



Behavioral Economics Modeling AI Services

A Pathway to Year-Round Fundraising Optimization

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President & CEO

March 30, 2023



Michael Gorriarán

President & CEO, Arjuna Solutions

- › 5+ Years, Arjuna Solutions
- › 30+ Years Microsoft, Xerox
 - Advanced Tech Solutions & Services Business Leadership
- › USA, LATAM, Europe, Global Leadership Roles
- › MBA, Kellogg School of Mgt, Northwestern U.
- › Former Chairman, OCHA
 - Oregon Council Hispanic Advancement 501(c)(3)

Fundraising Decisions-as-a-Service Business for Nonprofits

Founded by a Professor of Decision Sciences, Johns Hopkins University

2013 Established in Business as an LLC

2013 Patents Awarded for AI Capabilities in Consumer Pricing. R&D for ~4 years.

2018 Available to all Nonprofits for Direct Response Fundraising \$5–\$10,000.

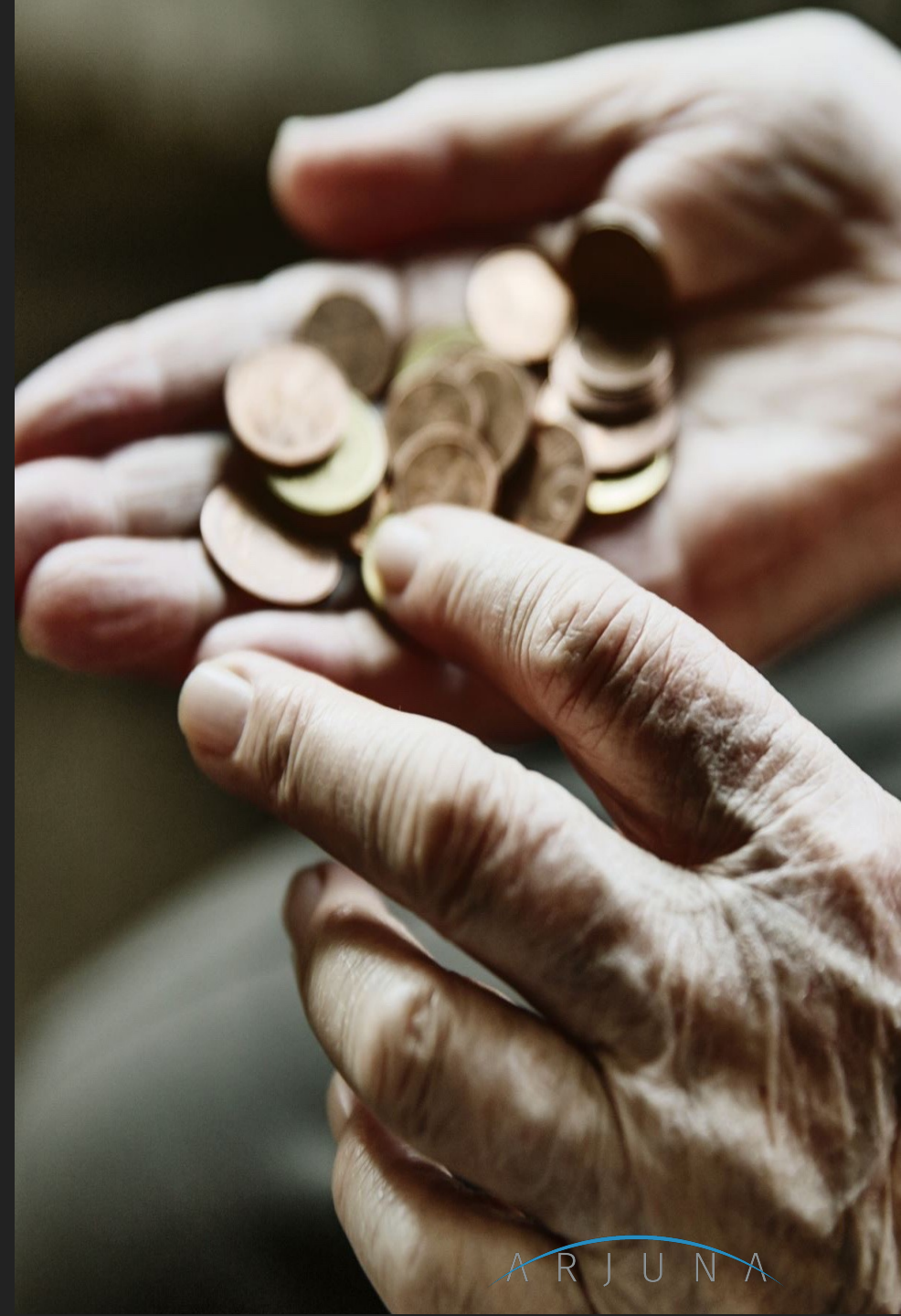
2023 5 Years Domain Expertise: AI Service Development and Delivery.

2023 10B+ Records Processed. \$125M+ in Donations Influence.

Agenda

› Understanding Donor Sentiment

1. Focus on growing net proceeds
2. Optimize donor lifetime value
3. Personalize relationship investment decisions at scale
4. Find new value in lapsed donor campaigns
5. Measuring fundraising performance



Today's Fundraising Environment

Poll Question #1:



Audience Poll

Is Inflation Affecting Fundraising Performance?

- a. No – what’s inflation?
- b. No – not yet, but we see it coming
- c. Yes – it’s becoming an increasing issue
- d. Yes – it hurts!



Fundraising Environment

Post-COVID-19 Vaccinations: Q4 Spending +

› \$\$\$+ entertainment, dining, clothes, travel, cars...

Inflation

› Less disposable income

- Donor elasticity declining <\$75
- Donations < \$100 Annually (73% Pop.)

› Fundraising cost increases

- Direct mail: rising cost of paper, envelopes, postage, freight, labor (+15% to 20% YoY)
- Digital: increasing cost of platform, apps, integration, ongoing management and labor

Episodic giving increasing +

› War, courts, laws, natural disasters, social



Direct Mail Paper Costs are Increasing
March 3, 2021 Blog, PMG News

Here's what you need to know about increasing paper costs:

Paper costs have been stable for quite some time, but supplier partners have alerted us to price increases in mills beginning in March. These increases affect direct mail and uncoated stocks components.

Record-breaking donations raise almost £62m for Ukraine in a week

By Eleonora Pilastro
Published 12 May 2022



National Council of Nonprofits

New Giving Data and Reports: Giving Stays Flat, and Worrisome Trend of Fewer Donors Continues

June 23, 2022 By Amy Silver O'Leary | Posted in: Fundraising | Giving | Data

Fewer donors. Smaller gifts.
Net-negative growth after Inflation

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Optimize Donor Lifetime Value

- › Retain Donors
- › Know Precisely How Much to Ask Now
- › Advance Donors Across Donor Segments



Audience Poll

How Do You Determine Gift Array Values?

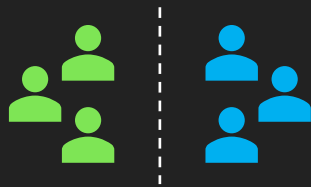
- a. MRC or HPC x Multiple (1.0, 1.5, 2.0)
- b. Wealth Screening / Capacity to Give
- c. “Segment of One” Personalization
- d. Other



Improve Net Proceeds from Fundraising

Enhance Lift in Annual Giving

+12% Avg.



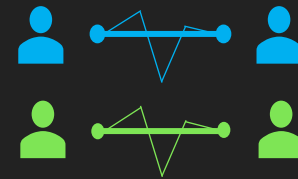
Optimize Lifetime Giving

3X-5X of Year One Gain



Advance Donors Across Segments

11% Faster



Reduce Cost Per Dollar Raised

10%-30% Cost Reduction

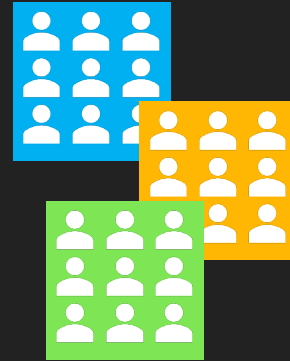


Fundraising Methods



Major Giving

Requires a One-to-One “Ask”
Deep Relationship Cultivation
Useful for Substantial Giving



Broad Giving Segments

Standard Gift Arrays (RFM)
Transactional Relationship
Useful for Simplicity in Fundraising



Segment of 1 @ Scale

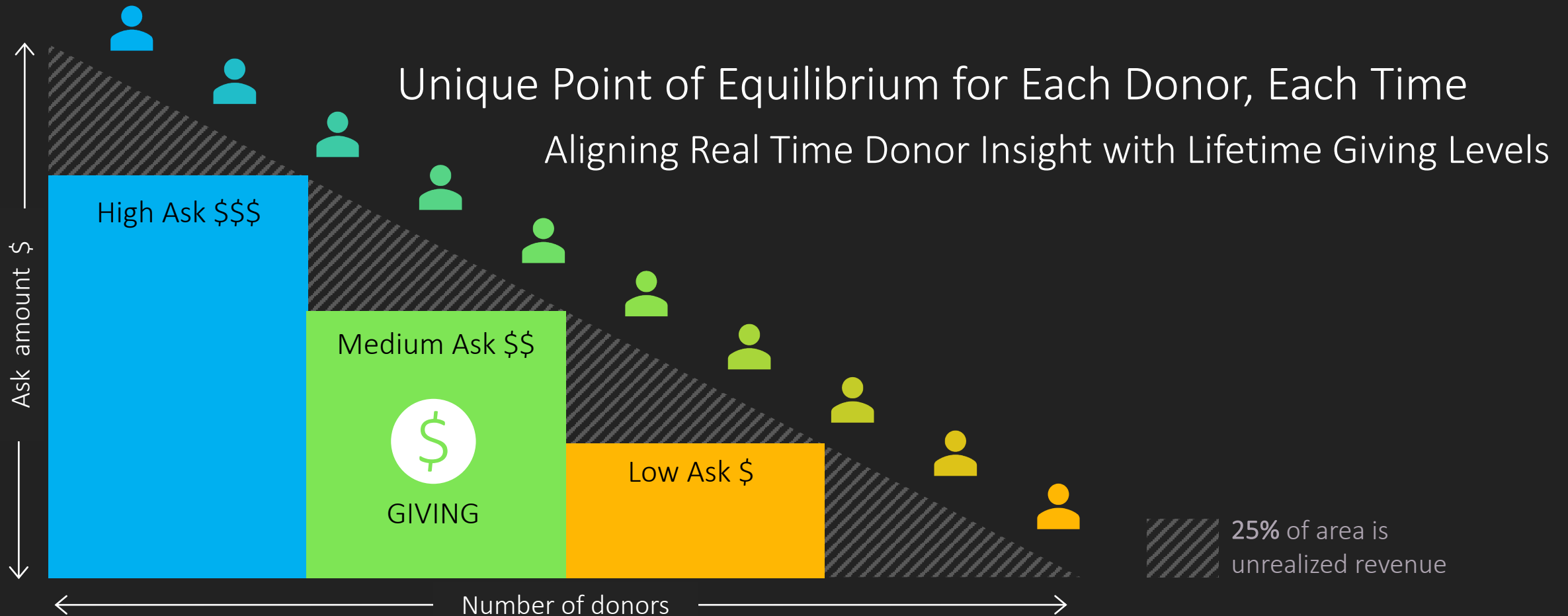
Individually Optimized Gift Arrays
Personalized Giving Insights at Scale
Useful in optimizing lifetime giving

Dynamic Personalization
and Optimization at Scale

Improve Giving Levels

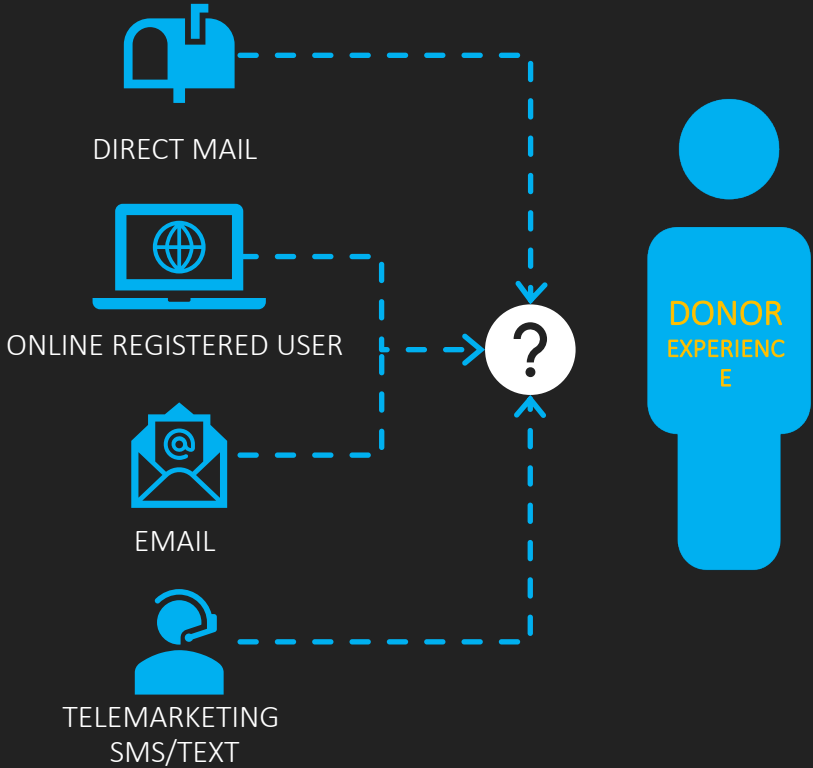
Problem: Suboptimized Giving Performance

Solution: Personalized, Optimized, Time Sensitive, Gift Array Values



Dynamic Personalization and Optimization at Scale

Donor Experience Gift Solicitation Channels



Speculating vs. Knowing

Yes, I/we want to support the Kellogg School of Management

1. MY GIFT AMOUNT:	2. MY AREA OF SUPPORT:	3. MY PAYMENT METHOD:
<input type="radio"/> \$500 <input type="radio"/> \$250 <input type="radio"/> \$100 <input type="radio"/> \$_____	\$_____ Scholarships [KSDS] \$_____ Global Innovation [KSMA]	<input type="radio"/> Check payable to Kellogg School of Management <input type="radio"/> Phone 847-491-2841

Please specify the gift amount and area of support below:

\$1,000 \$750 \$500 \$300 Other \$_____

Lundquist College of Business Investors Fund (1135.12.1)
 President's Success Fund (7971.12.1)
 Pathway Oregon Scholarships (6703.12.1)
 Other \$_____

Make your gift any of the following ways:

Make your gift online at giving.uoregon.edu
 Check, payable to: University of Oregon
 Credit/debit card

ID: 2861
Mr. Michael
0716 SW
Portland

Yes, Steve! I want to help children who are struggling to BREATHE! I have enclosed my most generous, tax-deductible gift to provide medicine to give them health and hope:

«\$ASK1» to help «XX1» children breathe
 «\$ASK2» to help «XX2» children breathe
 «\$ASK3» to help «XX3» children breathe
 other \$_____ to help as many children as possible

Mr. John Sampleperson
 ABC Company
 123 Main Street, Suite 456
 Boston, MA 02129

0001234500067890111234000567000

► Sign up for your FREE MAP International Newsletter. See back.

REPLY FORM

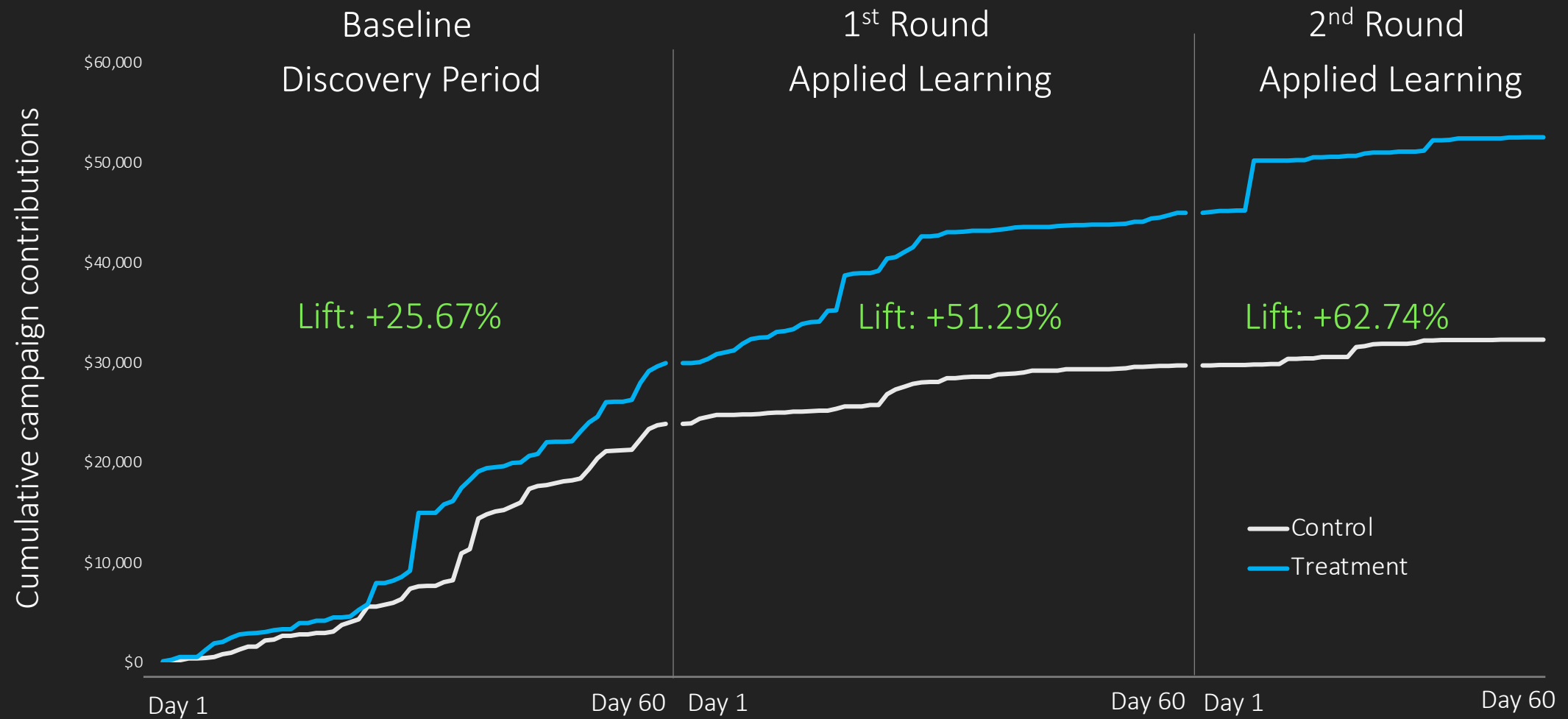
I have enclosed my **check** payable to MAP International.
 I am giving by **credit card** or **bank transfer**. Please see other side.

map INTERNATIONAL | **medicine for the world**

4700 Glynco Parkway | Brunswick, GA 31525
 1-800-225-8550 | www.map.org

Donate online at www.map.org/breathe

BEM-AI Learning Cycles

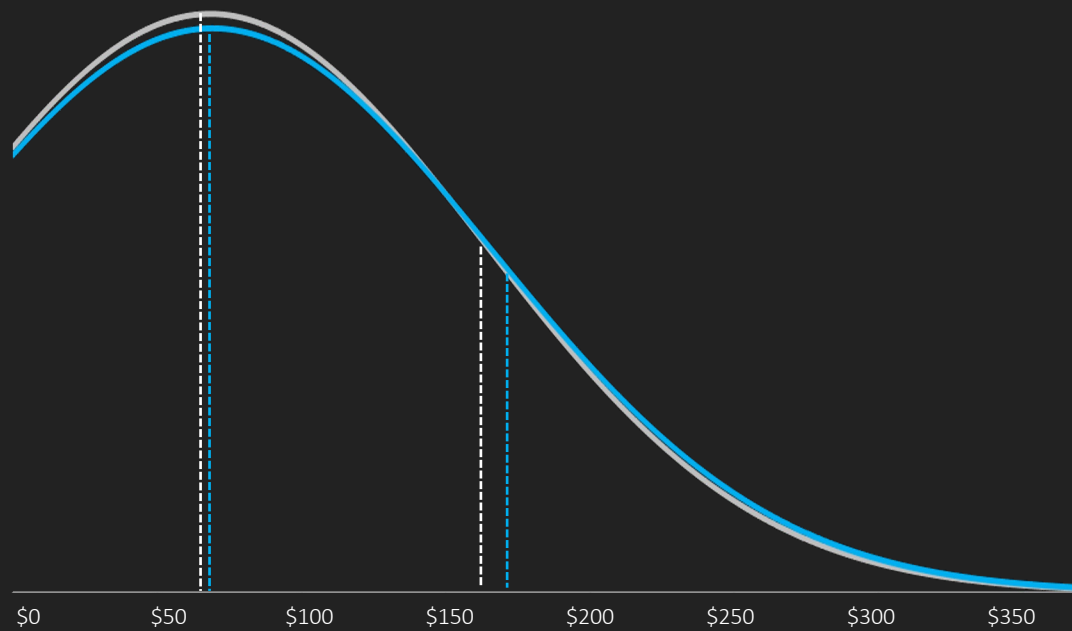


Total Investment of **(\$5,936)** Produced an Incremental **\$22,919**. **ROI = 286%**

Source: Anonymous Arjuna customer in Health and Human Services

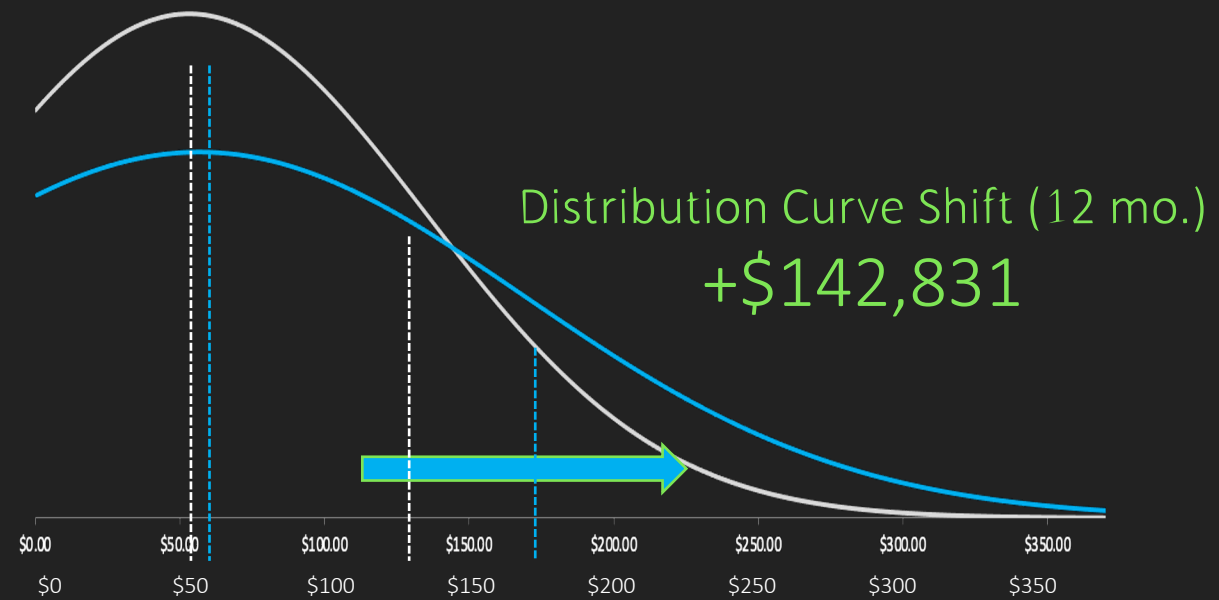
Influencing Behavior: A Statistically Material Shift

Three-year Avg. Donor Giving Behavior
Distribution of Historic Control vs Treatment



Control Group		Treatment Group	
Avg Single Gift	Stdev	Avg Single gift	Stdev
\$68.38	\$94.49	\$69.18	\$96.91

Gifts After AI Treatment
Distribution of Pilot Time Period Donation Amounts

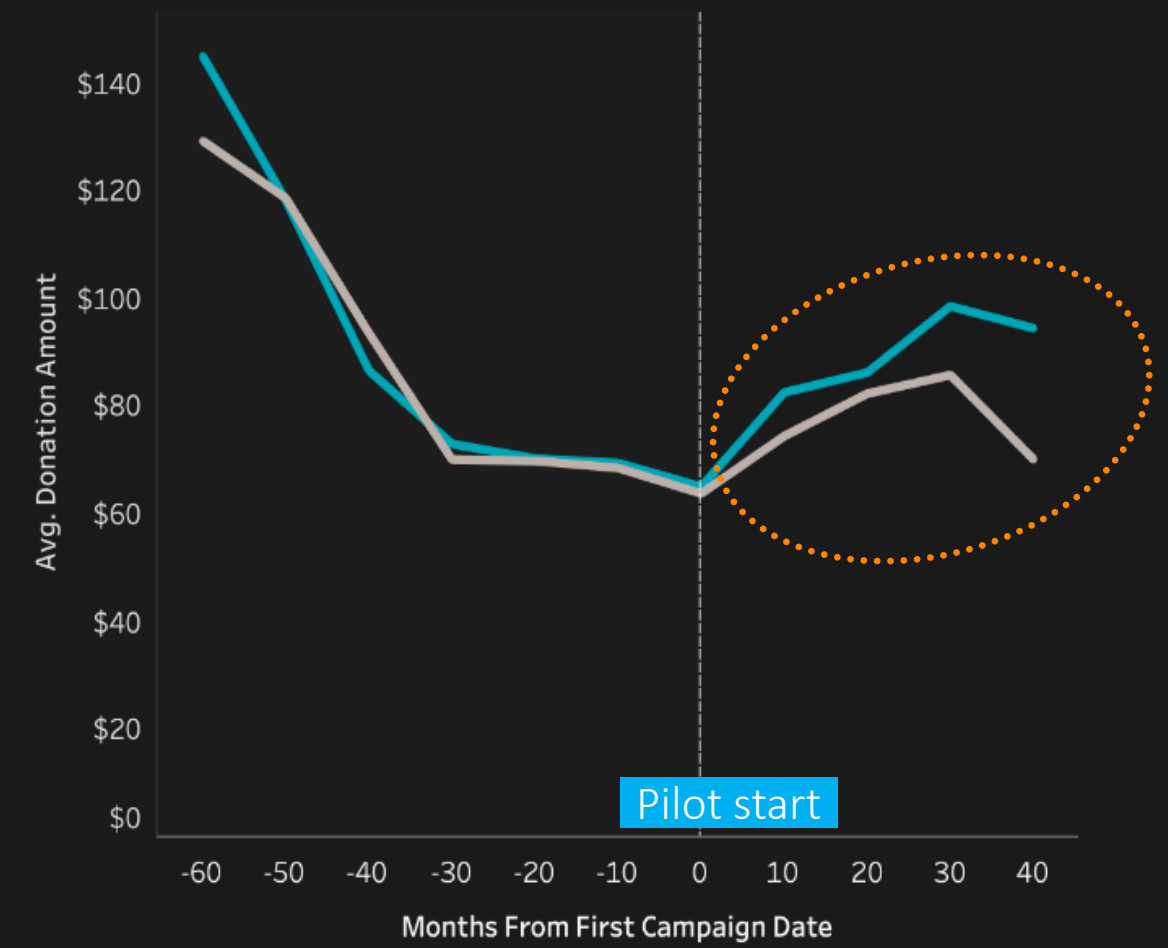


Control Group		Treatment Group	
Avg single gift	Stdev	Avg Single gift	Stdev
\$53.21	\$81.53	\$56.75	\$112.33

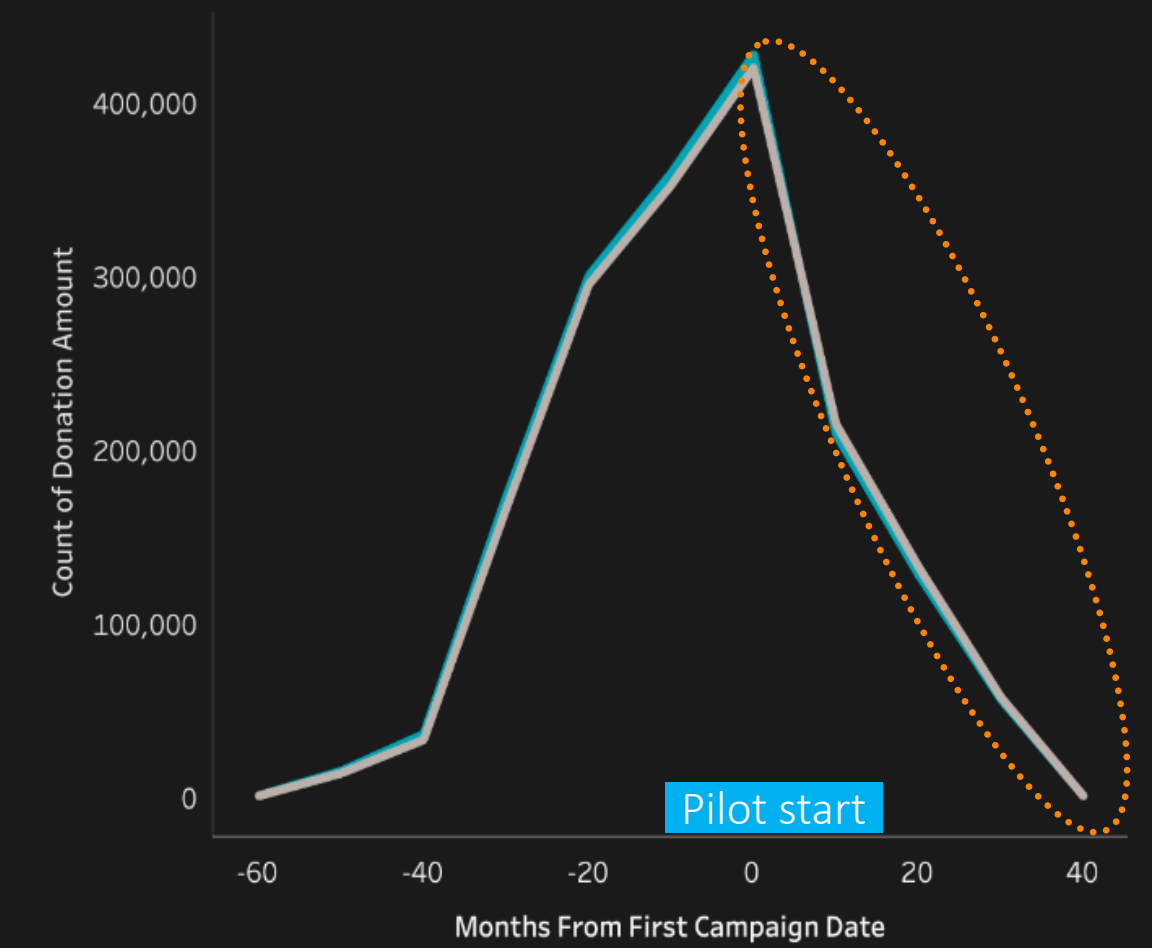
Source: Anonymous Arjuna Customers

Optimize Donor Value While Maintaining Retention

Average Donation Amount



Active Donor Count



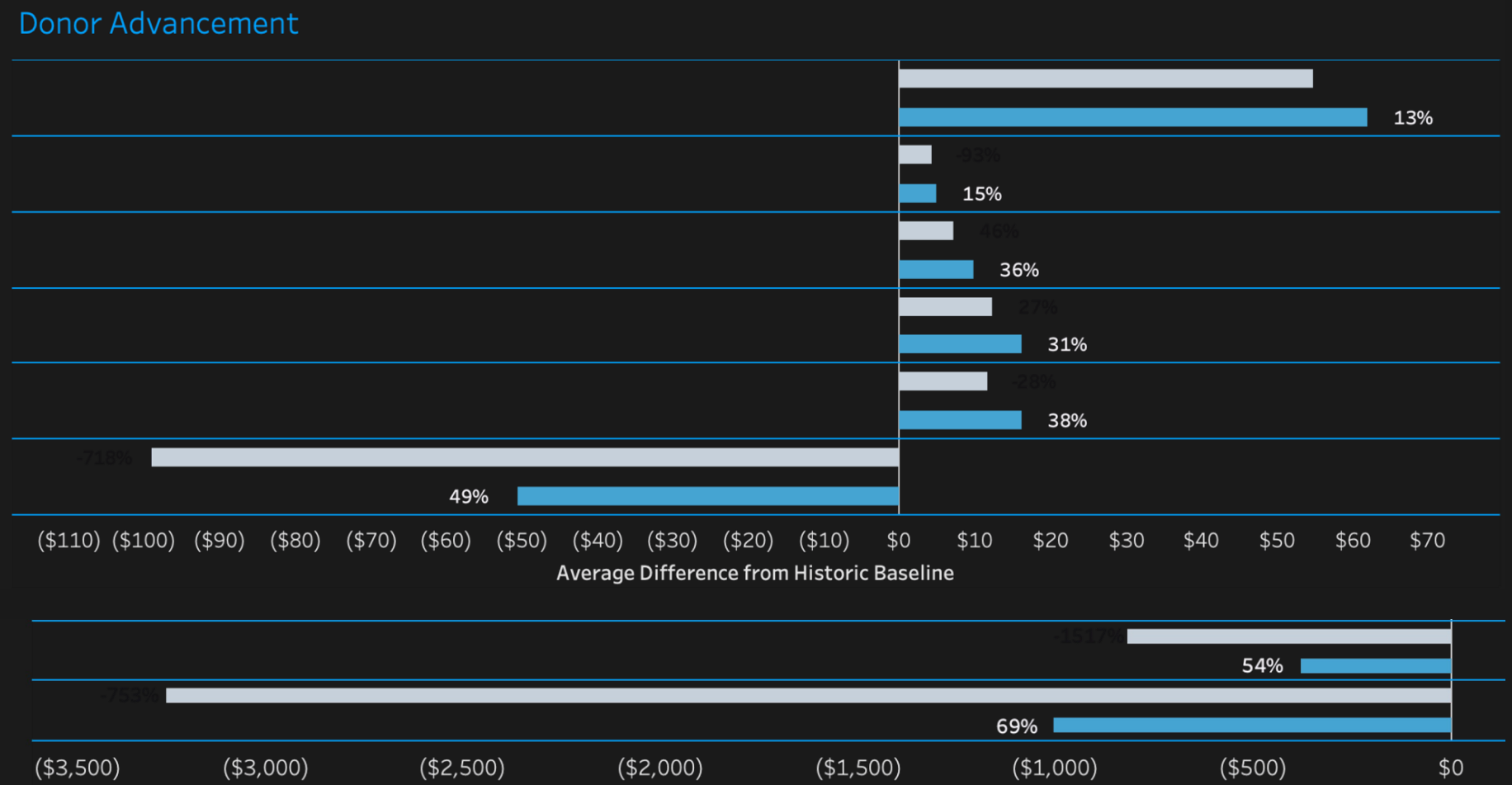
All Donors Recalibrated to Common Start Time

Source: Anonymous Arjuna Customer



Donor Advancement Across Giving Segments

	% Dollars	% Donors
0. No Historic Avg	0%	0%
1. Less than \$25	9%	26%
2. \$25 - \$49	24%	38%
3. \$50 - \$99	24%	20%
4. \$100 - \$499	38%	15%
5. \$500 - \$999	3%	0%
6. \$1,000 - \$2,499	1%	0%
7. Over \$2,500	1%	0%



Source: Anonymous Arjuna Customers



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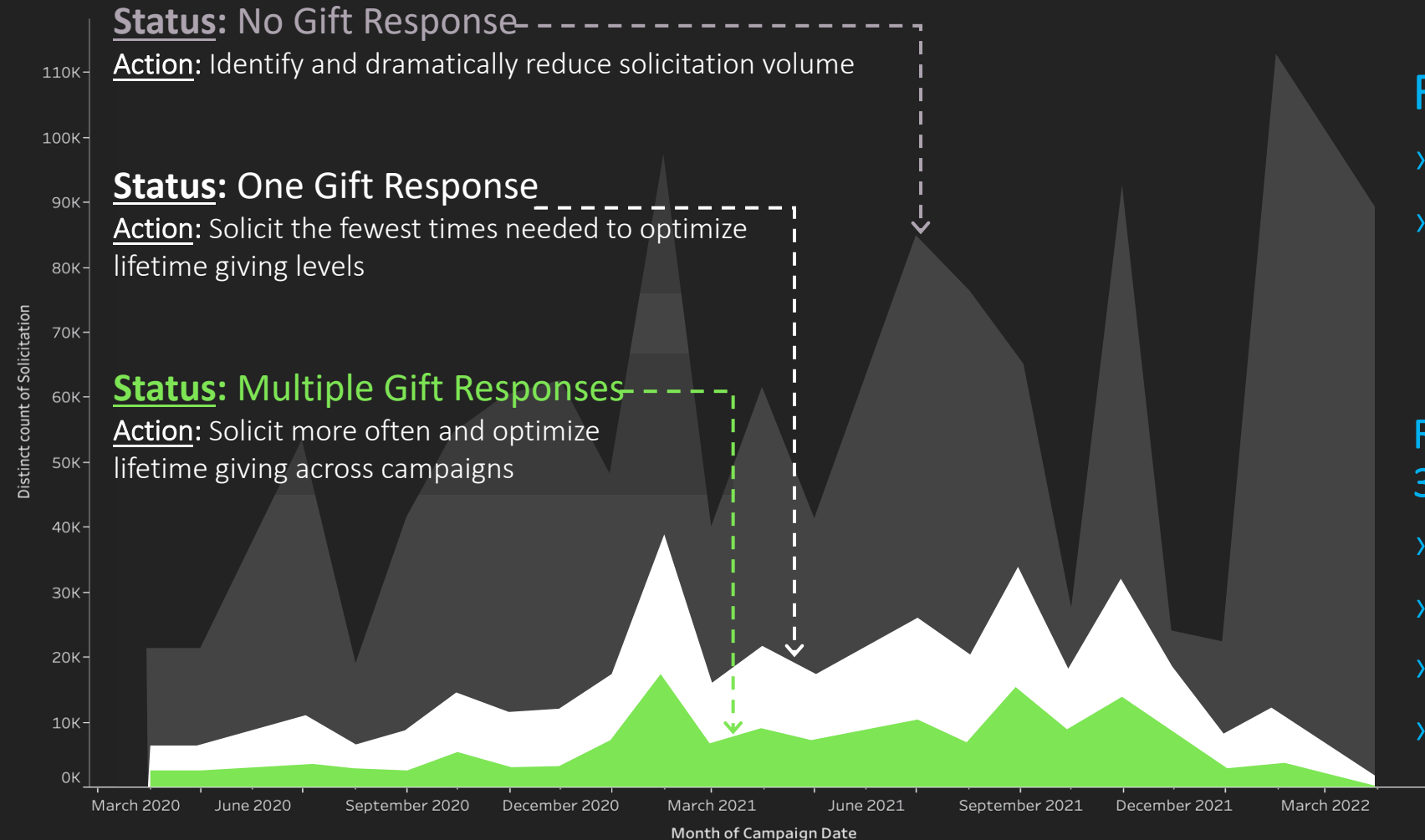
Personalize Relationship Investment Decisions at Scale

- › Optimize Donor Solicitation Cadence
- › Reduce the Cost-per-Dollar Raised
- › Enhance Brand Equity



Personalize, Optimize Individual Solicitation Investments

Improve net proceeds available to invest in mission



Response Statistics

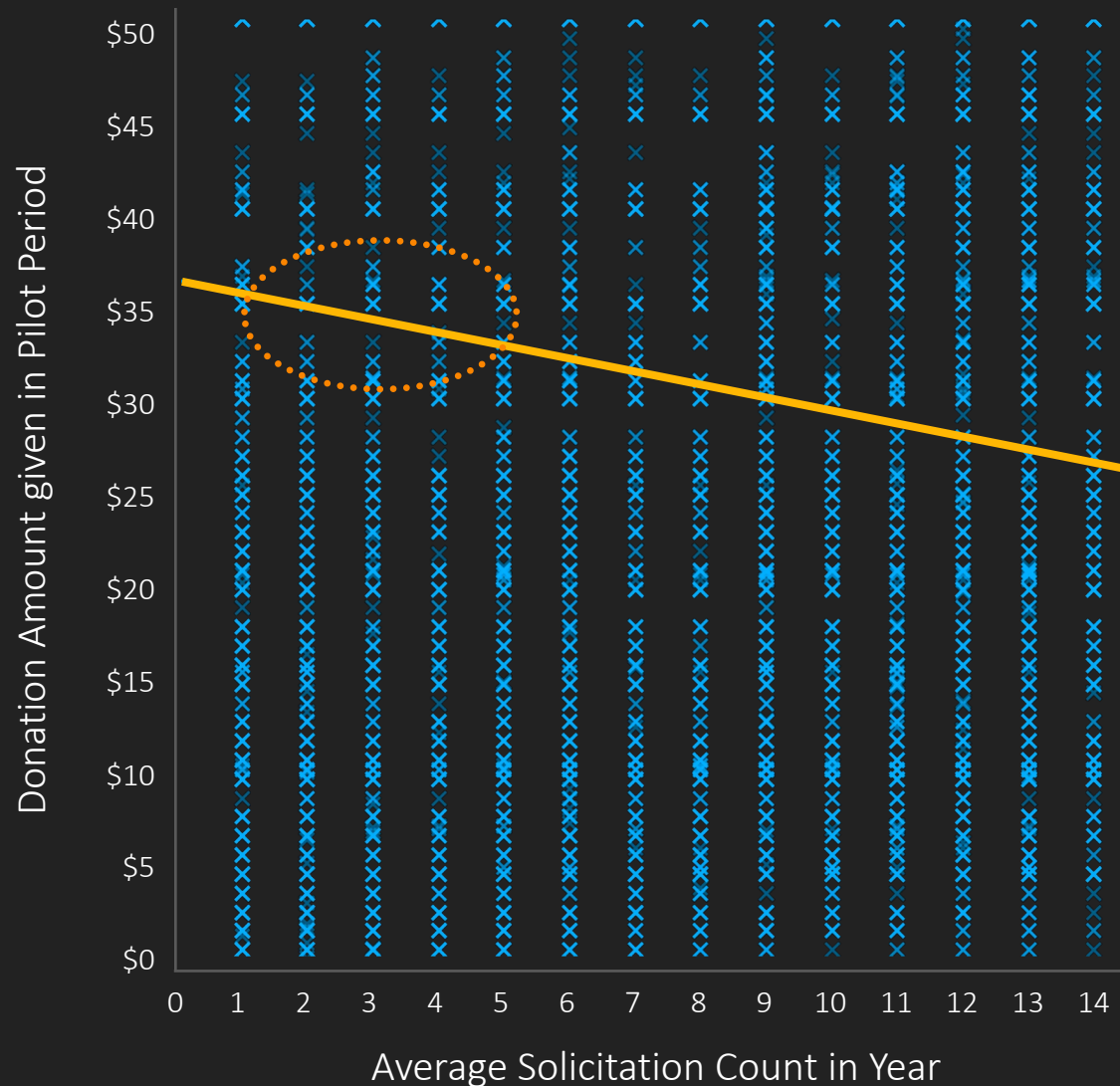
- › 93.9% of solicitations produce \$0
- › 69.8% of solicitations sent to individuals who did not provide donation

Reduce Solicitation Volume (10%-30%)

- › Keep donors engaged
- › Sustain brand equity
- › Reduce cost per dollar raised
- › Minimize carbon footprint

Source: Anonymous Arjuna customers

Dynamically Personalize Individual Solicitation Cadence



More Solicitations
Produce Less Money

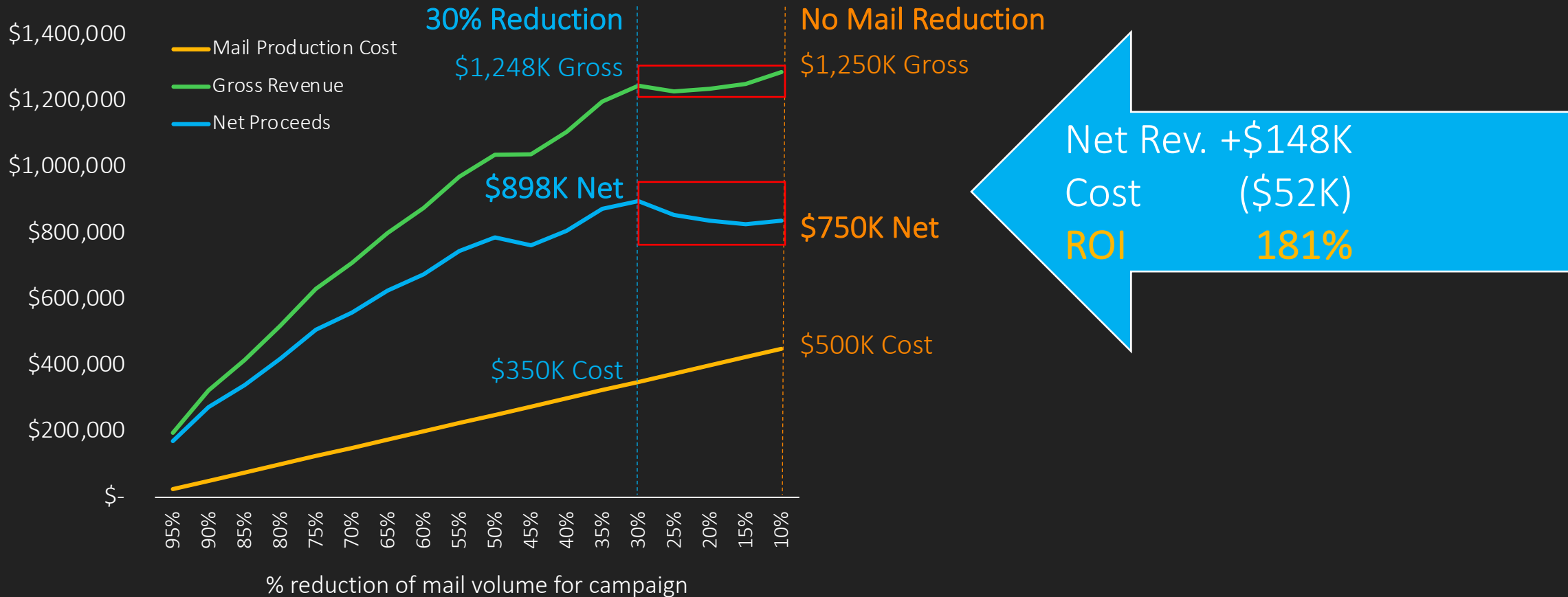
Personalize Solicitation Decisions

Improve Fundraising Performance

Preserve Brand Equity

Implementing Monthly Solicitation Volume Optimization

Sustain Gross Revenues While Reducing Costs



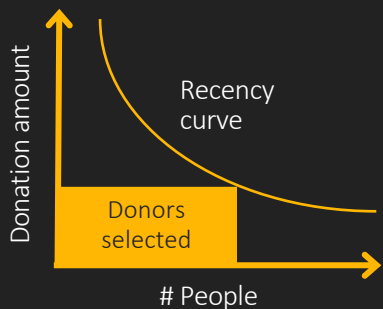
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Find New Value In Lapsed Donor Campaigns



Lapsed Reactivation Optimization

Recency Latest Gift



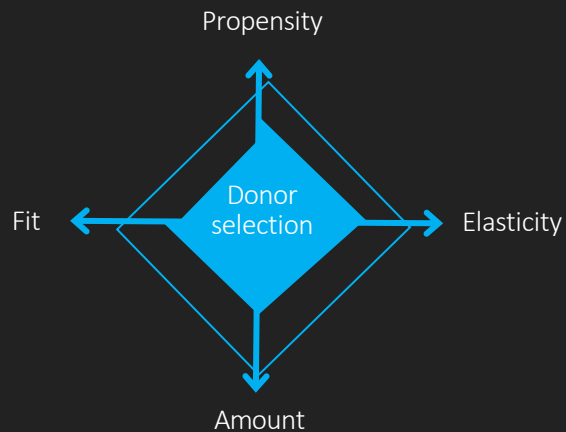
Strong participation,
but lower gift levels

Propensity Likelihood to Donate



Strong donation level,
but fewer donors

ExactDonor Likelihood to Increase DLV

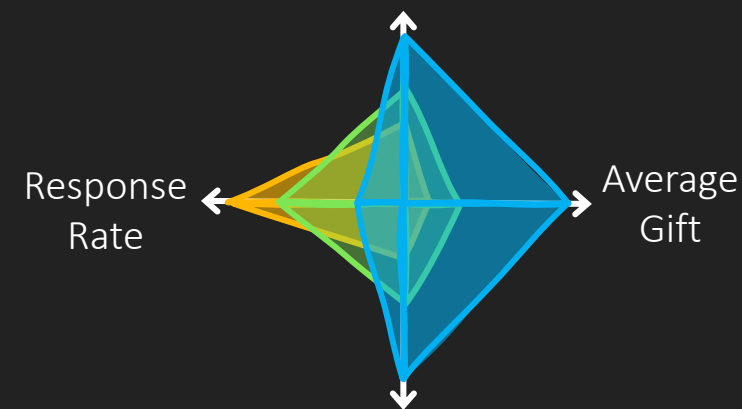


Multi-Dimensional
Behavioral Modeling

Calibrated through High Volume
Learning Cycles

Produces 25%+ Gift Value \$
over Competing Models

Donor Lifetime Value



- AI Treatment
- Propensity
- Recency

Lapsed Campaign: Donor inactive for 25 - 59 months

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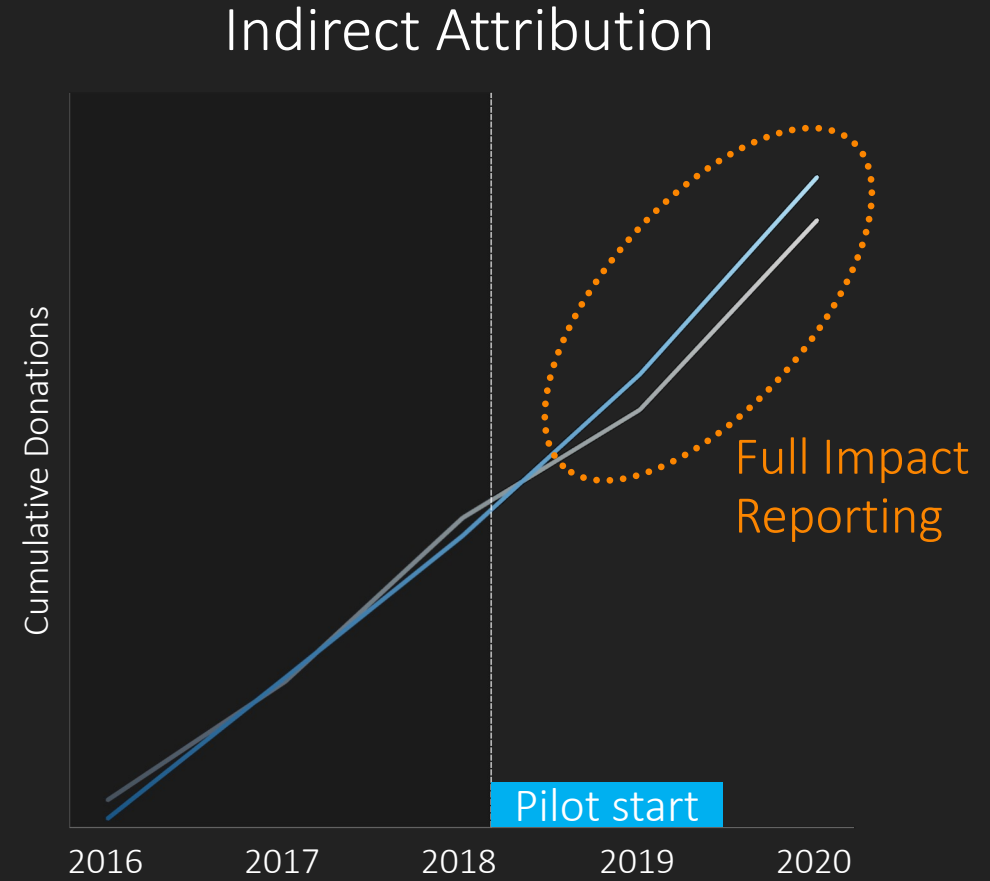
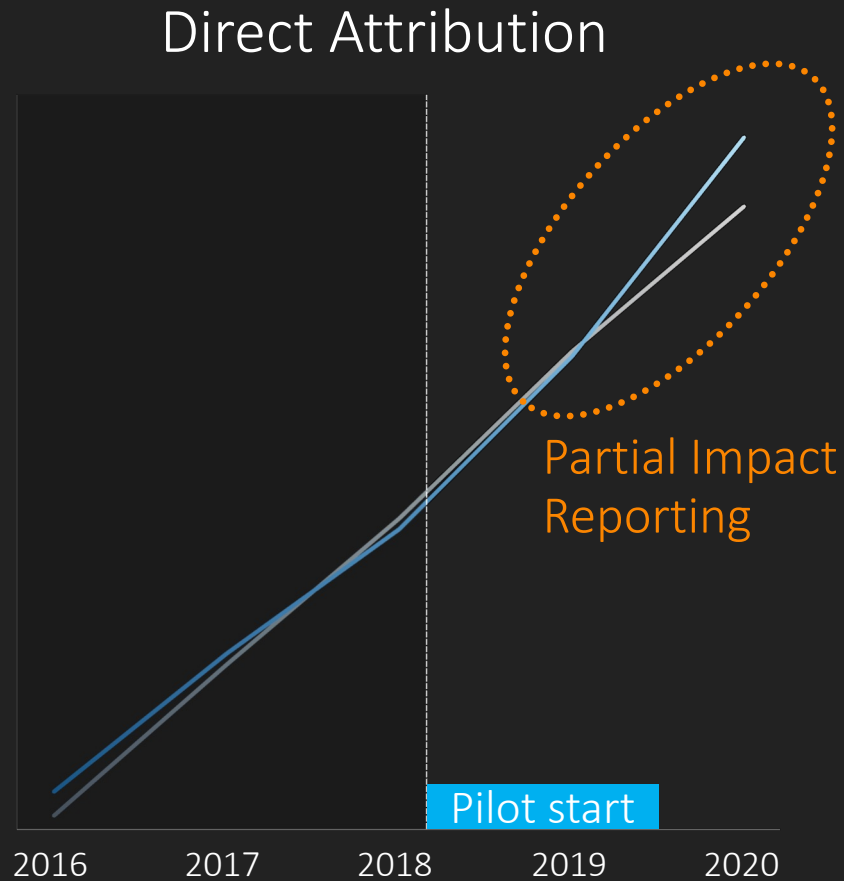
Measure Performance

- › Holistically
- › Objectively
- › Transparently



Measure and Win as an Enterprise

Direct and Indirect Influence Optimize Donor Behavior



Source: Anonymous Arjuna customer in Multipurpose Human Services sector

Re-evaluate Budget Setting

Zero-Based Budgeting

- › Brought Forward by Today's Environment

Apply Zero-based Budgeting Methods/Philosophy

- › Start with zero every year, and justify each dollar:
 - Strategic Value scoring: Project Impact, Risk, Viability, ROI / IRR% Stack
 - Build Project Business Cases: Approved and Evaluated in Annual Review
 - Quarterly Reevaluation & Reallocation of \$\$\$

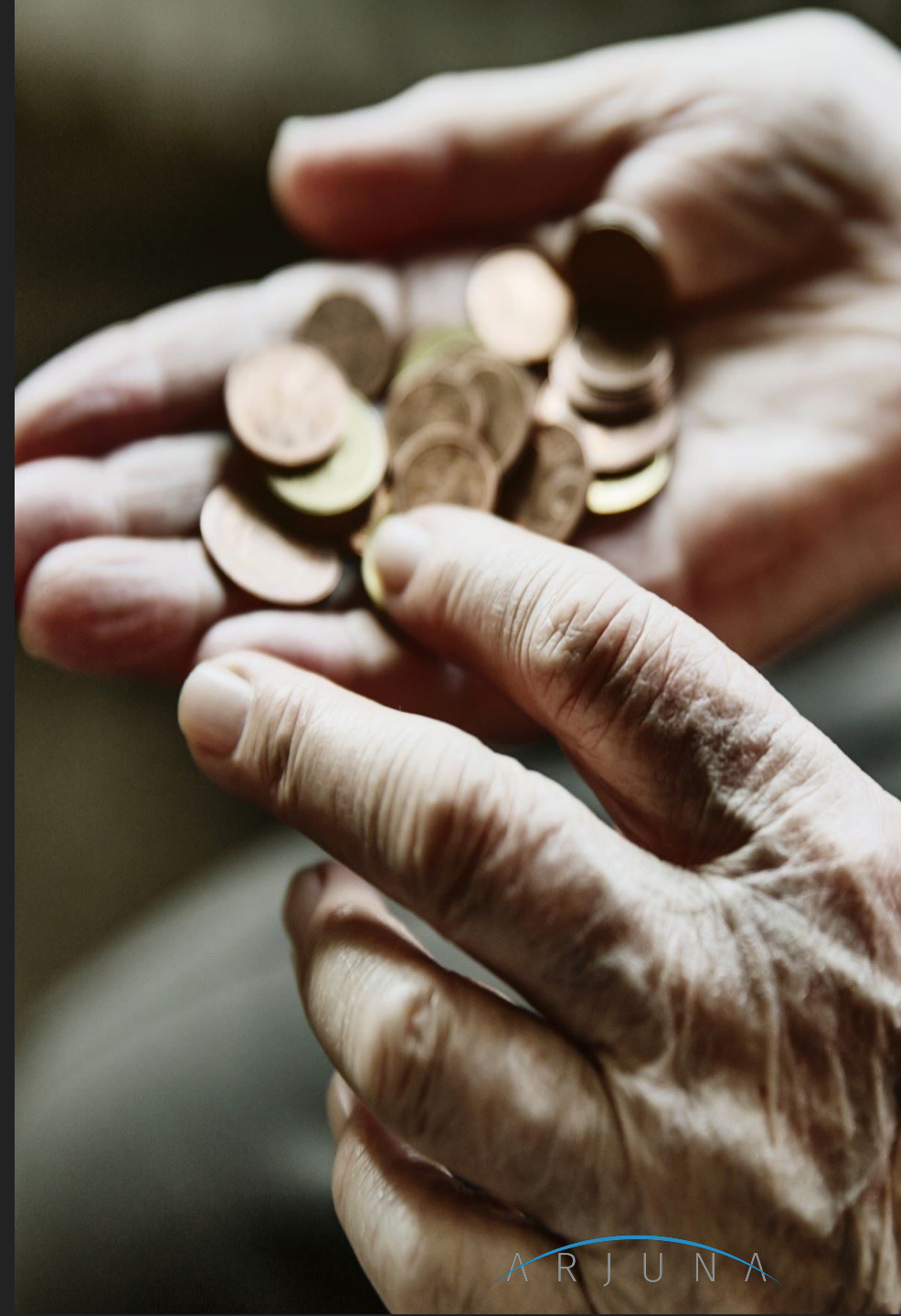
Be Transparent and Consistent with Budget Criteria

- › Measure upside in revenue and cost elimination uniformly
- › Apply consistent up/downside risk rates factors
- › Define mandatory compliance and discretionary spending



Summary

- › Understand Donor Sentiment
 1. Focus on improving net proceeds
 2. Optimize donor lifetime value
 3. Personalize relationship investment decisions at scale
 4. Find new value in lapsed donor campaigns
 5. Measuring fundraising performance





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