine the most appropriate and cost-effective treatment. Litigation is assigned to accounts with a high expectation of recovering the up-front costs. Those accounts with a low Profitability Index are placed for Contact Collections. (NOTE: a Contact Collection score can be used on these accounts).

The projected returns on our mock portfolio reflect Paymetrix AD's ROI according to the variable information within the portfolio provided by the client. **However, there are two important questions to consider:**

- **What if a variable changes over time?**
- **What if the information initially provided was inaccurate?**

We must control for inevitable changes in the data to maintain the accuracy of our projections and make any necessary adjustments to account level treatments. This is where Paymetrix AI enters the picture.



## THE VALUE OF INFORMATION

Paymetrix AI optimizes asset searching costs by leveraging decades of experience with data vendors. This experience has shown, time and again, that you get what you pay for. If a vendor provides **information that is cheap**, there is a good chance that the data is either inaccurate or out of date. Paying for invalid data is wasting more than just money; it's wasting the time, effort and additional costs that will be spent pursuing an invalid asset.

RDS uses a waterfall methodology to project the quality and value of the vendor's information. Importantly, the methodology looks beyond costs to focus on the known outcomes of the information we have purchased from each vendor.

Just like the "suit-rate" strategies that some collectors use to make decisions on which accounts should be litigated, shopping for data vendors by cost alone is a misguided strategy. Combining Paymetrix AD and Paymetrix AI, maximizes recovery and minimizes waste throughout the life of an account.

## RENEWED PORTFOLIO PROJECTIONS

After applying the Paymetrix AI solution, Paymetrix AD determines the following:

- Contact Collections: 66% total estimated collections = \$3.1M
- Litigation: 28% total estimated collections = \$8M
- Other: 6% total estimated collections = \$115K



## SECTION IV

### ACCOUNT PLACEMENTS AND TRACKING

#### PLACEMENTS

As discussed in Section II, RDS used our account decisioning tool, Paymetrix AD, to segment the portfolio into different treatment channels. Paymetrix AI was then applied to the portfolio to search for assets, and the following treatments and projections were reached:

#### OTHER TREATMENTS

***6% of the portfolio, 100K estimated collections***

6% of the portfolio has been projected to receive other treatments. These accounts (bankruptcy or deceased, for example) must receive special handling according to federal law and regulations that are governed by the jurisdiction in which the consumer resides. The client makes the decision to process these accounts using their own methods.

#### CONTACT COLLECTION TREATMENTS

***66% of the portfolio, 3M estimated collections***

66% of the portfolio has been projected to receive Contact Collection treatments. Our rainfall model shows that litigating these accounts would not be cost-effective. The client should utilize an in-house call center and/or third-party collection agencies to work these accounts.

## LITIGATION TREATMENTS

*28% of the portfolio, 8M estimated collections*

The remaining 28% of the portfolio has been identified for litigation, which is projected to be a profitable strategy for these accounts, despite the additional costs necessary for filing a lawsuit. Our focus now turns to tracking these accounts throughout the life of the litigation process.

### **ATTORNEY NETWORK AND LIAISON TEAM**

Litigation accounts are placed with our nation-wide attorney network. An internal liaison team with more than two decades of experience communicates with the network attorneys to help address their needs and ensure each account progresses through the various phases of litigation. The attorneys and liaisons work together to retrieve account documents, answer account level questions, address account changes, prepare documents, establish payment plans, locate consumers, domesticate judgments, and much more. The team also ensures that the attorneys are moving forward with asset execution and facilitates feedback if an asset cannot be executed upon.



## SECTION V

### LITIGATION PATH AND JUDGMENT MAINTENANCE

#### LITIGATION MONITORING

Accounts in litigation are continuously monitored to ensure they are advancing through the process as expected using a proprietary tool called the Legal Inventory Management System (LIM). LIM provides a snapshot of the accounts by phase as they pass from filing of the initial lawsuit to post judgment. LIM leverages a 30+ year history of account level data to determine the length of time, by jurisdiction, an account typically should spend in each phase and status of litigation.

The liaison team uses this information to identify accounts that are delayed and either keep those accounts moving forward or cure whatever deficiencies have caused the accounts to stall. Those deficiencies may reflect changes or delays at the jurisdictional level (for example, a court system that is experiencing delays in entering judgments), or a performance issue with an individual law firm, or a documentation request that needs to be fulfilled.

#### JUDGMENT MAINTENANCE

Monitoring is just as crucial for accounts once they reach judgment and post-judgment collection efforts begin. In this phase, our liaison team works closely with the attorney network to track each judgment. For example, if state laws allow a judgment to be collected through wage garnishment, the liaison team may need to track the process through issuance of the garnishment, service of the garnishment upon the employer and consumer, and regular receipt of garnishment payments. Delays may arise through difficulties in obtaining service, or legal limits on the garnishment itself (for example, the consumer may have another garnishment that must be satisfied first). This attention to detail in each phase and current status of collection activity protects the investment made in up-front costs needed to pursue the litigation treatment.

## SECTION VI

### RESULTS

#### COMPOSITE CASE STUDIES

The pages above outline how the Paymetrix suite of advanced analytic products can guide both account decisioning and asset verification. Below, we illustrate three different outcomes from composite case studies of actual accounts.

##### Mr. Green



Mr. Green had an original balance of \$5,000. The creditor purchased asset data on Mr. Green from a large data vendor for \$1. The vendor's data indicated that Mr. Green owned a home, but the data was not accurate and there was NO HOME from which to draw value. Five years and \$449 in data and court costs later, the only thing the creditor has to show for the bad data is a dormant judgment and no payments. If the creditor had used RDS's Paymetrix suite to obtain accurate and actionable asset data, the creditor could have better prioritized, saved the court costs associated with this judgement and focused on accounts with a much higher likelihood of paying.

**MONTHS: 60**  
**GROSS COLLECTED: \$0**

**The Story: Bad data for Cheap + Extremely Low Likelihood of Paying=Wasted Cost and Time and Lost Opportunity on Better Accounts.**

$$\frac{\text{Probability Adjusted NPV}}{\text{Court Cost + Information Cost}} = \frac{\$0}{\$448 + \$1} = \text{\textcolor{red}{(\$449)}}$$

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## Mr. Yellow



Mr. Yellow had an original balance of \$4,500. Mr. Yellow's creditor took a strategic approach and partnered with RDS to obtain accurate and actionable asset information and predictive modeling. Using RDS's Paymetrix suite of industry-leading analytical products, the creditor discovered a VERIFIED HOME and a solid EMPLOYMENT HISTORY, leading to an estimate that Mr. Yellow had a 57% likelihood of paying. Now, 18 months and \$460 in data and court costs later, the creditor has collected \$3,173 gross, OR 3X their investment.

**MONTHS: 18**  
**GROSS COLLECTED: \$3,173**  
**LIKELIHOOD OF PAYING: 57%**

**The Story: 18 Months + High Cost + High Likelihood of Paying=3.0 Times Return On Money.**

$$\frac{\text{Probability Adjusted NPV}}{\text{Court Cost + Information Cost}} = \frac{\$1,400}{\$335 + \$125} = \mathbf{3.0 \text{ Profitability Index}}$$

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## Mr. Pink



Mr. Pink has an original balance of \$5,500. The creditor leveraged RDS's complete Paymetrix capabilities and identified that Mr. Pink had verified core assets of a HOME and LENGTHY EMPLOYMENT history. Paymetrix proprietary data-mining process tracked and analyzed 76 variables in Mr. Pink's profile that produced an estimate that that Mr. Pink had an 82% likelihood of paying. Paymetrix delivered powerful data that helped prioritize this suit. Now, 14 months and \$451 in data and court costs later, the creditor has collected \$3,307 gross, or 4.2X their investment..

**MONTHS: 14**  
**GROSS COLLECTED: \$3,307**  
**LIKELIHOOD OF PAYING: 82%**

**The Story: 14 Months + Lower Costs + Very High Likelihood of Paying= 4.2 Times Return on Money.**

$$\frac{\text{Probability Adjusted NPV}}{\text{Court Cost + Information Cost}} = \frac{\$1,900}{\$276 + \$175} = \mathbf{4.2 \text{ Profitability Index}}$$

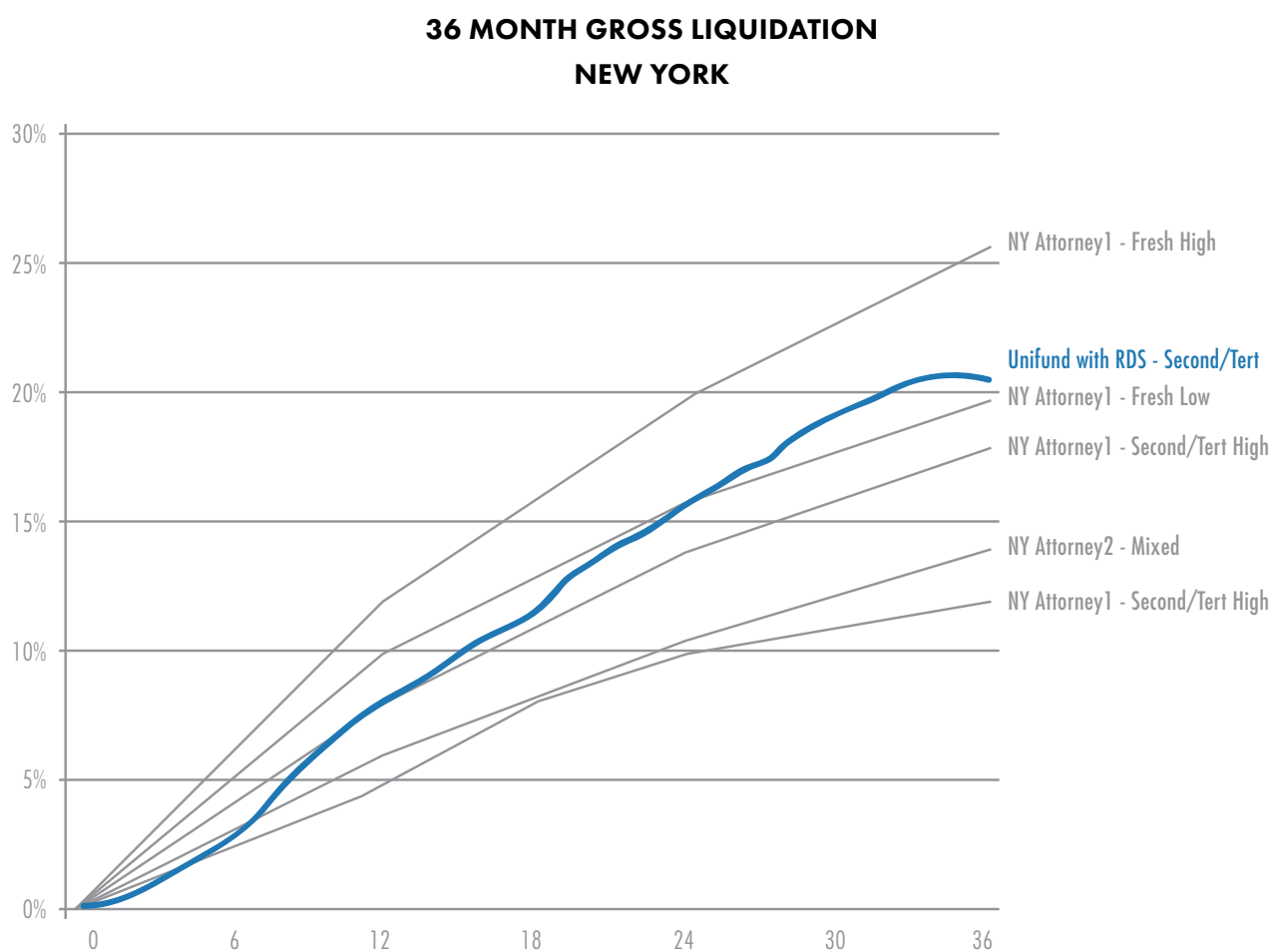
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As you can see, both the value of the data and how it is applied can have a significant impact on your ROI.

## LONG-TERM PERFORMANCE

How does Paymetrix perform during a longer window?

The chart below is comparing an attorney's performance of his other clients' accounts without RDS vs. his accounts from RDS using the Paymetrix solution. Note the RDS accounts, comprised of secondary and tertiary paper, outperforms the liquidation rates of four of the attorney's portfolios.





## SECTION VII

### COMPLIANCE

As a solution provider to the nation's leading creditors, banks, debt buyers and licensed collection agencies, we understand the importance of strict security and compliance controls. During the first 30 years of data and analytics leadership in asset recovery, we have designed a solid platform of risk, security and compliance procedures to ensure our clients' data is protected and secure.

You can review our protocols on the **RISK MANAGEMENT** tab of the RDS website.

Further, in April, 2018, RDS submitted Paymetrix to an independent third-party for a Fair Lending analysis.

***The purpose was to determine if the use of Paymetrix may result in an impermissible disparate impact on a protected class.***

The report concludes: "Based on our analysis, the use of Paymetrix is unlikely to result in an impermissible disparate impact on a protected class. Specifically:

1. Paymetrix passes muster under the CFPB's proxy methodology
2. RDS uses factors that bear a demonstrable relationship to expected return
3. Although Paymetrix appears to function based on certain discretionary parameters (such as blanket exclusion of persons age 70 and older), RDS's decisions in this regard are supported by statistical analysis
4. Apart from the analysis produced by Paymetrix, it is our understanding that RDS has no input in any given creditor's decision to sue. In other words, RDS's participation in the decision-making process is limited to providing an empirically derived, demonstrably and statistically sound litigation scoring system."

Attached, please find the detailed Fair Lending Analysis for your review.



**TO LEARN MORE ABOUT PAYMETRIX CONTACT  
RECOVERY DECISION SCIENCE: 513.615.9990, or**

**LEXIS-NEXIS RISK SOLUTIONS  
(OUR STRATEGIC PARTNER SINCE APRIL, 2016)**