

# Managing the affordability crisis



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We know utilities.

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# Utility Customer Research Consortium

The E Source Utility Customer Research Consortium is a blue-ribbon panel of executives working together to identify opportunities for improvement and innovation in customer service and care.

The Utility Customer Research Consortium emphasizes peer-to-peer interaction and information sharing and is committed to working with the members to conduct collaborative research and consumer surveys, and to develop other content to enrich the dialogue among members and to provide thought leadership in the utility sector.

# Current Utility Customer Research Consortium members



# Agenda

- Growing affordability crisis and arrearage management
- How can data science improve how we respond to arrears?
- Arrears risk
- Micro-cohorting
- Employment, income, and debt recovery
- Credit risk and payment behavior
- Areas of focus

# Speakers



**Jamie Wimberly**

Senior Vice President,  
Utility Customer Strategy  
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**Bob Cooke**

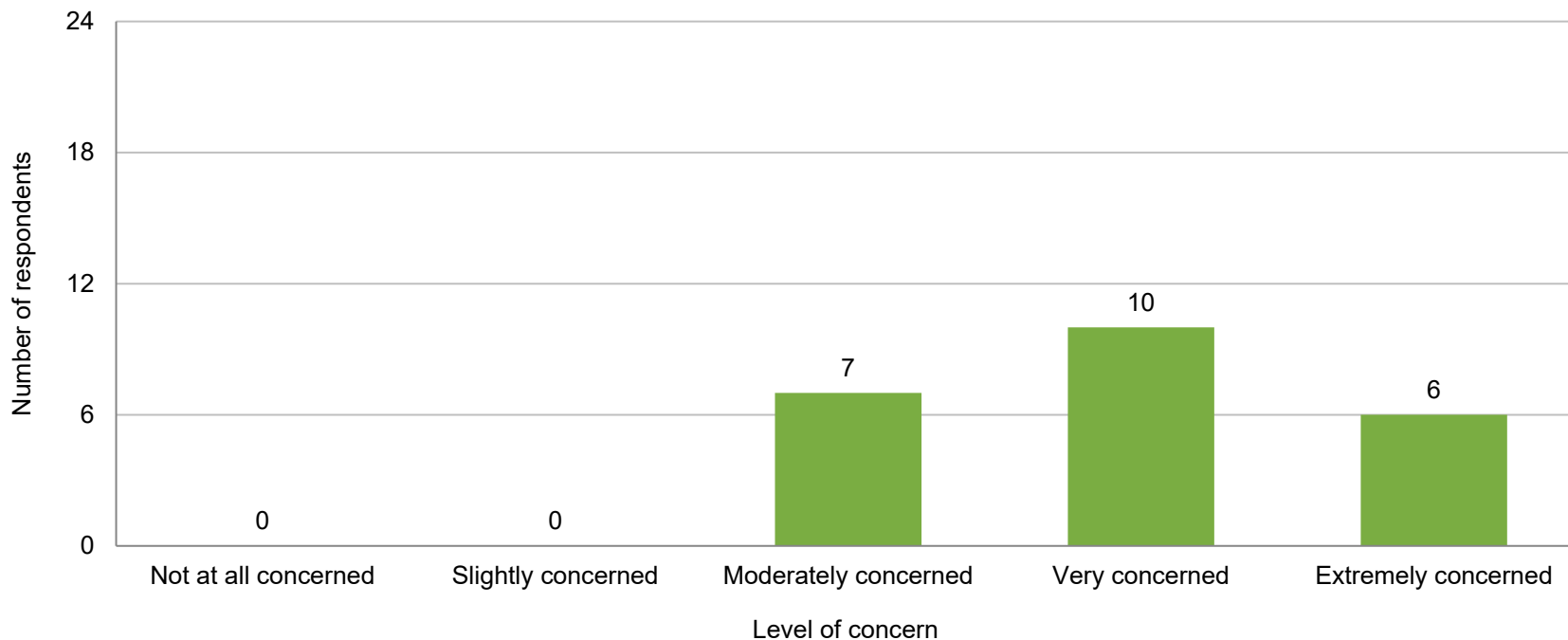
Executive Consultant,  
Consulting  
E Source



**Tom Martin**

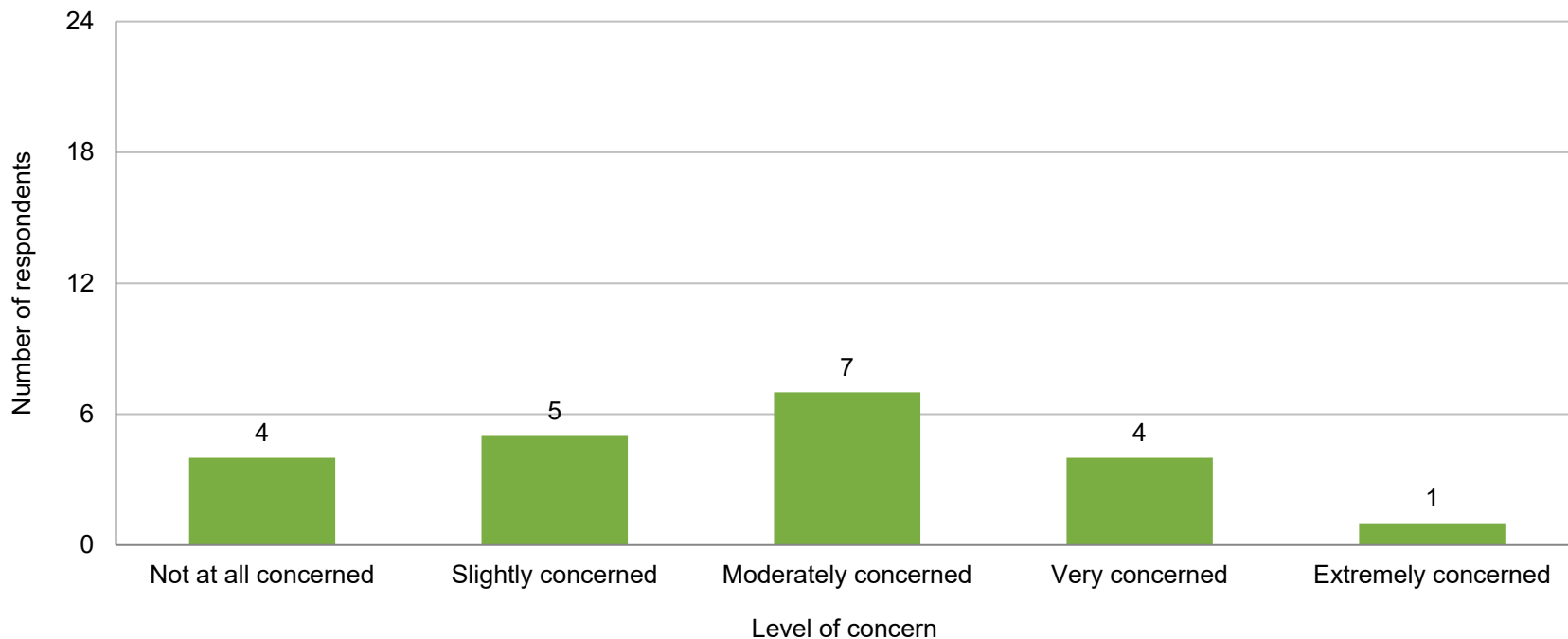
Vice President of Commercialization,  
Data Science  
E Source

## Poll: Over the next two years, how concerned are you with managing affordability?



© E Source. **Base:** Event attendees (n = 23). **Question:** Over the next two years, how concerned are you with managing affordability? **Notes:** Use caution with small sample size. Some respondents may be from the same utility.

## Poll: Over the next two years, how concerned are you about your utility's debt levels?



© E Source. **Base:** Event attendees (n = 21). **Question:** Over the next two years, how concerned are you about your utility's debt levels? **Notes:** Use caution with small sample size. Some respondents may be from the same utility.

# Growing affordability crisis and arrearage management

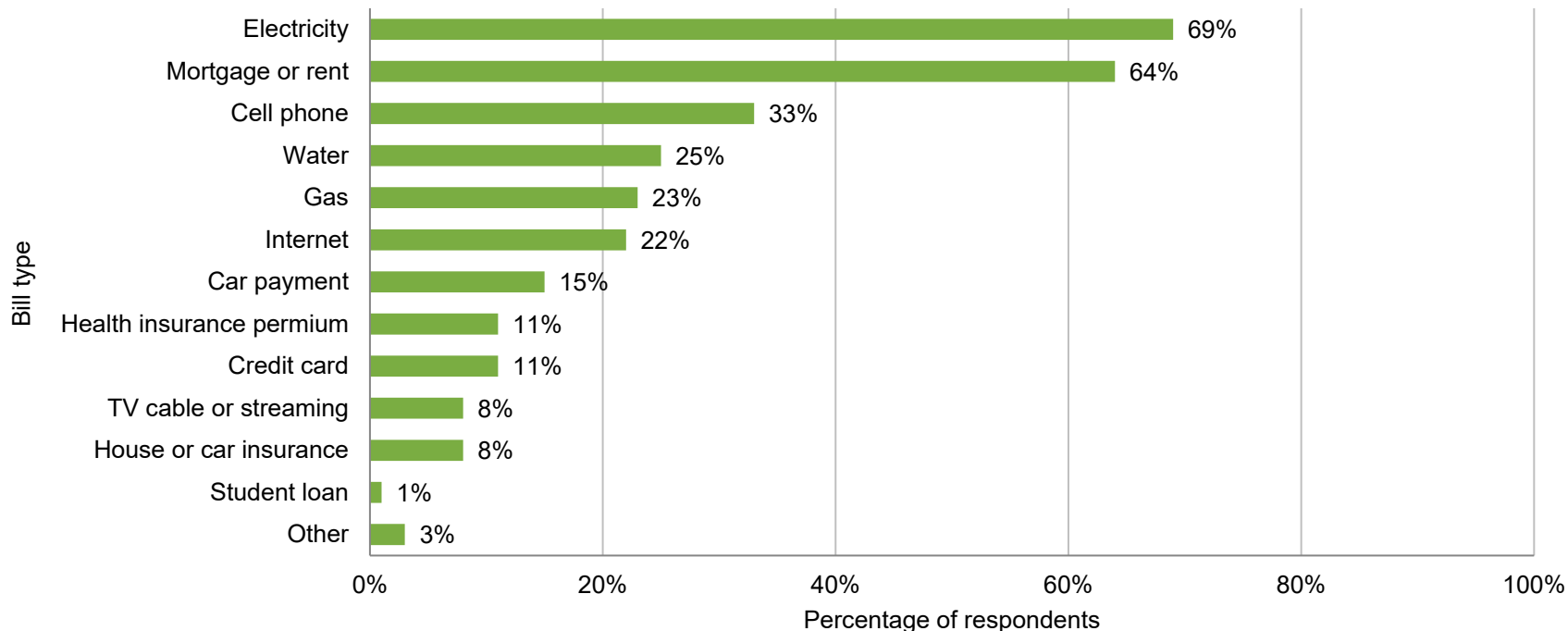


# Opening thesis

- A growing number of utility customers are struggling to stay current and pay down any debt they owe to the utility.
- The challenge will grow harder with expected rate increases and other riders.
- High default rate of payment arrangements leads to even more debt and costs.
- Utility collections process is dysfunctional and needs attention.
- There are ways to help the customer out of debt and to keep them whole.
- Data science will be key to a proactive management approach.

# Payment view

Payment priorities for struggling customers



© E Source; data from Fiserv [2021 Expectations & Experience: Consumer Payments](#). **Question:** If you could only afford to pay three bills next month, which would you choose to pay? Select up to 3 responses below.

# Payment view

- **38% either have difficulty** or can't pay all their bills.
- **84%** of consumers were more likely to pay a bill first if it had **late fees**.
- **64%** would prioritize a payment if there was a **threat of disconnect**.
- **48%** would take **credit score** risks into consideration.

# Debt view

Score your customer base and segment by risk score and age groupings for payment and collection strategies.

FICO score	Percent change	
	2021–2022	2022–2023
300–579 (Poor)	8.3%	20.5%
580–669 (Fair)	5.1%	4.1%
670–739 (Good)	3.9%	–0.2%
740–799 (Very good)	4.2%	–1.7%
800–850 (Exceptional)	9.1%	4.6%
Generation	2021–2022	2022–2023
Gen Z (18–26)	24.3%	15.4%
Millennials (27–42)	14.7%	8.0%
Gen X (43–58)	5.8%	1.9%
Baby boomers (59–77)	0.5%	–1.3%
Silent generation	–1.3%	–1.9%

© E Source; data from [Experian Study: Average U.S. Consumer Debt and Statistics](#), February 2024

# Struggling customers



~30% of households earning less than \$50,000 per year have not fully paid utility bills



25% of all income levels report being past due on utility bills



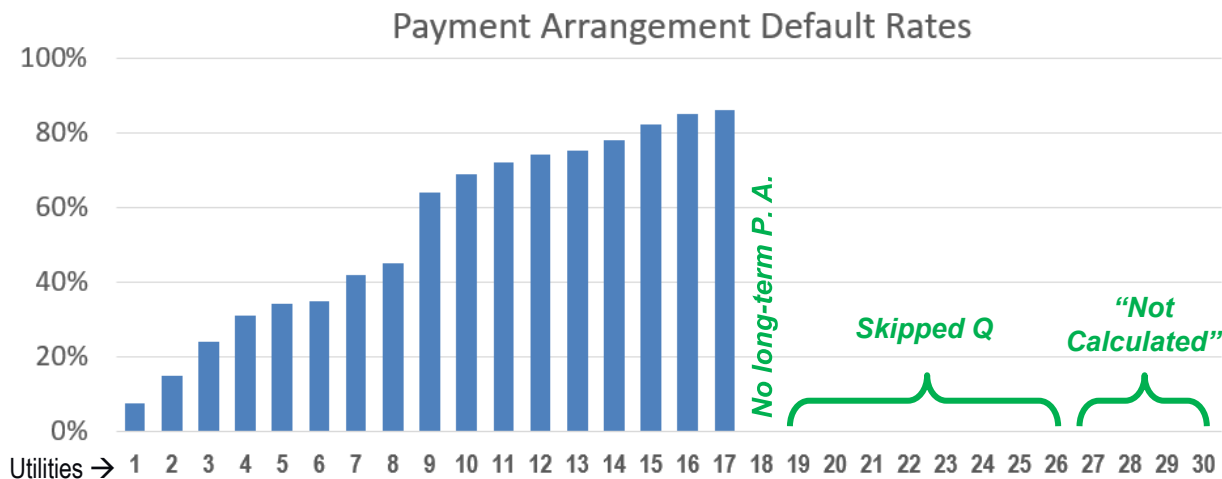
5% of low-income households indicate they owe more than \$500 on utility bills



~40% of low-income households are concerned about staying current on utility bills

# Reported default rates of payment arrangements

A high percentage of payment arrangements fail (arithmetic mean is 57%)



© E Source. "Utility Payment Arrangements: Survey Findings and Analysis" Utility Customer Research Consortium Contingency Planning Research Project. Presented to DEFG's Utility Customer Research Consortium. Survey question Q16. Based on your response to the previous question, what was the default rate for long-term, pre-COVID residential customers attempting to complete a standard payment arrangement? (Define your terms and the base for the calculation. If you track more than one, please provide those you track.)

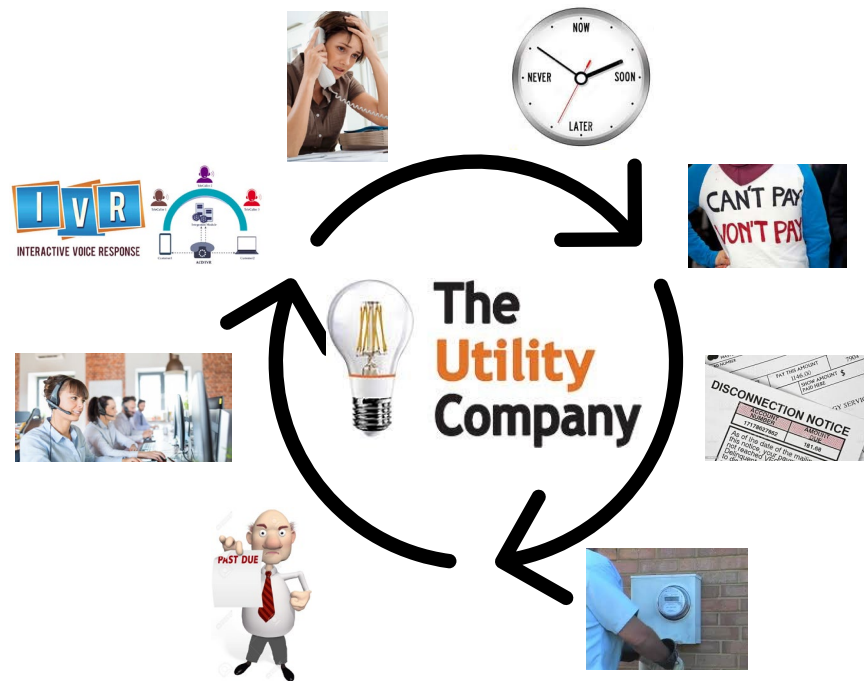
# Payment arrangement: Typical scenario

Broken arrangements increase costs and allow customer balances to increase over time.

Bad debt increases.

Additional costs:

- Increased call volume
- Increased average handle time
- Customer education



How are you handling commercial customers?

# Total financial impact

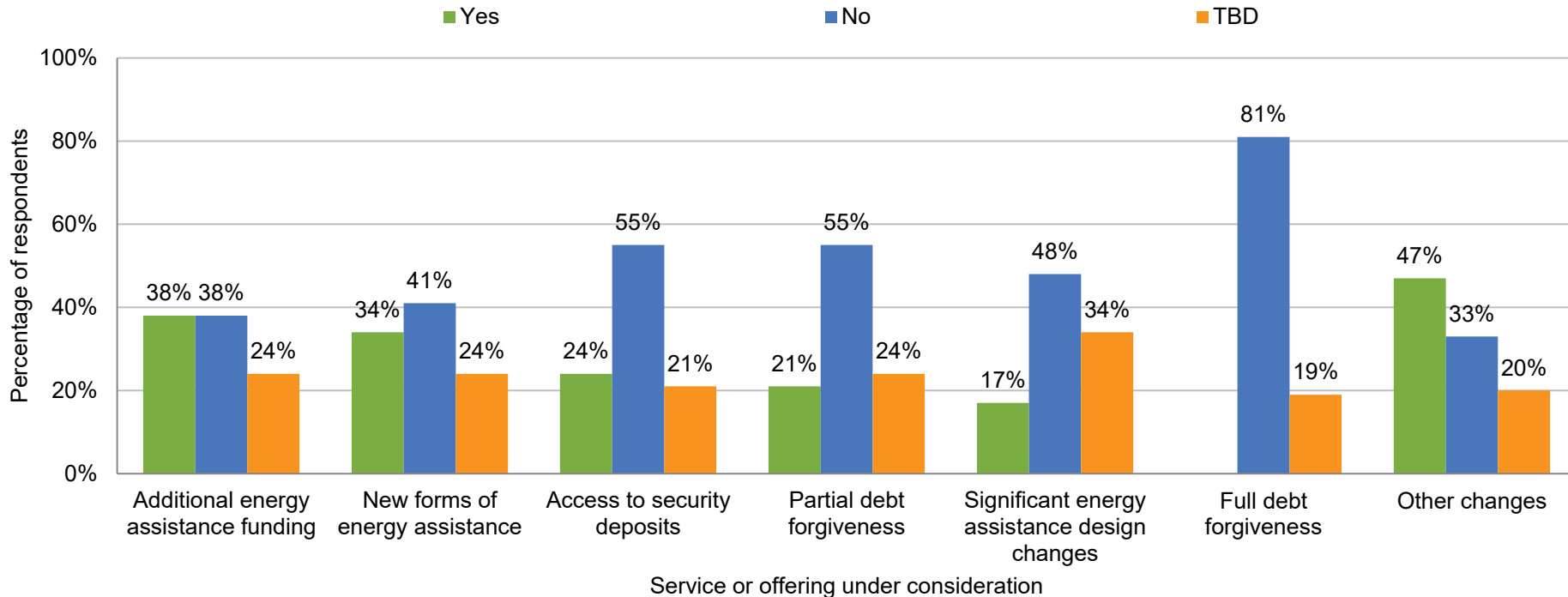
## Utility company example\*: Total financial impact of broken arrangements

Total cost to renegotiate defaulted payment arrangement	\$2,321,111
Annual cost of broken agreements (variance)	\$1,890,000
<b>Total cost</b>	<b>\$4,211,111</b>

© E Source ("An Analysis of Utility Payment Arrangements" presentation to the Utility Customer Research Consortium, March 2021). **Note:** \*Midsize utility in Pennsylvania.



# Utility survey: Service alternatives



© E Source (Utility Payment Arrangements: Survey Findings and Analysis, Utility Customer Research Consortium Contingency Planning Research Project).  
**Base:** n = 30 utilities.

# How can data science improve how we respond to arrears?

# Data science and arrears: Key questions

1

What's the risk of a given customer to fall into arrears, and what's the expected amount of those arrears?

Outcome: Cohorts of customers by arrears risk

2

What's the best outreach and intervention strategy to reduce the most arrears risk for a given customer?

Outcome: Optimized customer outreach and engagement plans

# A data-driven approach to Audience of One

## DATA

### Utility data

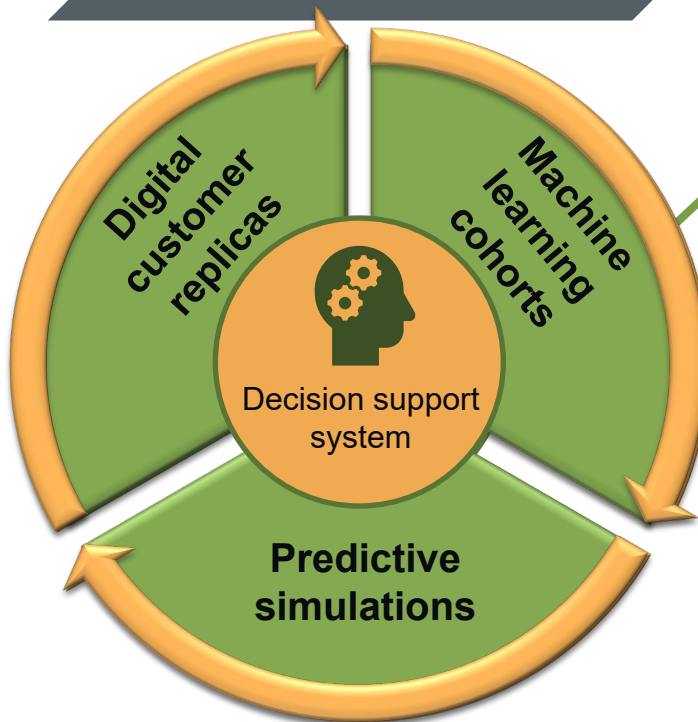
Customer details  
(address, phone, etc.)  
Call center interactions  
Billing & payment history  
Assistance & program  
history

### Third-party data

E Source Data Package  
+  
Curated research

Data fusion

## MODELING



## OUTCOMES

Customer arrears  
risk model

Incorporates both risk of  
falling into arrears and  
likely arrears amount

Real-world results for learning recalibration

# What's driving arrears risk up or down?

## Bill payment behavior:

- Percent of payments paid by ACH, credit card, autopay
- Trends over time—credit card, ACH, checks

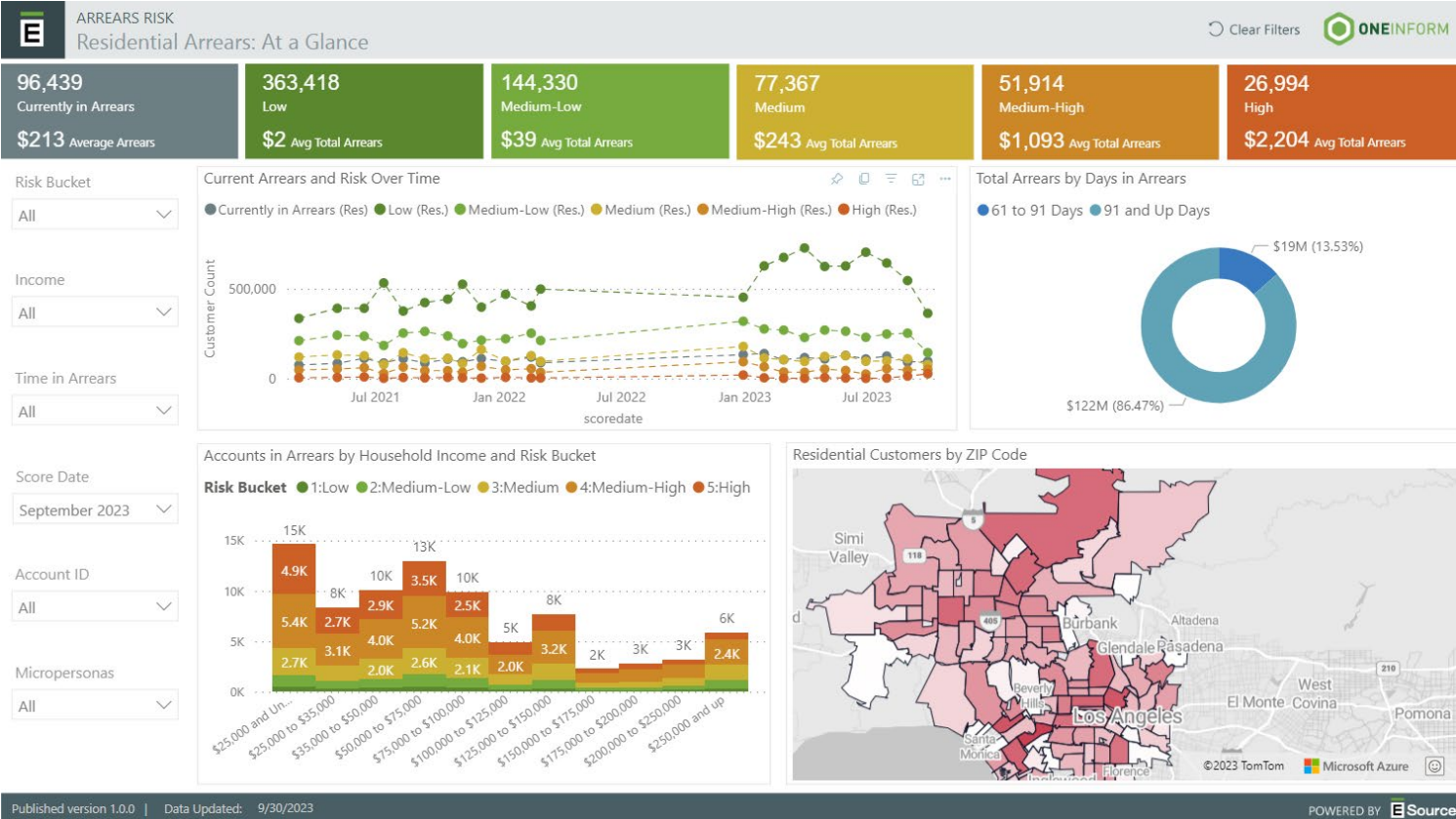
## Locational:

- Density of other customers in arrears around them
- Latitude and longitude

## Credit or finance attributes:

- Recent 24-month delinquency
- Credit score
- Likely mortgage refinancers
- Likelihood of self-perceived COVID-19 impact bill-payment ability
- Likelihood of interest in financial relief options

# Residential customers arrears risk



# Micro-cohorting for customer engagement

# Current partnership: Data-driven customer cohorts

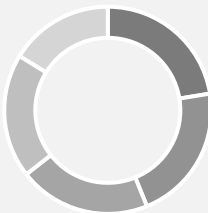
## Static persona segments

Percentage of residential customers



- Innovative Investors
- Totally Tech
- Sensible Savers
- Continually Connected
- Simply Service

Savings per customer



Static personas created different groupings but without any impact or differentiation between segments.

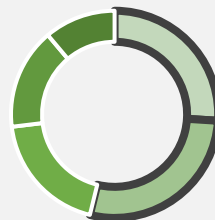
## Data-driven cohorts: Peak-time rebate

Percentage of residential customers



- Low Engagers
- Borderliners
- Middle Movers
- Fast Growers
- Big Impactors

Savings per customer



Machine-driven cohorts identified best customers who represented a disproportionately high load shift based on individual energy and behavioral profiles.



# Audience of One targeting objectives



Identify customer cohorts based on arrears risk and likelihood to benefit from intervention



Target the right customers in the most effective ways to reduce or prevent arrears



Continuously assess data to support future program design and offerings



Reduced arrears, collections, and shutoffs; improved customer satisfaction; and lower call volume and cost to serve

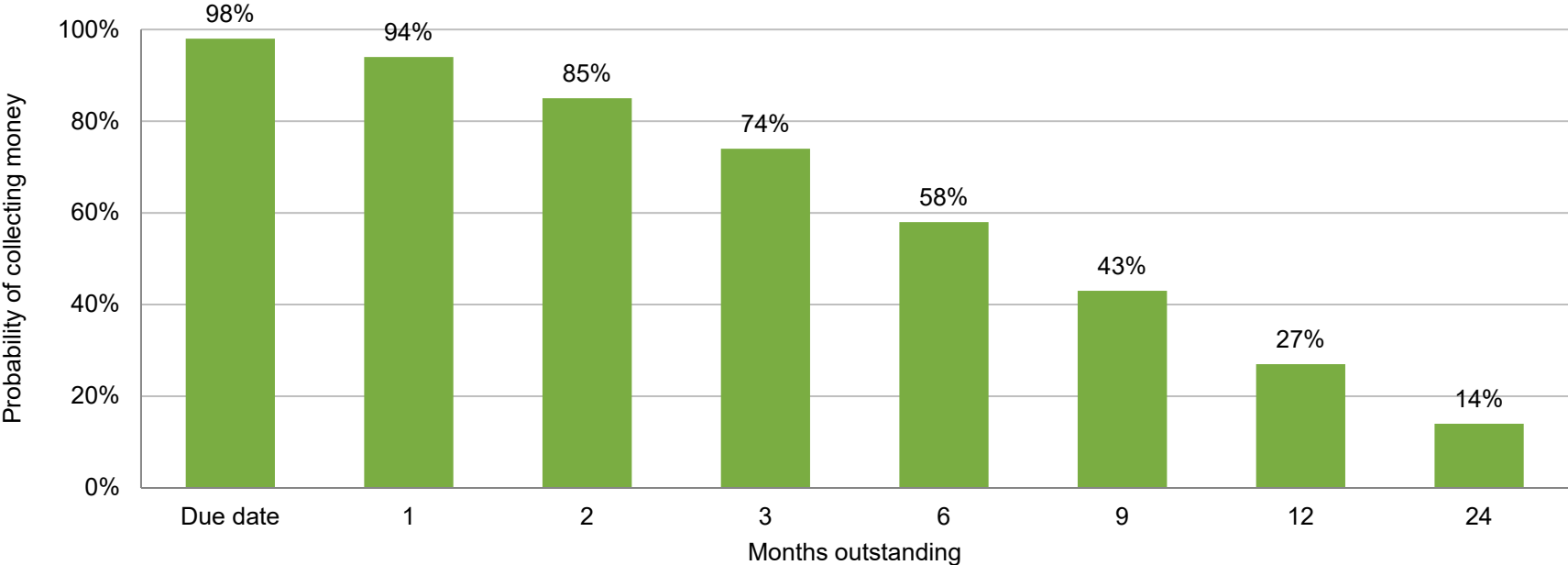
# Employment, income, and debt recovery

# Employment, income, and debt recovery

- **16%** of the workforce is part time.
- Over **30% of US households** fall under the federal poverty level guidelines.
- Since 2021, **median income has dropped 5%** while the **cost of living has risen 3.5%**.
- **6%** of households in the US are **unbanked** in 2024.
- **Gen Z** has the greatest amount of debt.
- **Gen Z and baby boomers** require the greatest financial assistance.
- Debt for credit scores below 580 has **increased by 250%** since 2022.

# Employment, income, and debt recovery

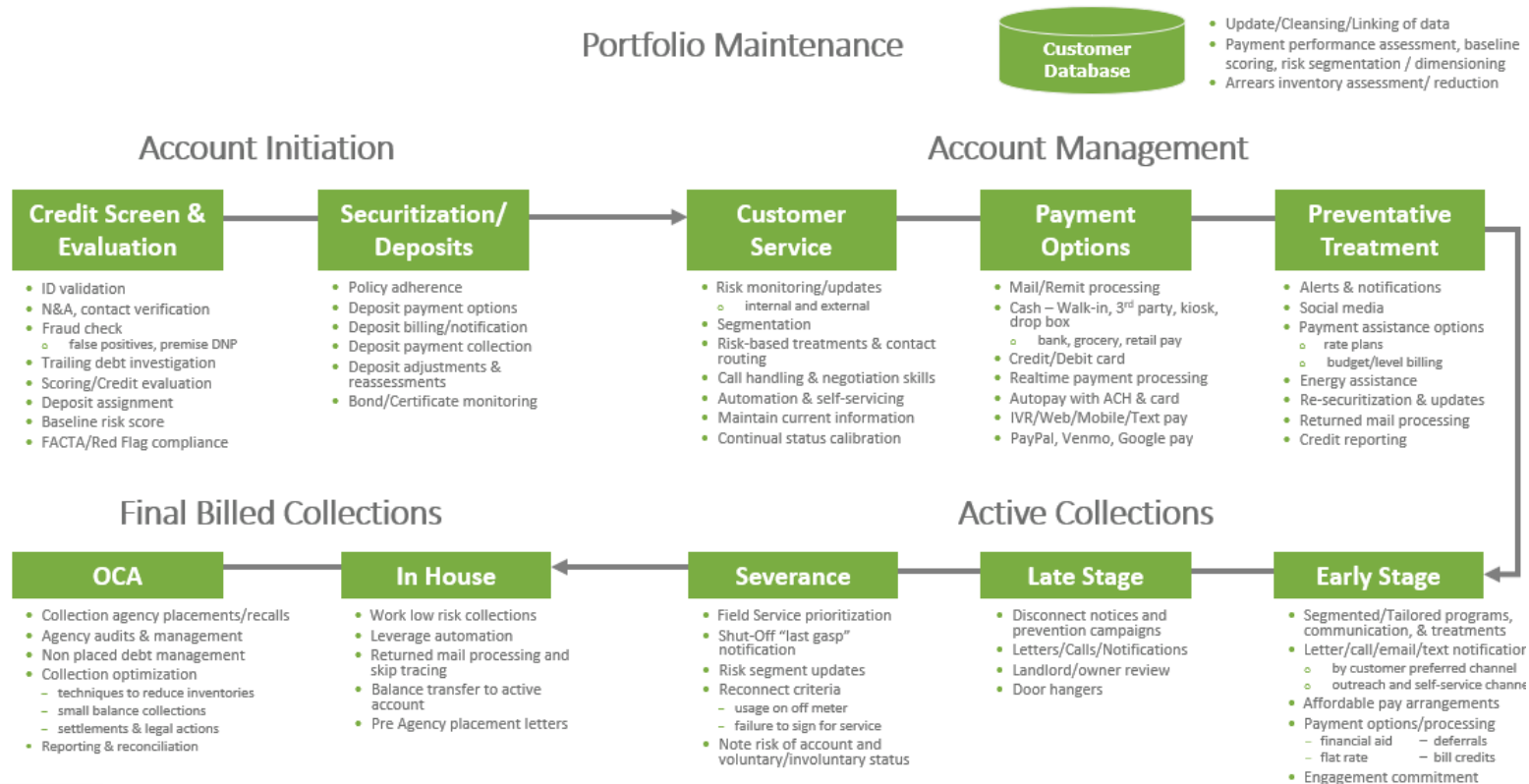
Probability of recovering commercial debt with age



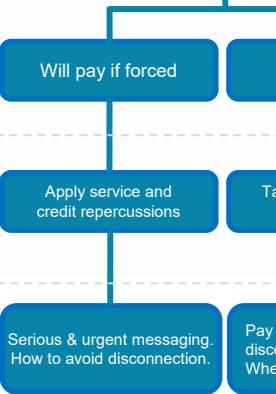
© E Source; data from [Commercial Law League of America](#)

# Credit risk and payment behavior

# Managing the credit risk lifecycle



# Driving customer behavior



# Areas of focus



# Areas of focus

## Customer engagement:

- Keep customers **engaged monthly**
- Create **targeted** offers, communications, and outreach **campaigns**
- Make **monthly notifications** a requirement for payment program enrollment
- Evaluate and revise program **terms and conditions**

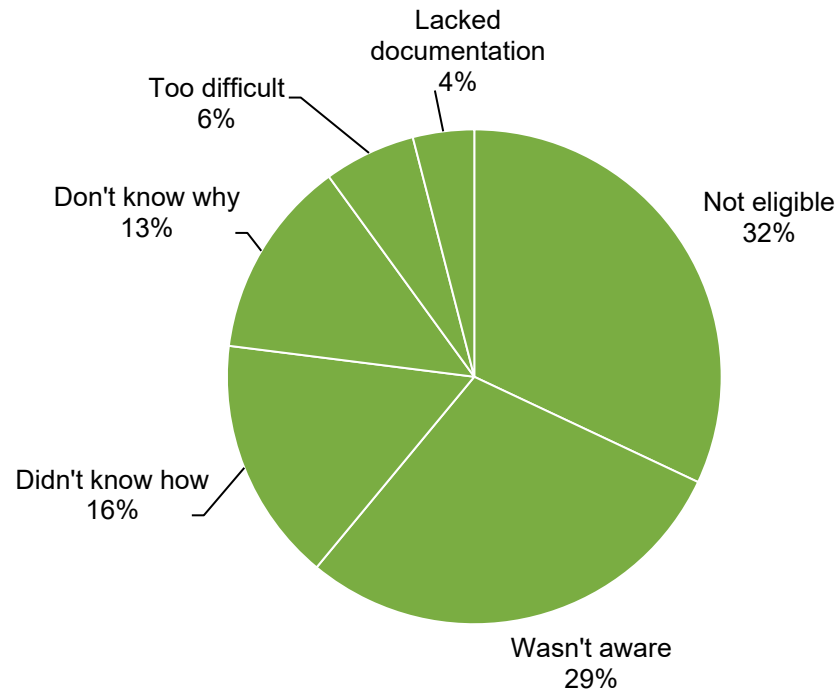


# Areas of focus

## Payments and loss:

- Financial assistance—**community** outreach and organizational **partnerships**
- Payment and credit
- Mitigate loss—arrears and write-off offsets
- Operational

Reasons for not applying for financial assistance



© E Source (Low Income Energy Issues Forum, February 2024)

# Areas of focus

Affordability and sustainability to **keep current**:

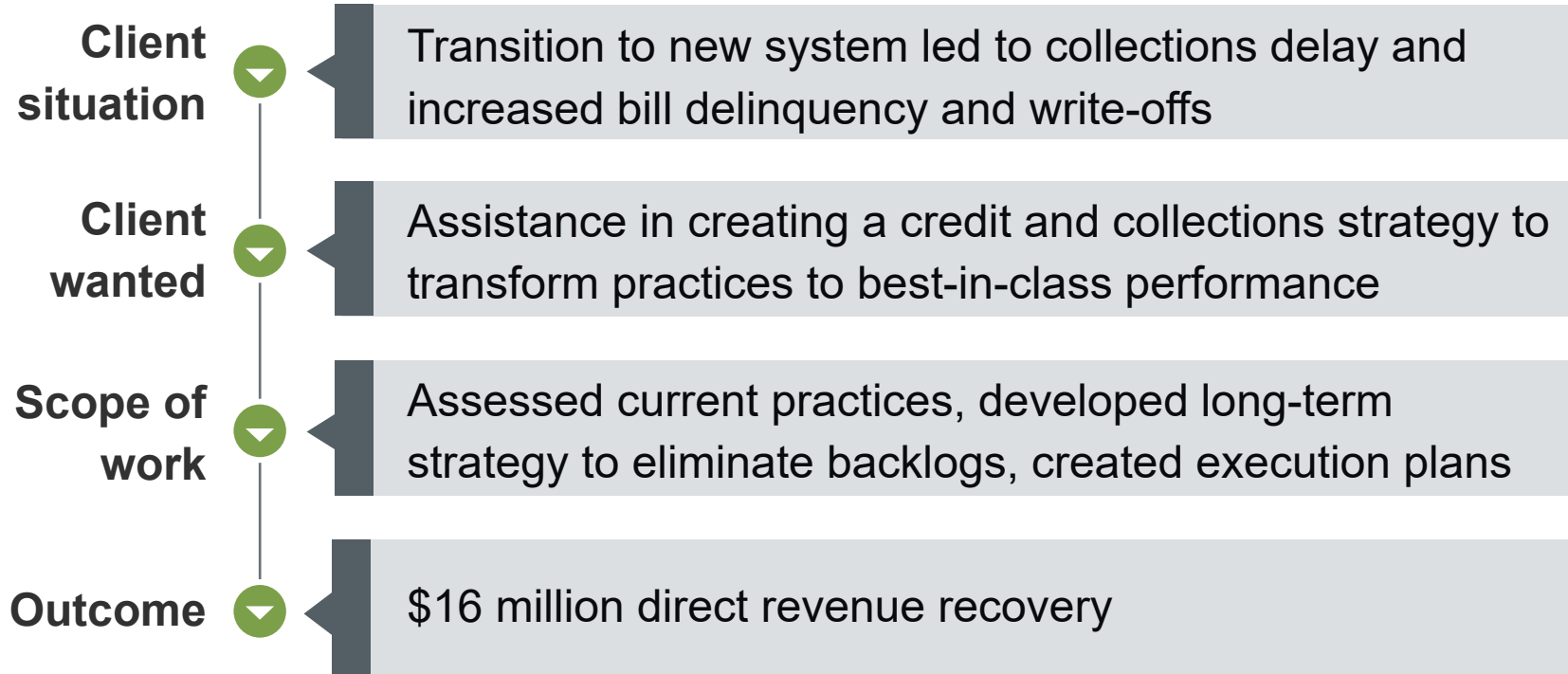
- Budget billing—**payment distribution**
- Financial assistance programs and payment arrangements—**afford to pay back**
- Rates—**afford to pay**
- Prepay—**manage usage**
- Weatherization—**manage usage**

WHEN YOU CAN'T  
AFFORD TO PAY THE  
UTILITIES



# Hydro One case study

# Credit risk strategy, process realignment



# For more information, please contact



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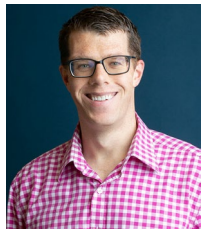
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