Death to Buckets

Fundraising Decisions at the Individual Level

SIMIOCLOUD

Agenda

The Challenges of Donor Segmentation

The Solution in Theory

The Solution in Practice

Segmentation in the nonprofit industry is behind the times.

Competition for donors is fierce as the donor pool shrinks.

It's time to utilize data science to fully optimize your fundraising efforts.

Challenges

Organizational Alignment

- Is there an internal fight for the donor?
- Event Attendees, Grateful Patients and Volunteers
- Mid-level and Major donors
- Membership Program versus Donors?
- Does the consumer care how they are classified?

The Cultivation Fallacy

"Acquire new donors through any means, we will cultivate them"

"Our messaging and mission appeal will win them over"

- Most programs essentially promote ALL 0-12 month recency donors
- Organizations have as many "one-time" donors as they have "multi-donors"

Is your new donor acquisition plan tied to long-term value?

The Cultivation Fallacy

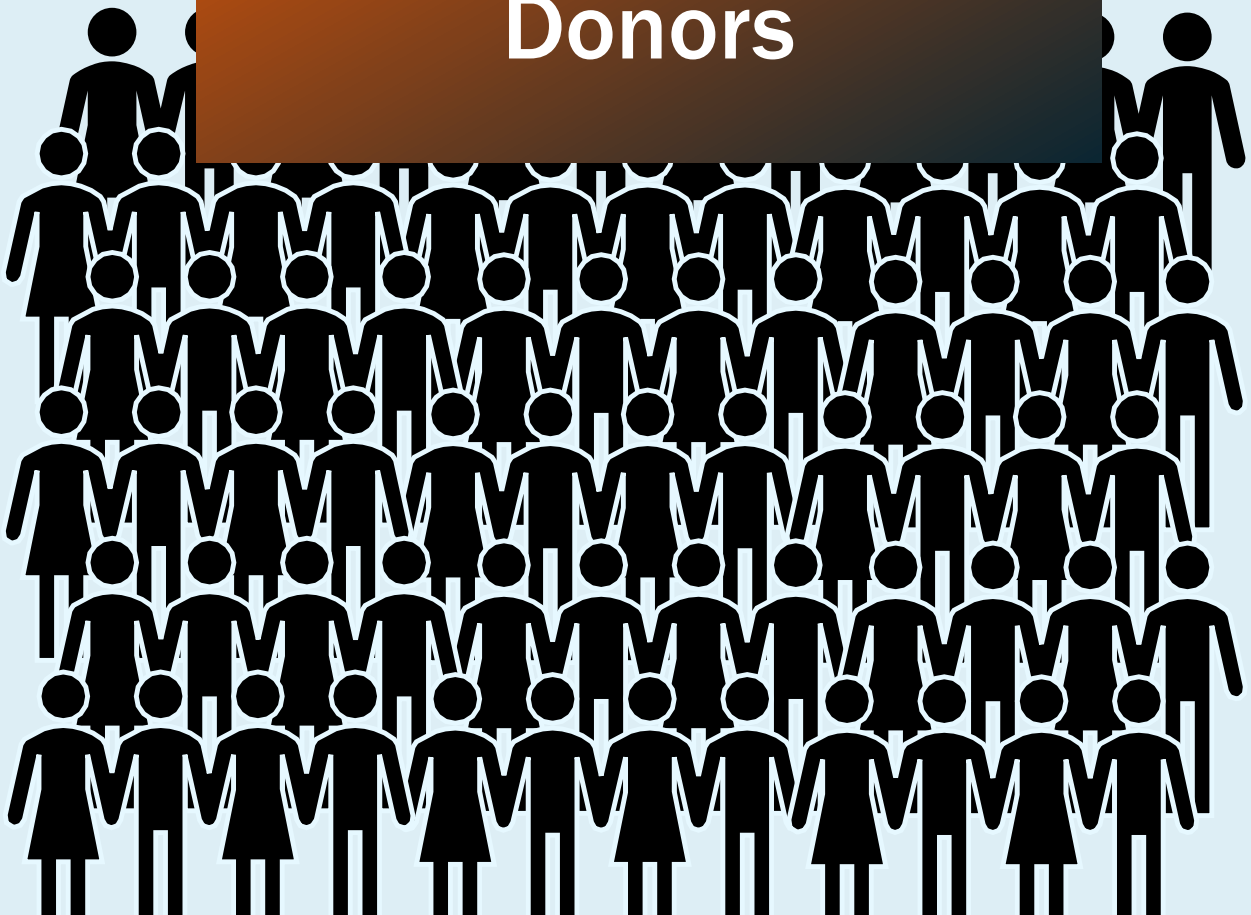
Acquire the “right” donors who are predicted to convert and provide high long-term value

Remove new donors predicted to have low long-term value from systematic campaigns

- Initial gift amount is ALWAYS a powerful predictor of long-term value, but isn’t the only one
- One-time givers help short term cash flow, but you should control longer term cost

Is your new donor acquisition plan tied to long-term value? – WHY NOT?

Mass of Undifferentiated Donors



Intuition

Intuition is used to determine marketing strategy

Singular Thinking

One “lever” is used to separate the masses for simplicity

Budgets

Budgets define campaign volume versus predicted performance setting the budget

What is a “BUCKET”?

The “Mass of Undifferentiated Donors” are broken into segments based upon a finite number of characteristics

RFM

The traditional solution is Recency, Frequency and Monetary Values of past donations

Additions

Sophisticated buckets add Acquisition Channel and Demographic Information

Leaky BUCKET Problem?

A “segment” is a collection of few to many donors who will all be treated in the same fashion

Big Buckets

Some segments are too large, so additions are layered on based upon “universal” understanding, not “local” knowledge

Potential Error

There was no direct statistical support for the splitting of segments

Simpson's Paradox

A phenomenon in which a trend appears in several different groups of data (buckets!) but disappears or reverses when the groups are combined (all donors)

?

Marginal Segment

A large segment has shown to be marginal in the past, so split it with a universal truth? (e.g., females outperform males)

X

Potential Error

It is possible that in this localized segment (or in many segments), males outperform females.

Lack of Meaningful Bucket Data

One-Time Donors

While better than nothing, one transaction is not enough to make informed decisions

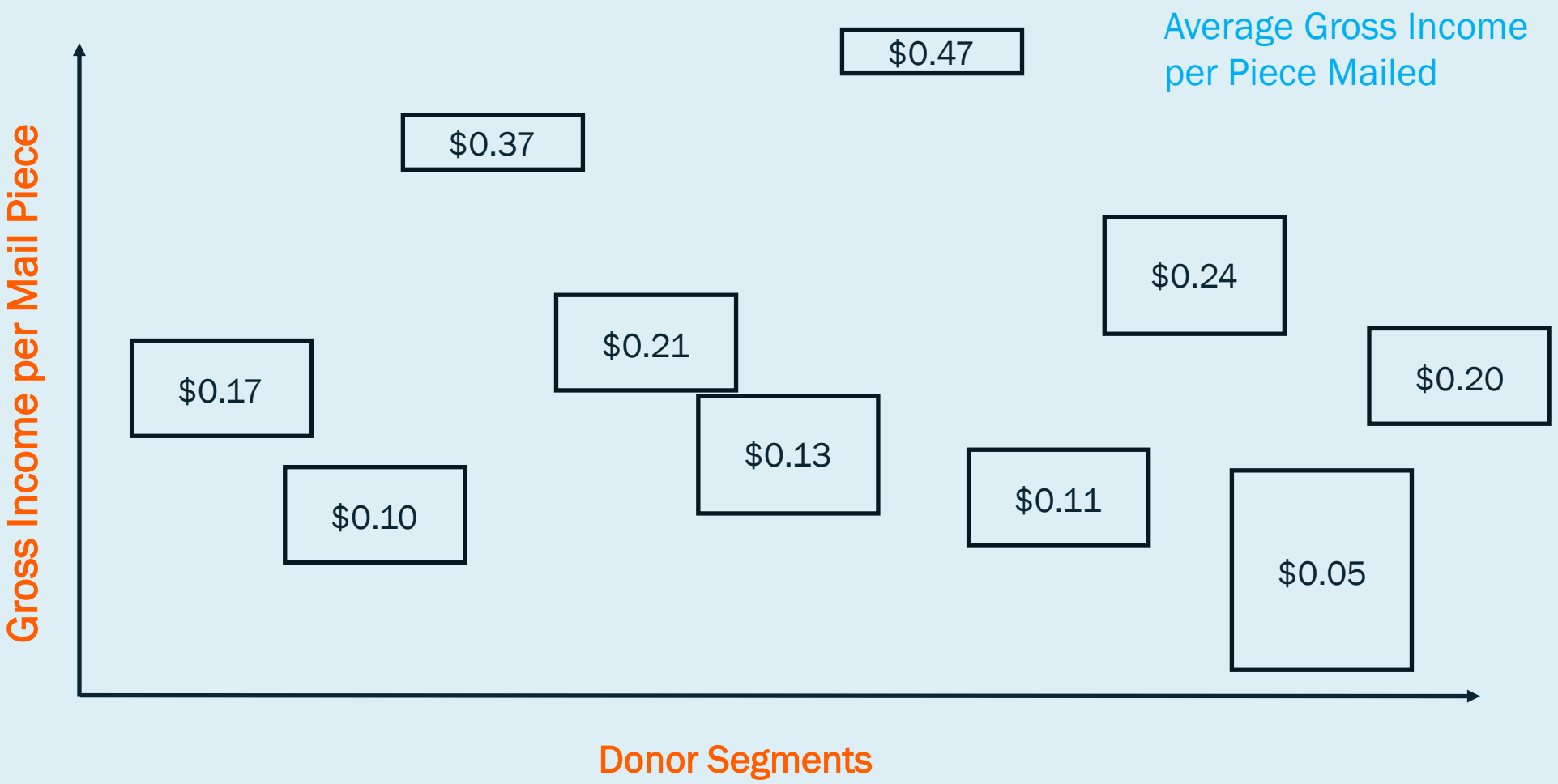
Lapsed/Dormant Donors

Really “old” information becomes less relevant in distinguishing a good bucket from bad

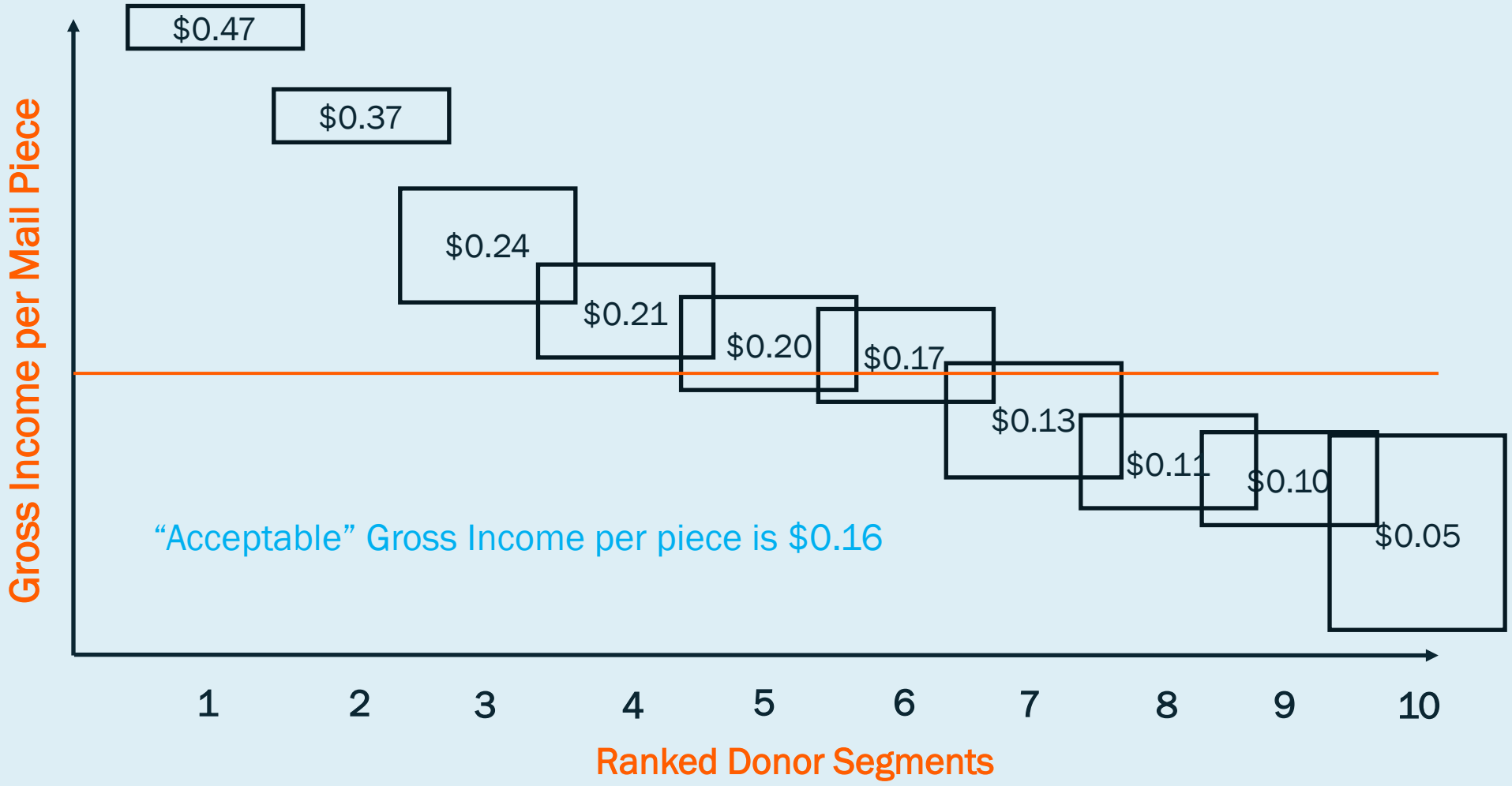
Consumer Data

Manually adding consumer data is costly and prone to error

The Bucket Problem



The Bucket Problem



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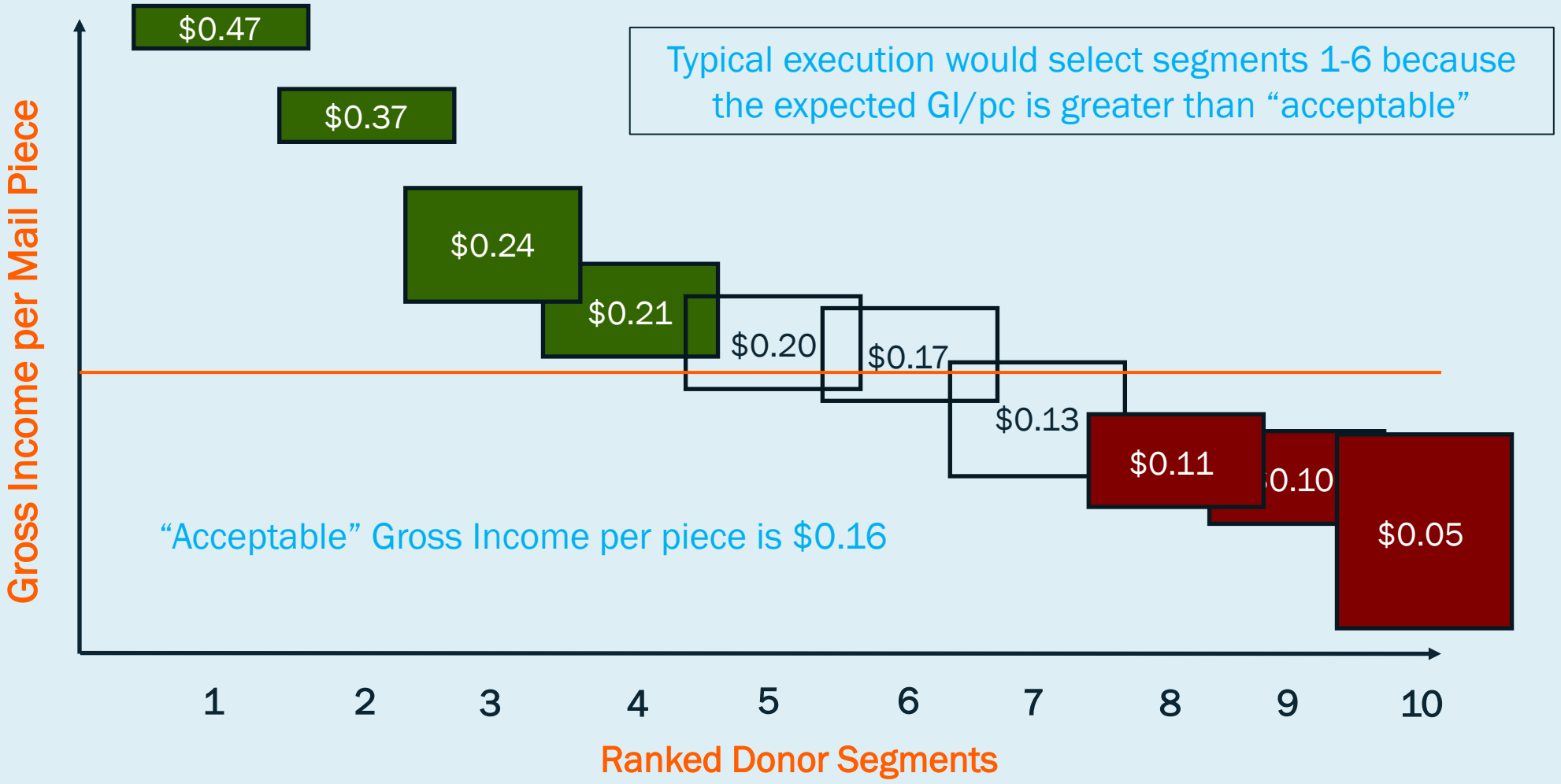

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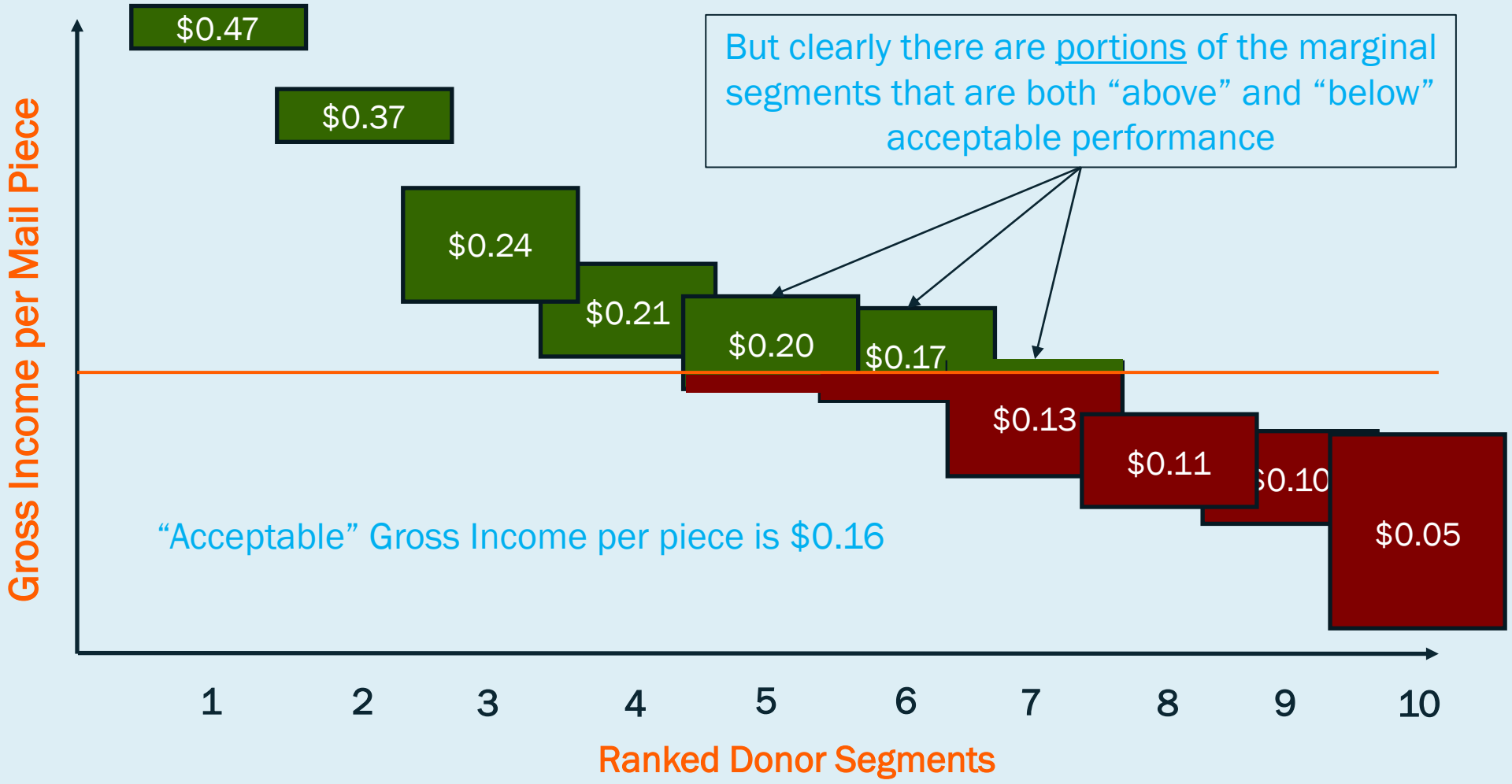

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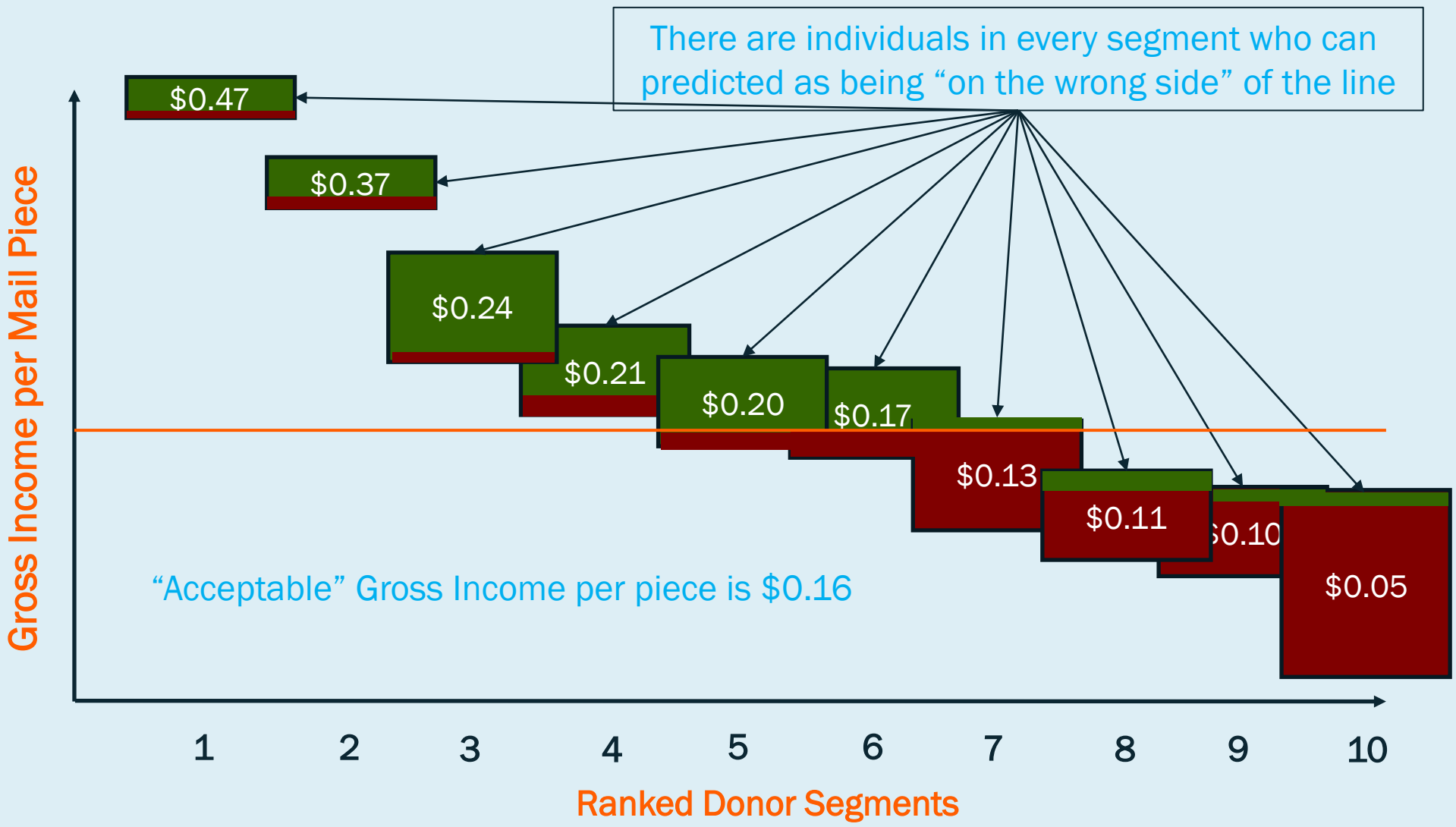


The Solution in Theory

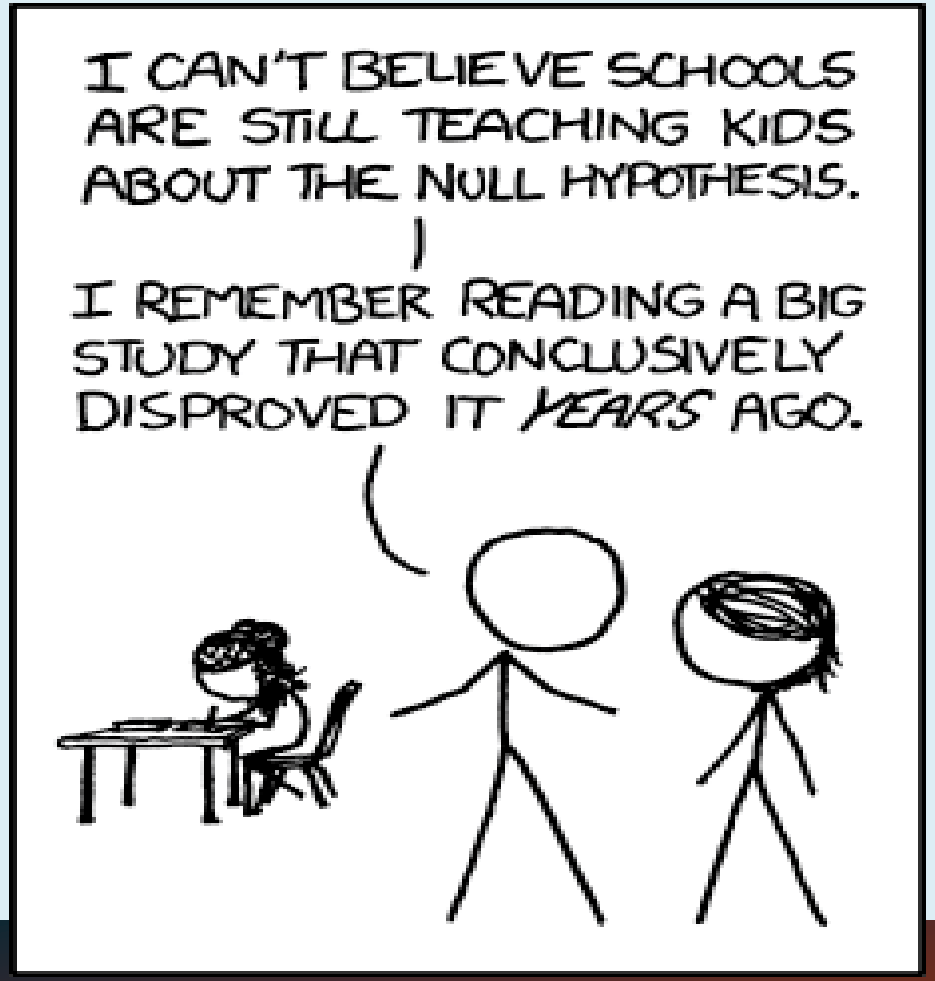
Extensive data exists on all donors

Each donor is a bucket

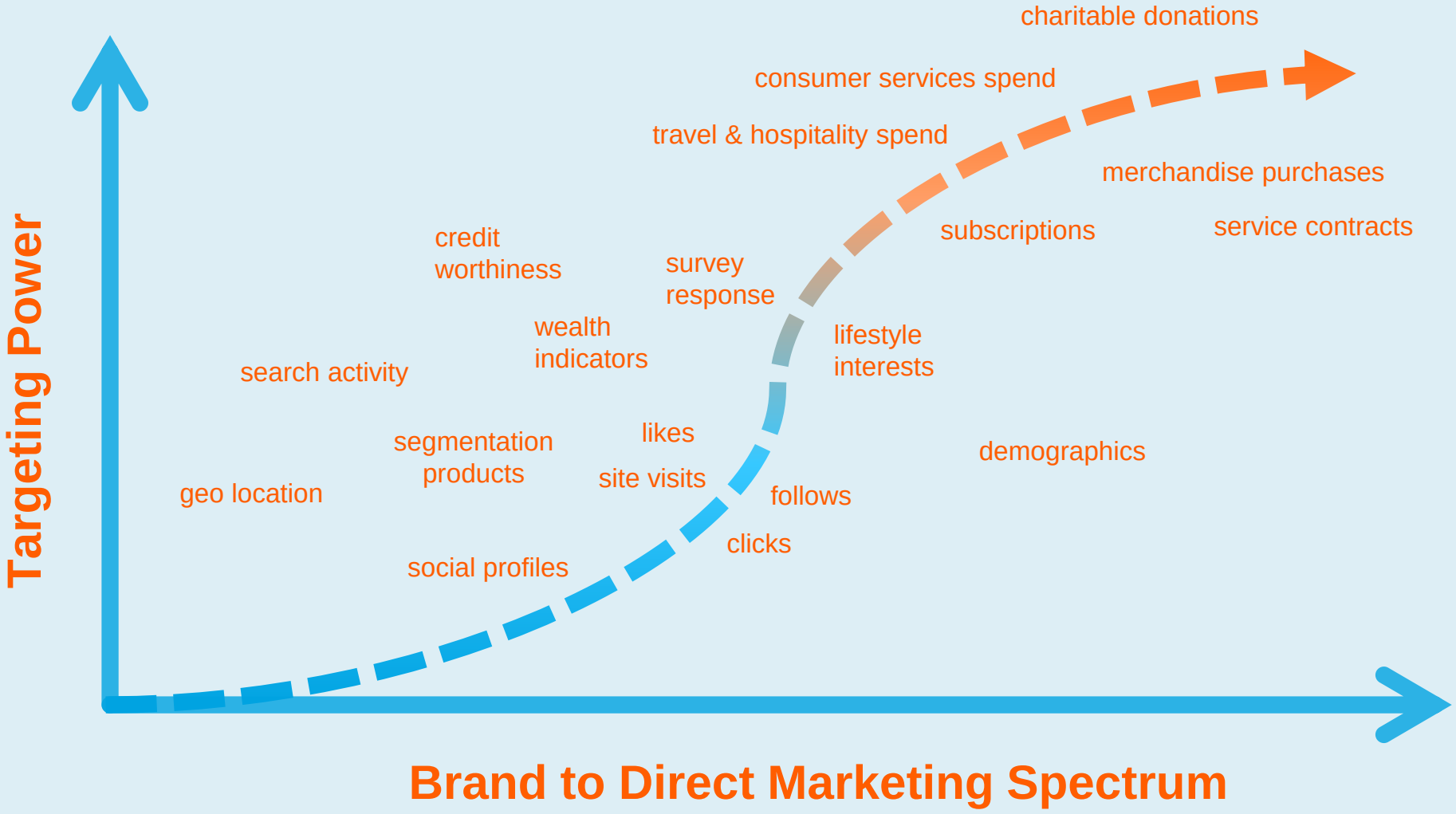
Algorithms or Models are created using ALL the data

Models are predictions of response, revenue and/or long-term value

Fundraising decisions are, therefore, made at the donor level, not with leaky buckets



VAST CONSUMER DATA



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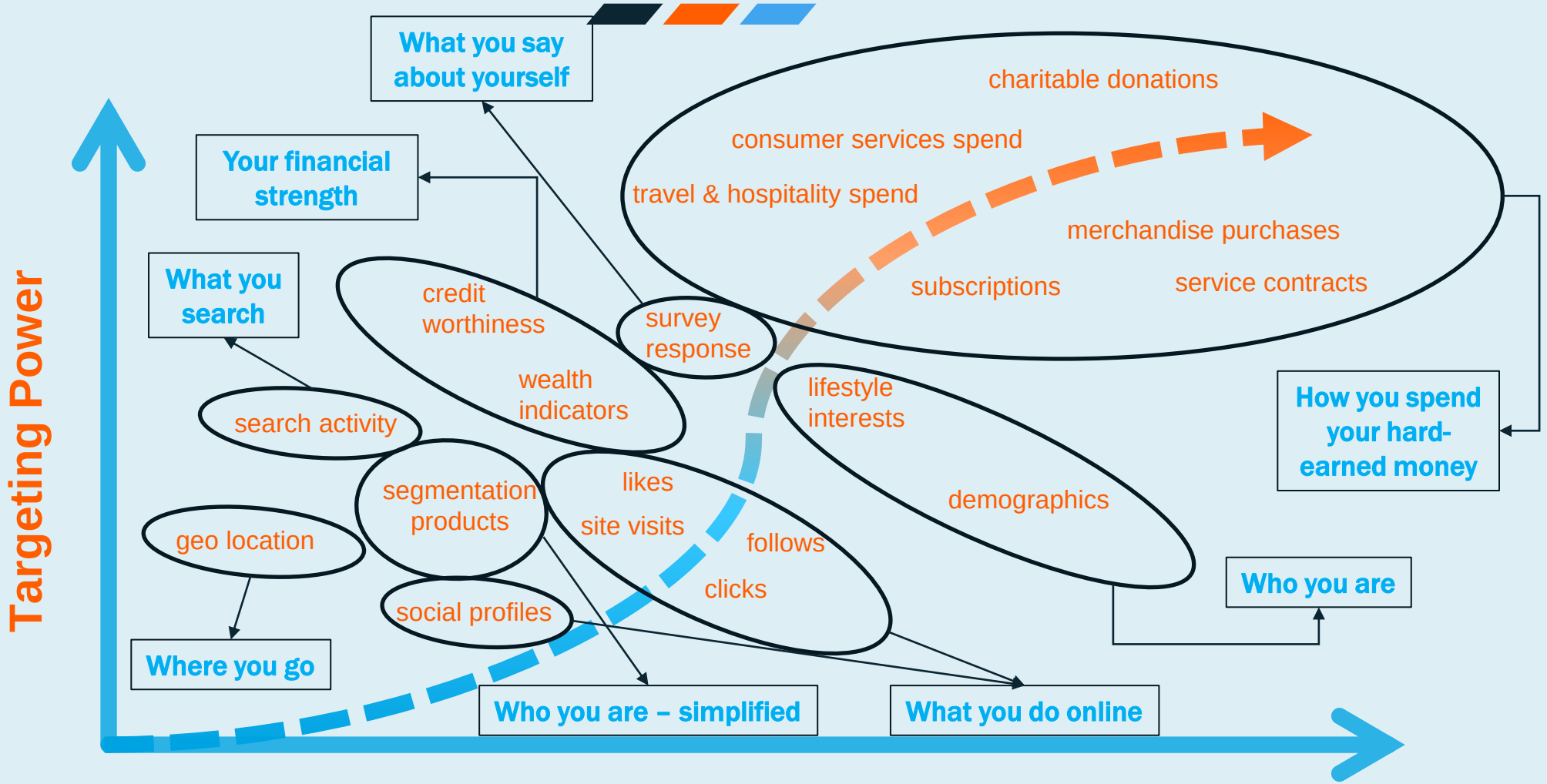
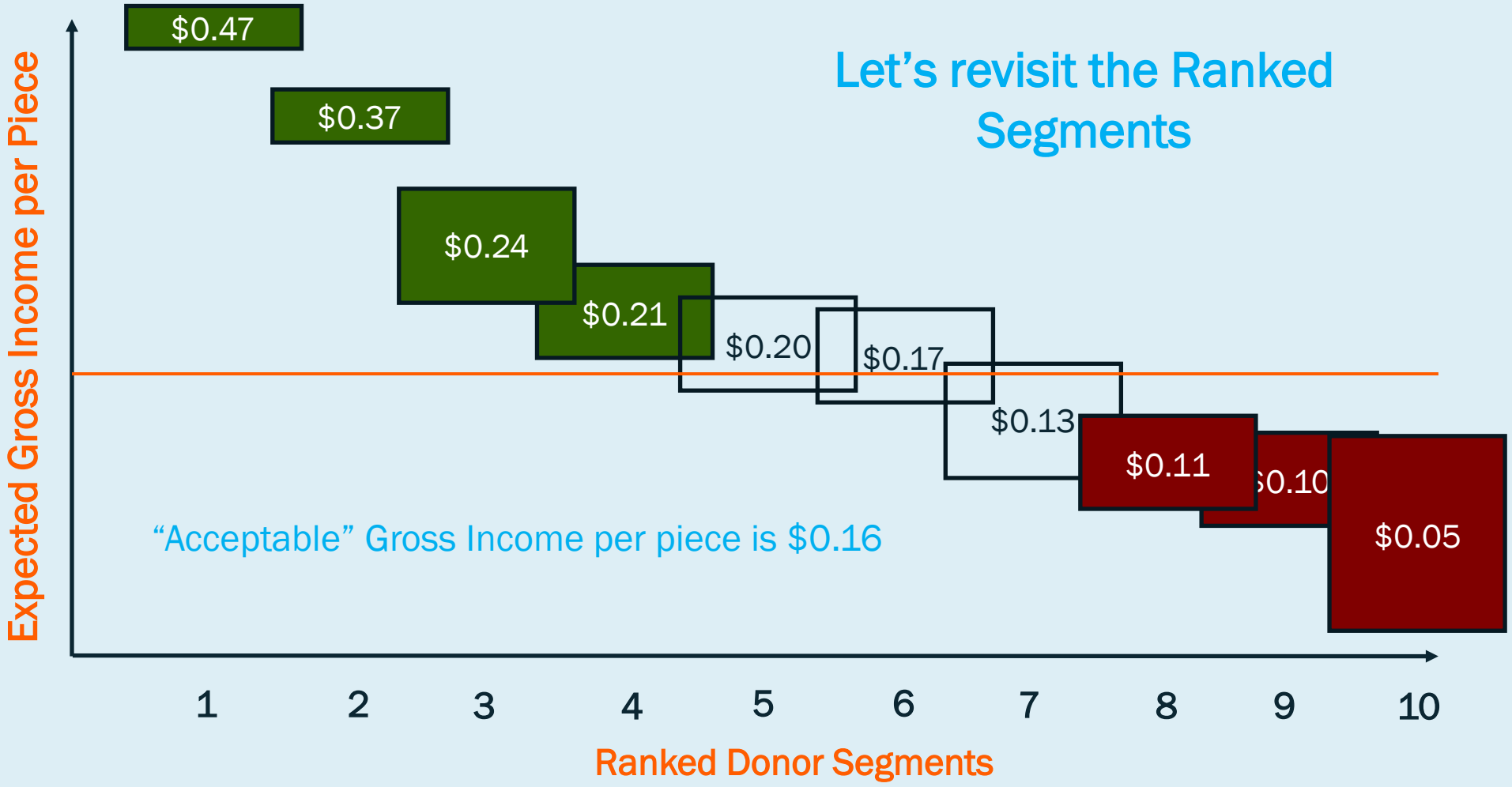
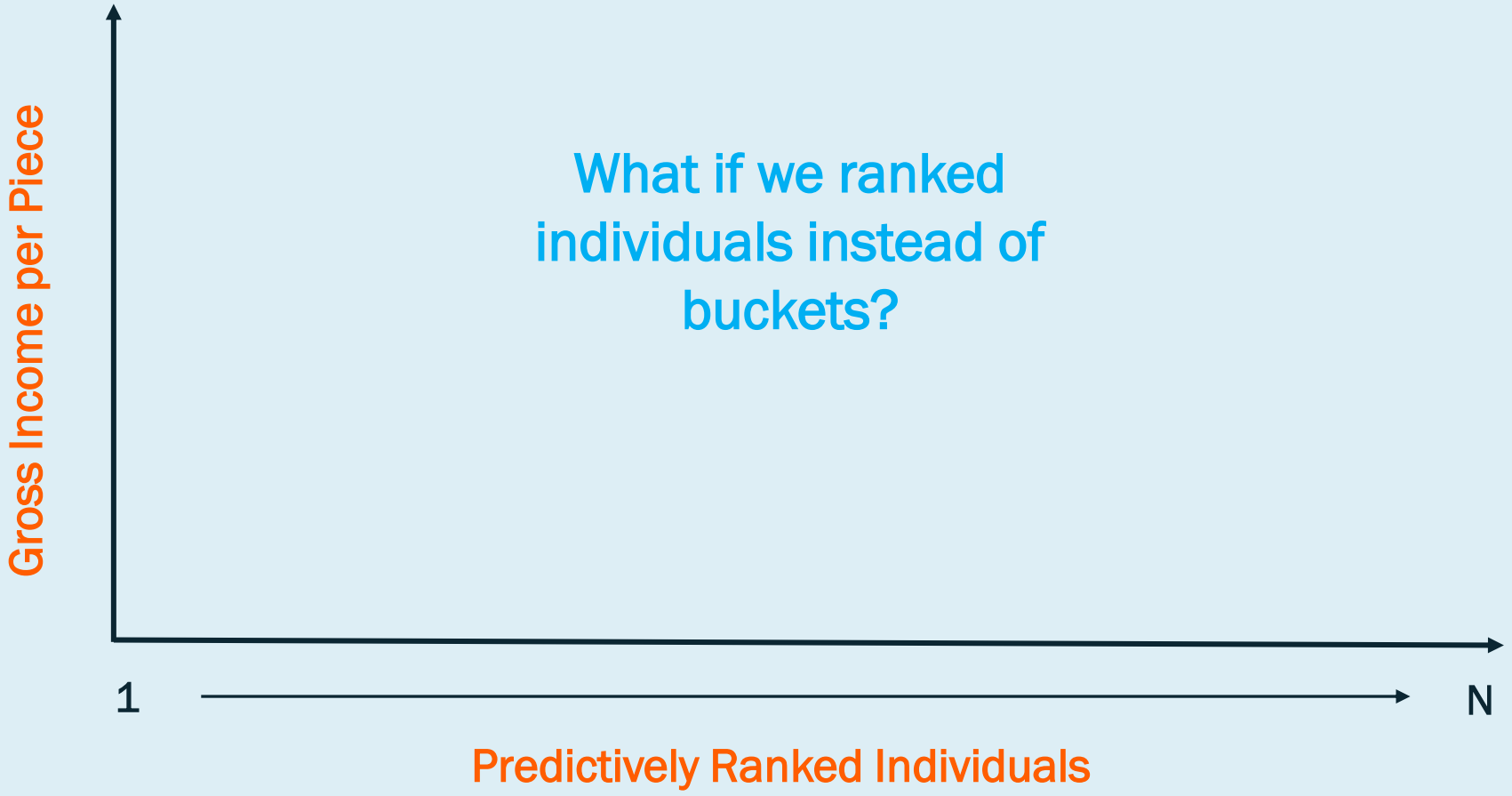


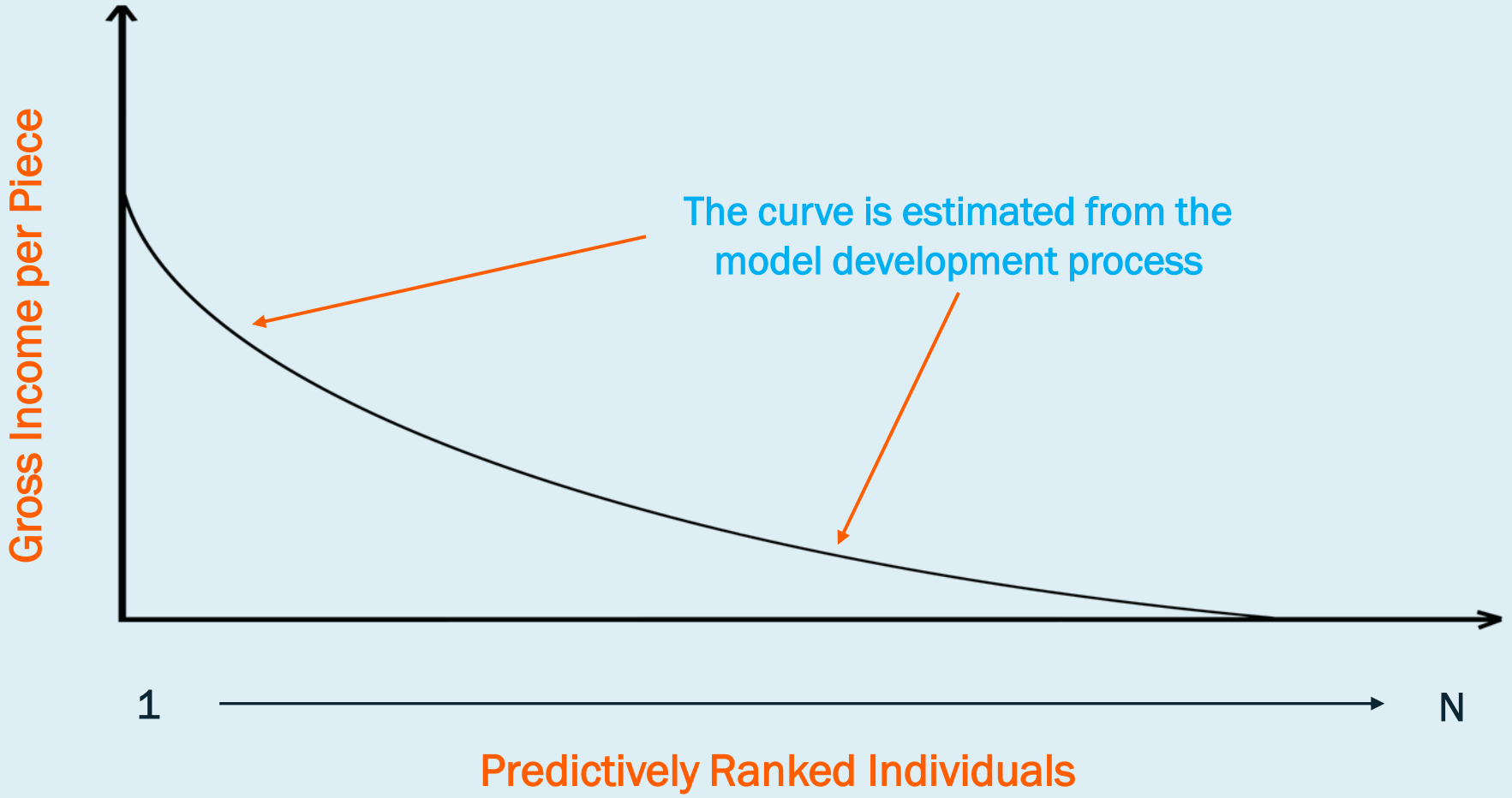
The Bucket Problem



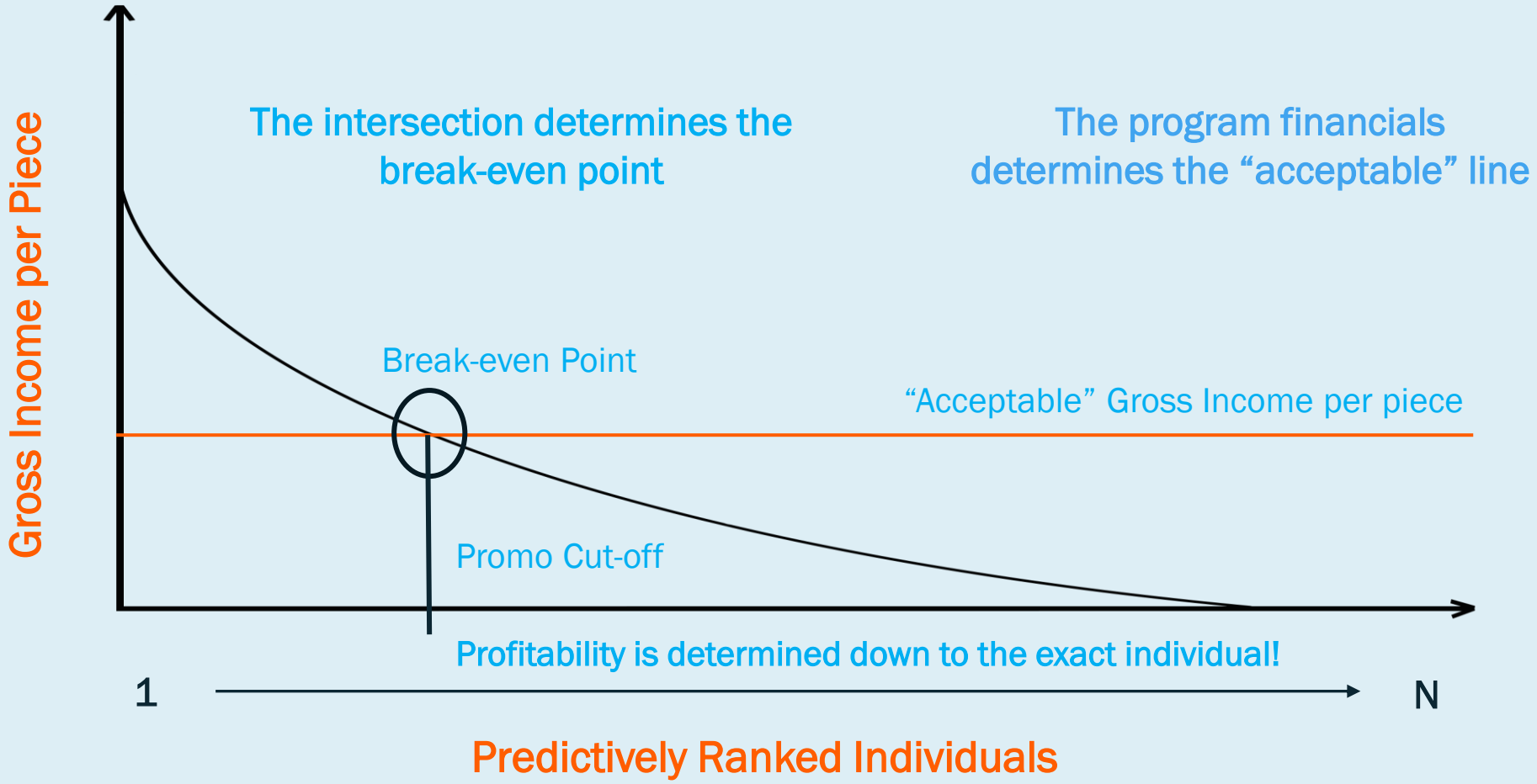
Predictively Ranking Individuals



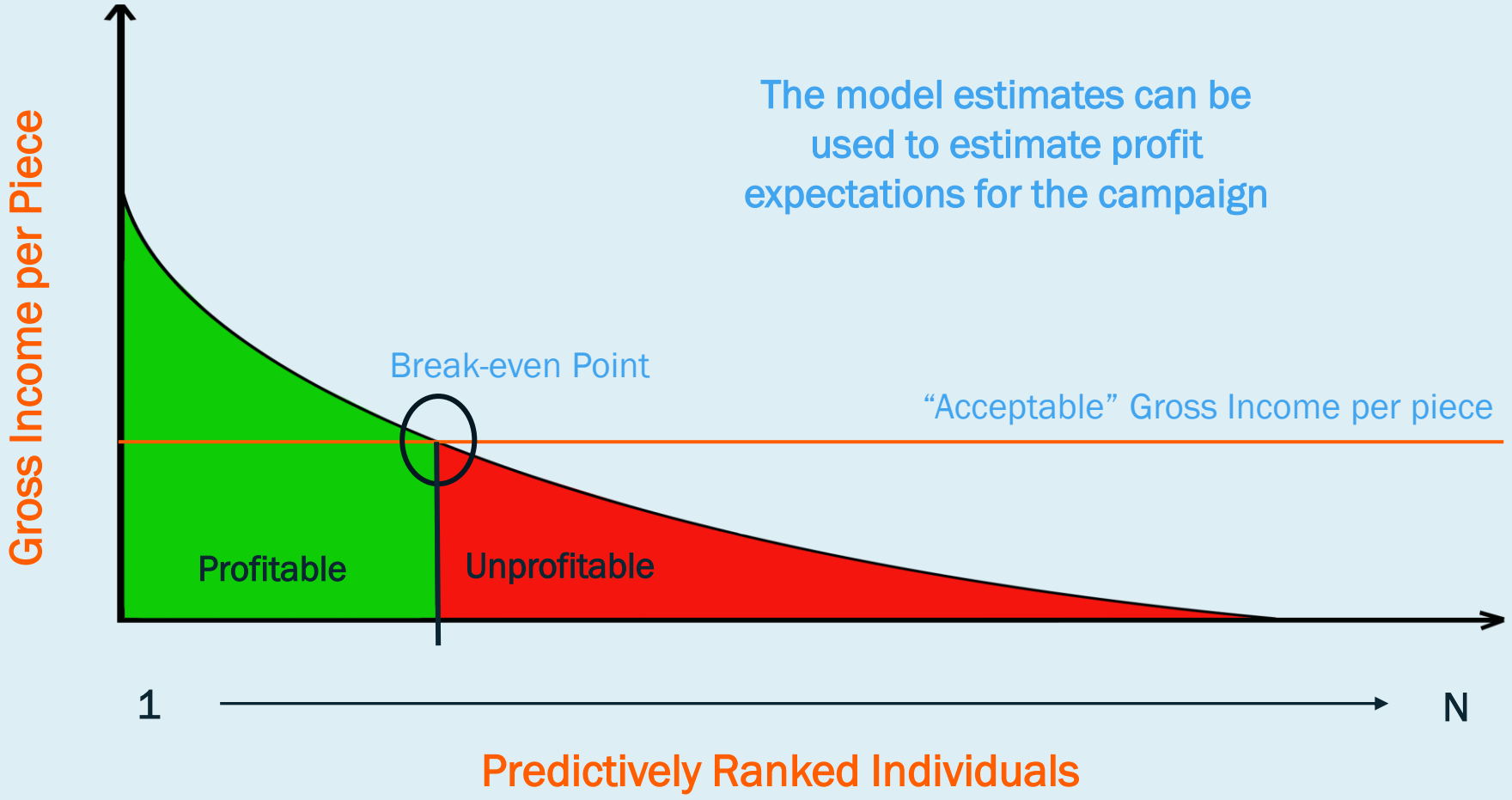
Predictive Model “Shapes the Curve”



Determining Promotion Cut-Off



Predicted Profit Can Be Estimated



The Solution in Practice

The “Segmentation Process” in place for many organizations is very complex

Lapsed Donor Reactivation

Mixture of Segmentation, Processing and Model Scores

Donor Renewal

Segmentation

Model scores are not typically utilized in nonprofit

Lapsed Donor Segmentation

The “Superdupe” Approach

Rationale: Allow for interactions of lapsed donors and outsourced acquisition names

Segment Description	Latest Donation Amount	Sum of Count
37-48 mo, Multi-Gift		11304
37-48 mo, Single-Gift		8507
49-60 mo, Multi-Gift		9729
49-60 mo, Single-Gift		11505
61-120 mo, Multi-Gift		31038
61-120 mo, Single-Gift		36391
121+ mo, Multi-Gift		14383
121+ mo, Single-Gift		24401
Grand Total		147258

Steps

A. Insert all lapsed donors into the Merge/Purge

B. Allow for acquisition sources to deliver lapsed donors names

C. Flag and select for mail all that “overlap”

Potential Issues

A. How are lapsed donors defined?

B. Expected counts of superdupes is variable

C. Changes in “mixture” of outsourced names has unknown affect on performance

D. Managing outsource vendors is troublesome

Lapsed Donor Segmentation

The Balance of Lapsed Names

Rationale: Select the intersection of segments and top model segments

		Model Score									
Segment Description	**Latest Donation Amount**	**01**	**02**	**03**	**04**	**05**	**06**	**07**	**08**	**09**	**10**
49-60 mo, Single-Gift	**C: $10-14.99**	127	449	696	986	1140	1188	2154	2126	1066	3047
	D: $15-24.99	112	303	444	592	612	723	1475	1293	488	1877
	E: $25-49.99	104	311	426	573	584	659	1407	1296	454	1759
	F: $50-99.99	66	92	121	132	258	152	352	490	111	467
	G: $100-249.99	25	54	39	42	126	60	135	193	29	130
	H: $250-499.99	1	1	2	4	4	1	4	6	5	7
	I: $500-999.99	1	1	1	3		1	2	5		3
	J: $1,000-1,999.99			1		1	1	1			2
	K: $2,000-4,999.99										
	L: $5,000-9,999.99	1								1	
	M: $10,000+										

Potential Issues

A. Mix of names that “fall” into this process changes depending upon superdupes

B. Segments are assumed to be as important as model scores

C. Model may not be aligned with the campaign objective, e.g. targeting prospects versus lapsed donors

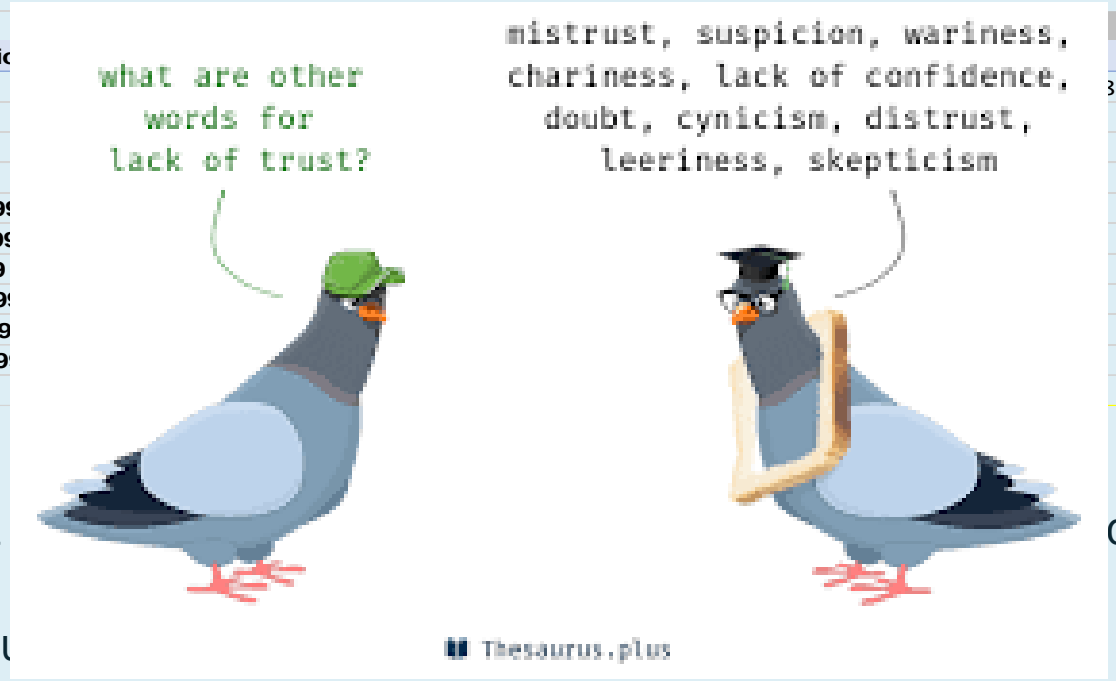
D. Model scores are “cherry picked”

Lapsed Donor Segmentation

The Balance of Lapsed Names

Rationale: Select the intersection of segments and top model segments

Segment Description	Latest Donatic
49-60 mo, Single-Gift	C: $10-14.99
	D: $15-24.99
	E: $25-49.99
	F: $50-99.99
	G: $100-249.99
	H: $250-499.99
	I: $500-999.99
	J: $1,000-1,999
	K: $2,000-4,99
	L: $5,000-9,99
	M: $10,000+



	07	08	09	10
3	2154	2126	1066	3047
	1475	1293	488	1877
	1407	1296	454	1759
	352	490	111	467
	135	193	29	130
	4	6	5	7
	2	5		3
	1			2
			1	

Potential Issues

A. Mix of names that dupes

B. Segments are assu

C. Model may not be aligned with the campaign objective, e.g. targeting prospects versus lapsed donors

D. Model scores are “cherry picked”

Donor Renewal Segmentation Example

Renewal Names Methodology:

Create buckets based upon Recency, Frequency, Gift Amount & Package

Recency	Frequency	Largest Gift Amount	Total File	Mid-Level*	NTF - DIRECT MAIL	Package Responsive	Non-Package Responsive
0-3 mos	MULTI	$0.01 - $4.99	1119	0	0	703	416
	MULTI	$5.00 - $9.99	3252	0	5	1363	1884
	MULTI	$10.00 - $14.99	31302	1	1	13670	17631
	MULTI	$15.00 - $24.99	41981	2	2	18048	23928
	MULTI	$25.00 - $49.99	68553	16	7	25629	42902
	MULTI	$50.00 - 99.99	40415	220	3	13714	26267
	MULTI	$100.00 - $249.99	28799	975	0	8187	16289
	MULTI	$250.00 - $499.99	3345	428	0	394	1127
	MULTI	$500.00 - $999.99	1677	490	0	129	375
	MULTI	$1,000.00 - $1,999.99	646	386	0	58	154
	MULTI	$2,000.00 - $4,999.99	145	101	0	11	38
	MULTI	$5,000.00 - $9,999.99	41	21	0	4	9
	MULTI	$10,000+	9	3	0	1	6

Potential Issues

A. Segment definitions, e.g. Largest Gift Amount

B. Large segments

Opportunities

A. Use models to simplify the process for donor selections

B. Use of models will precisely indicate which donors should be promoted

C. Develop models specific to package types

Low Risk Model Evaluation & Testing

How can you evaluate models relative to current segmentation methodology?

Simple Approach to Identify the Opportunity

A. Develop Models

B. Generate Selection using Segmentation Method

C. Generate Selection using Model

D. Enumerate the Overlap

E. Determine the Opportunity

F. Test in Market

Selected?		Modeled: Yes	Modeled: No
Segmentation: Yes		Agree: Promote	Re-key and Promote
Segmentation: No		Key & Test	Agree: Do Not Promote

If either the “Segment Only” or “Model Only” quantities are large, the opportunity for performance improvement with the model exists

Low Risk Model Evaluation & Testing

Some Important Considerations

Considerations:

A. Overall Size of the Universe / Donor File

B. Availability of Data to Develop Effective Model

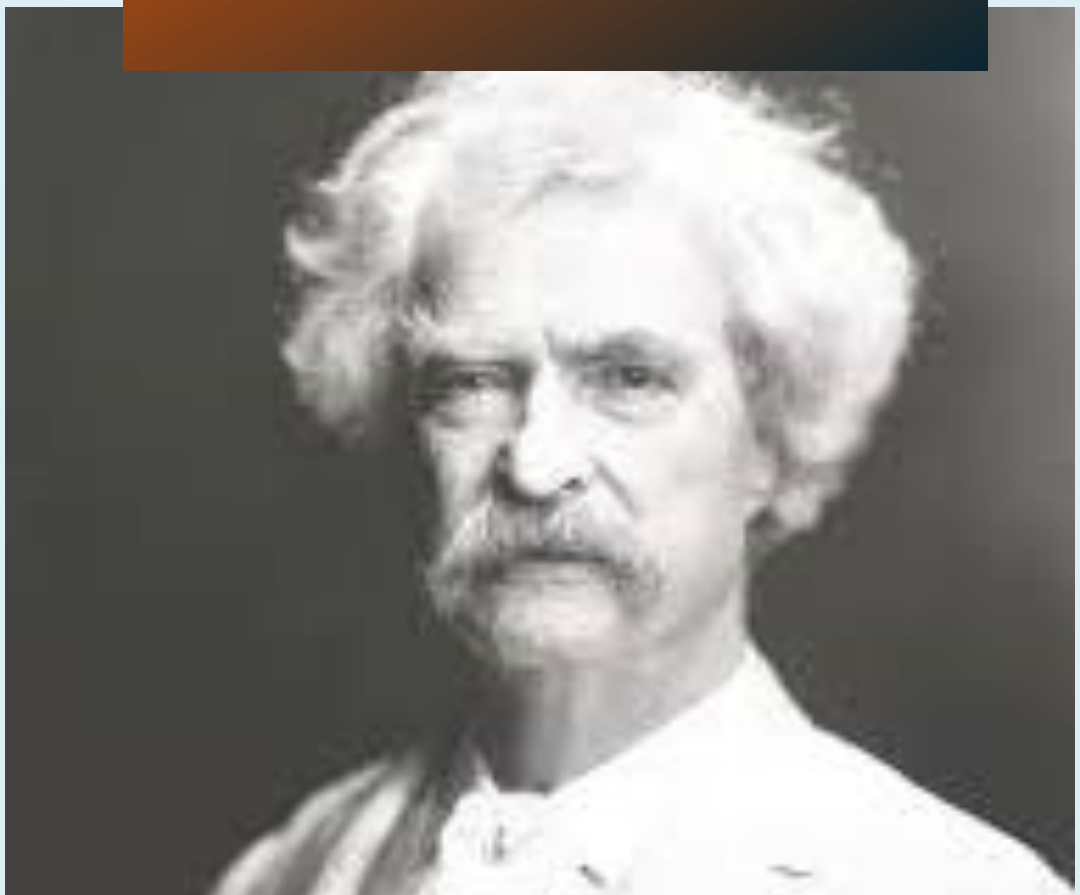
C. Cost of the Model Development / Application

D. Organizational Alignment / Agreement for Process Change

Selected?		Modeled: Yes	Modeled: No
Segmentation: Yes		Agree: Promote	Re-key and Promote
Segmentation: No		Key & Test	Agree: Do Not Promote

So is it a Bucket Funeral?

Reports of my death are greatly exaggerated” – Mark “McBuckets” Twain



Segmentation versus Modeling?

Small Organizations

Segmentation for donor file

Modeling for Acquisition

Mid-Sized Organizations

Segmentation or modeling for donor file

Modeling for Acquisition

Large Organizations

Predictive modeling should be used for:

- Renewal Programs
- Donor Upgrades to Mid-level, Sustainer and Major Donor
- Lapsed Renewal
- Modeling for Acquisition

What Should You Do?

- Ask Yourself: Is Your Segmentation Optimal?
- Consult with an Analytical Expert
- Engage with a Data Company Execute a project that accomplishes the following:
  - Understand how your selection process will change
  - Use actual data & build predictive models
  - Identify the opportunity for improvement
  - Test, test, test

THANK YOU

DOUG KACZMAREK
dkaczmarek@mooredmgroup.com
SimioCloud.com

SIMIOCLOUD