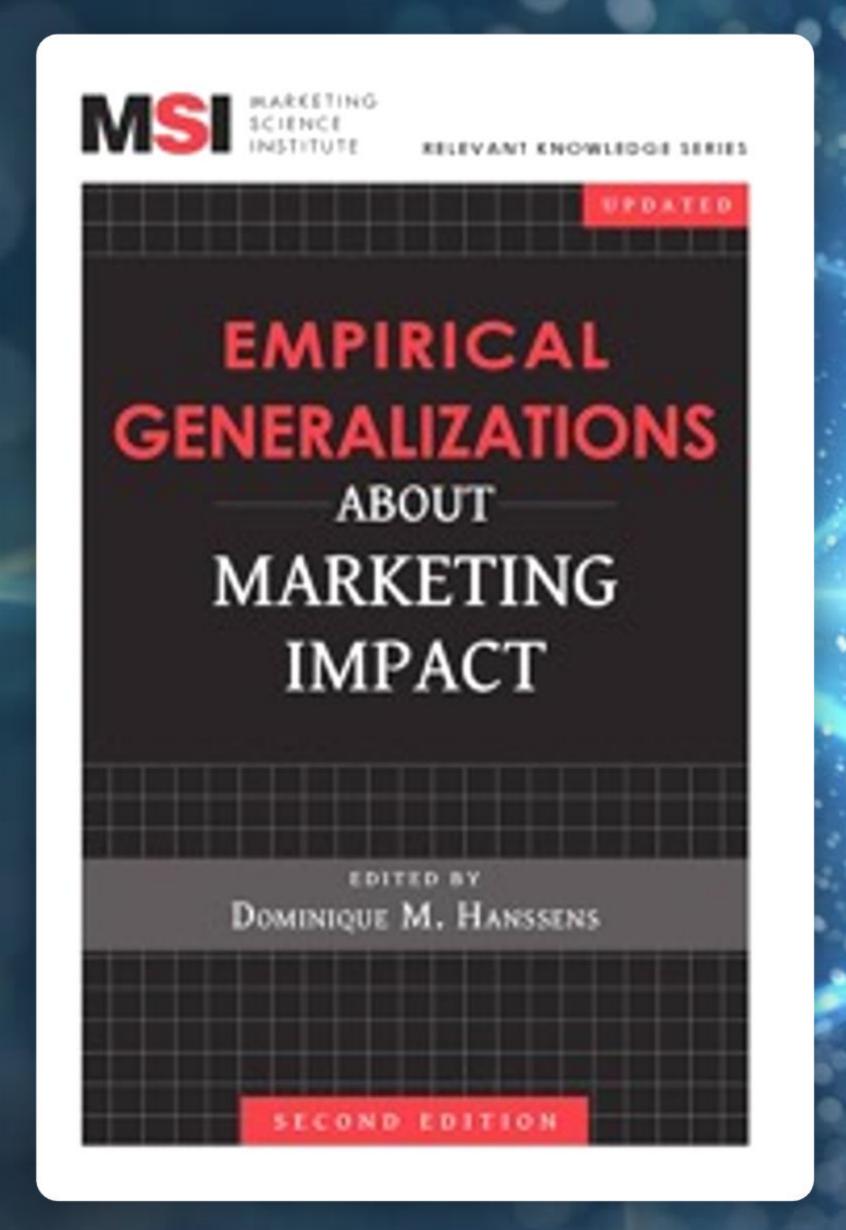


## To be a profession:

We should have a CODIFED view of marketing 'truths'

It is our Knowledge







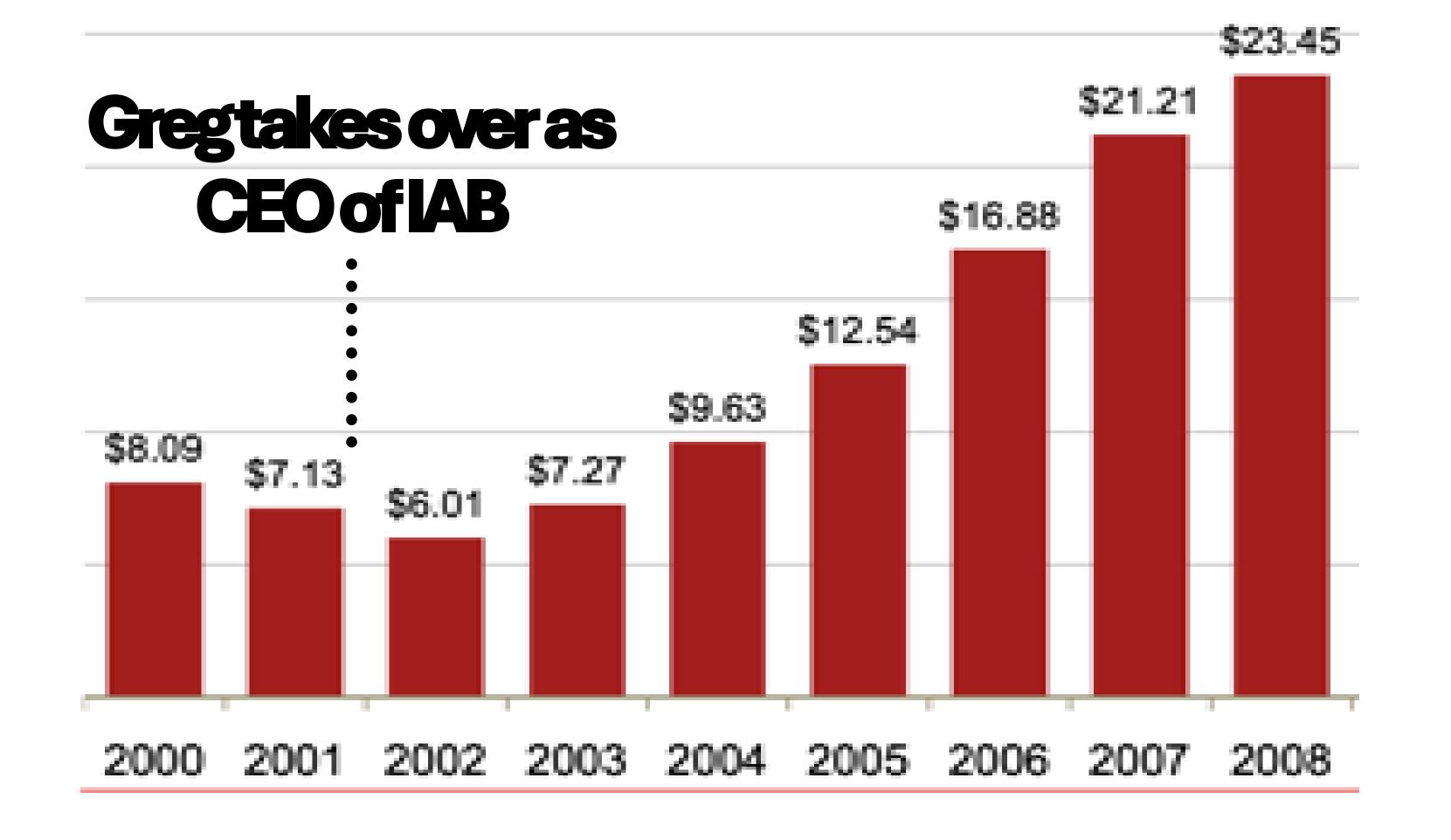
## We Must Believe in and Know Science





# 

#### Annual Revenue, In billions





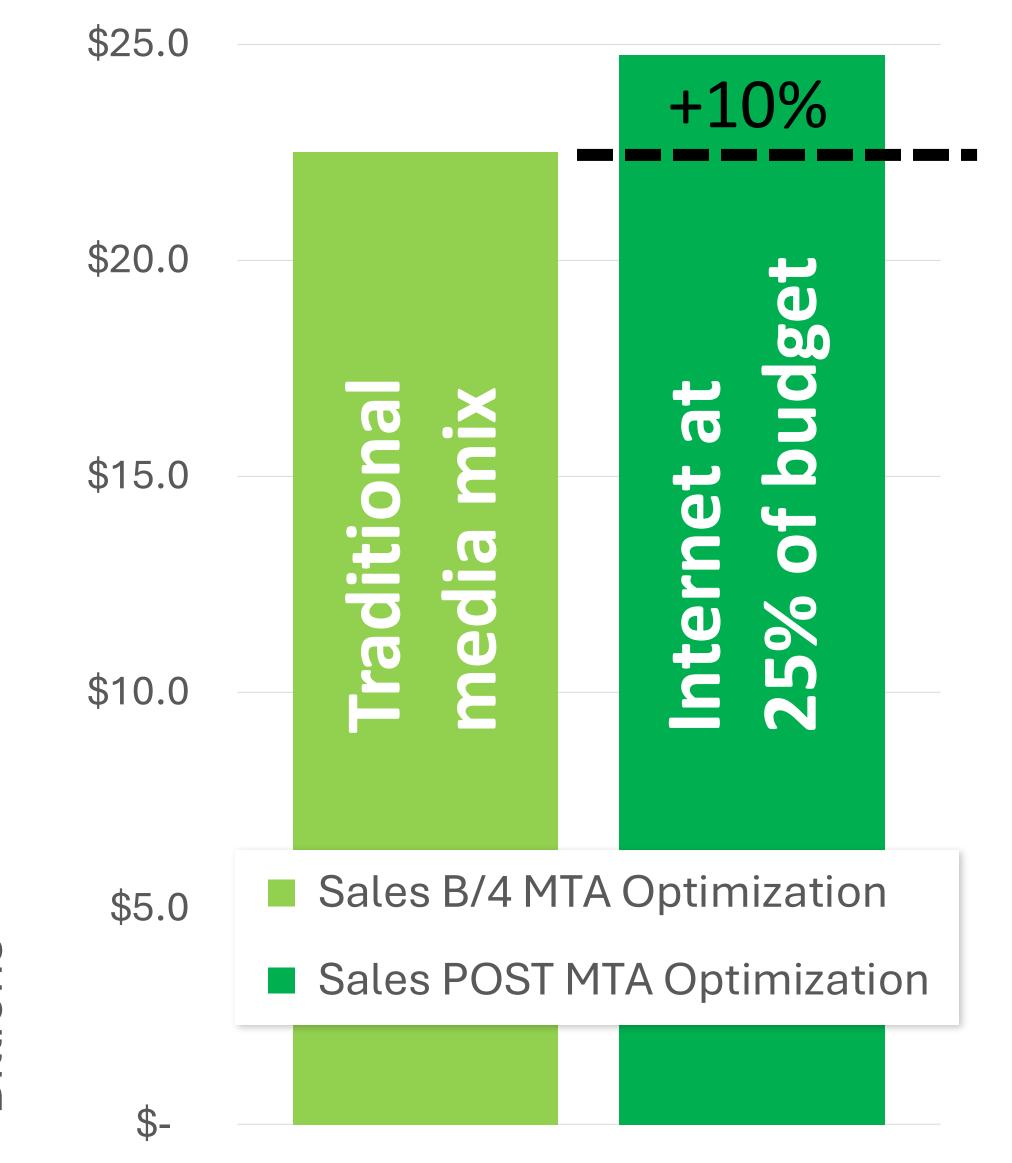








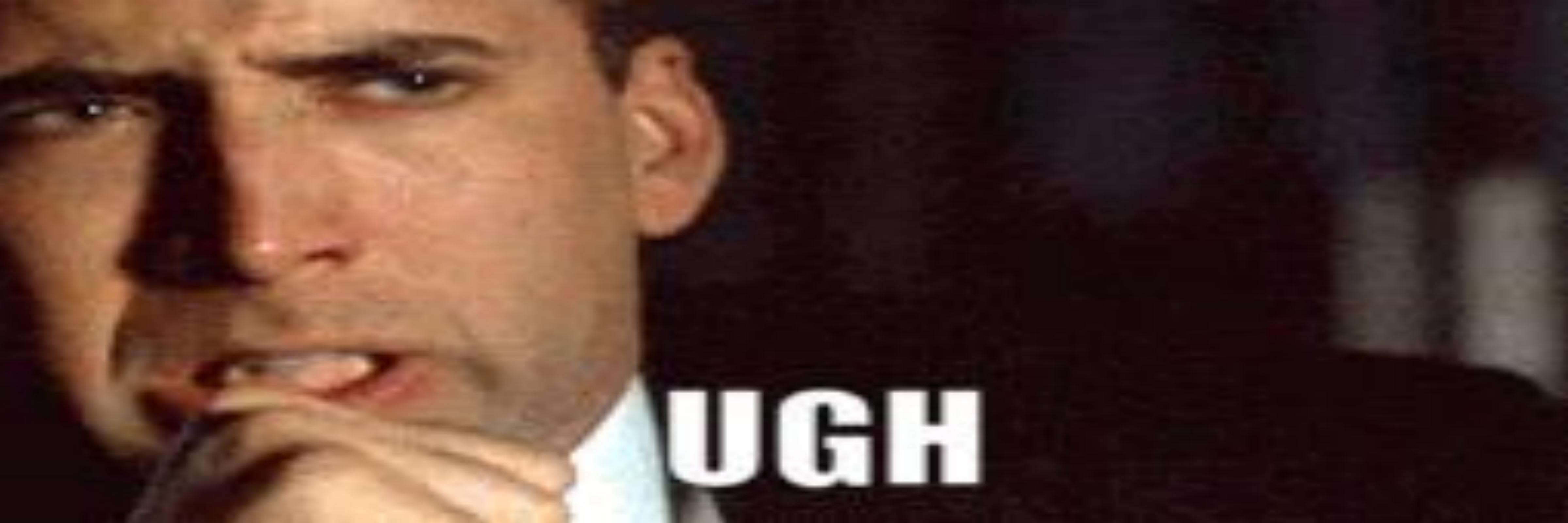
## Increase in Sales Due to MTA Optimization with Internet



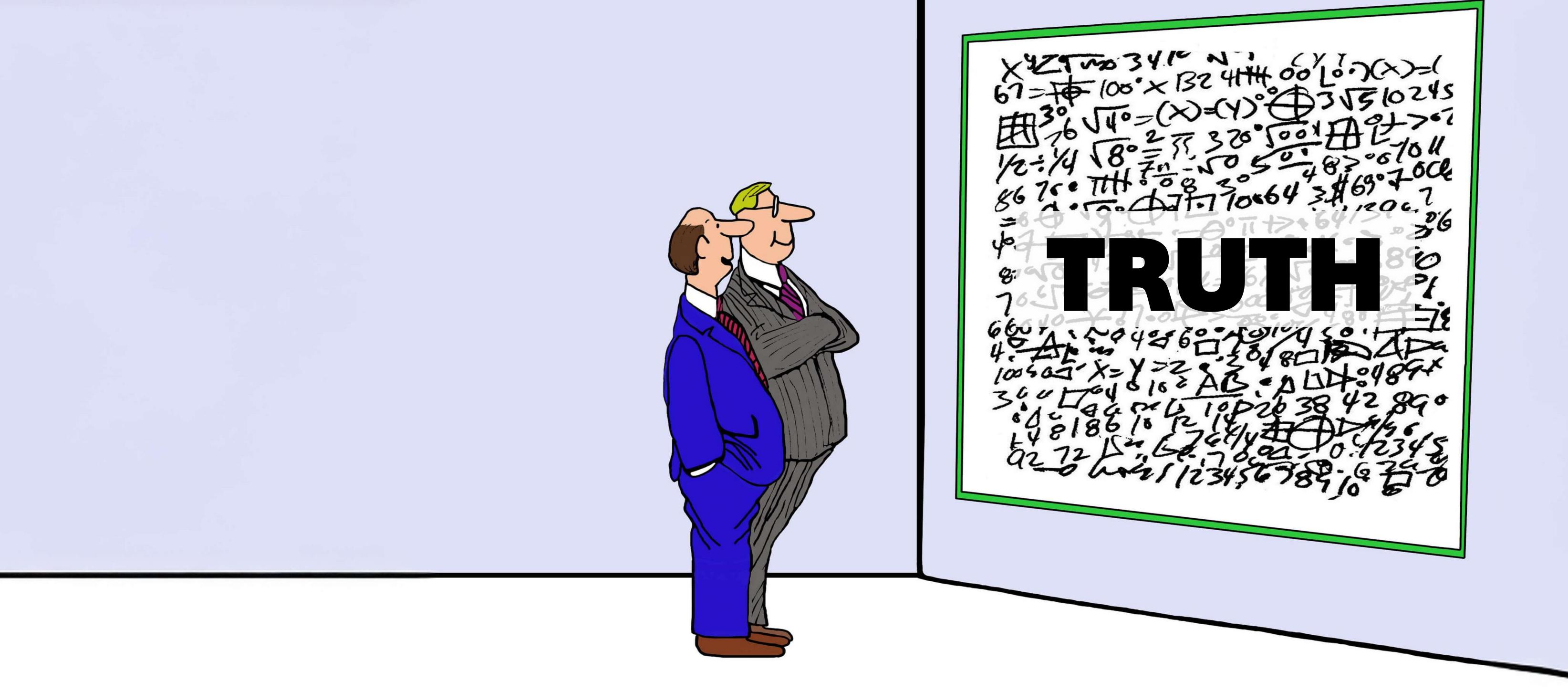


## MTA Adoption is Still Only 52% by Marketers...

After 25 years







"Here's that quiet little project we've been doing in marketing."

## THE SCIENCE



...an autopoietic approach with unsupervised machine learning via One Hot Encoding with K-Modes Clustering...

...for personalization of ads to consumers



## THE SCIENCE



...an autopoietic approach with unsupervised machine learning via One Hot Encoding with K-Modes Clustering...

...for personalization of ads to consumers

## 

22 studies to date gains of +149%, one as high as +270%.







...Neuroscience inherent in "inattentional blindness," via studies by Simons & Chabris (Harvard) via their Selection Attention Test (1999)...

...Informed new segmentation-based growth strategy\*...



## 2 THESCIENCE



...Neuroscience inherent in "inattentional blindness," via studies by Simons & Chabris (Harvard) via their Selection Attention Test (1999)...

...Informed new segmentation-based growth strategy\*...

## 

...that beats every other targeting segmentation resulting in Campaign performance +50% to double.

\* Also leverages economic science of Marginal Utility and the statistical techniques in Beta Distribution and Logit Function, basically what Moneyball was all about.



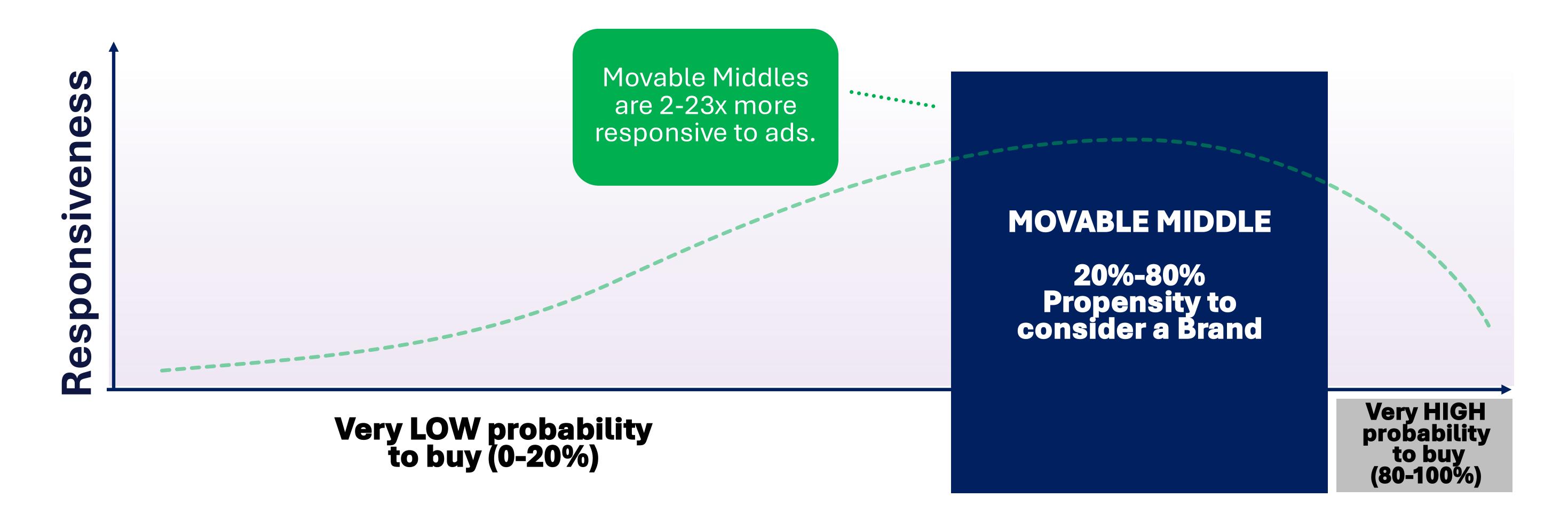




#### MMA

### Movable Middles Growth Framework (MMGF) Targets Consumer's Propensity to Consider a Brand

Approaches targeting with science









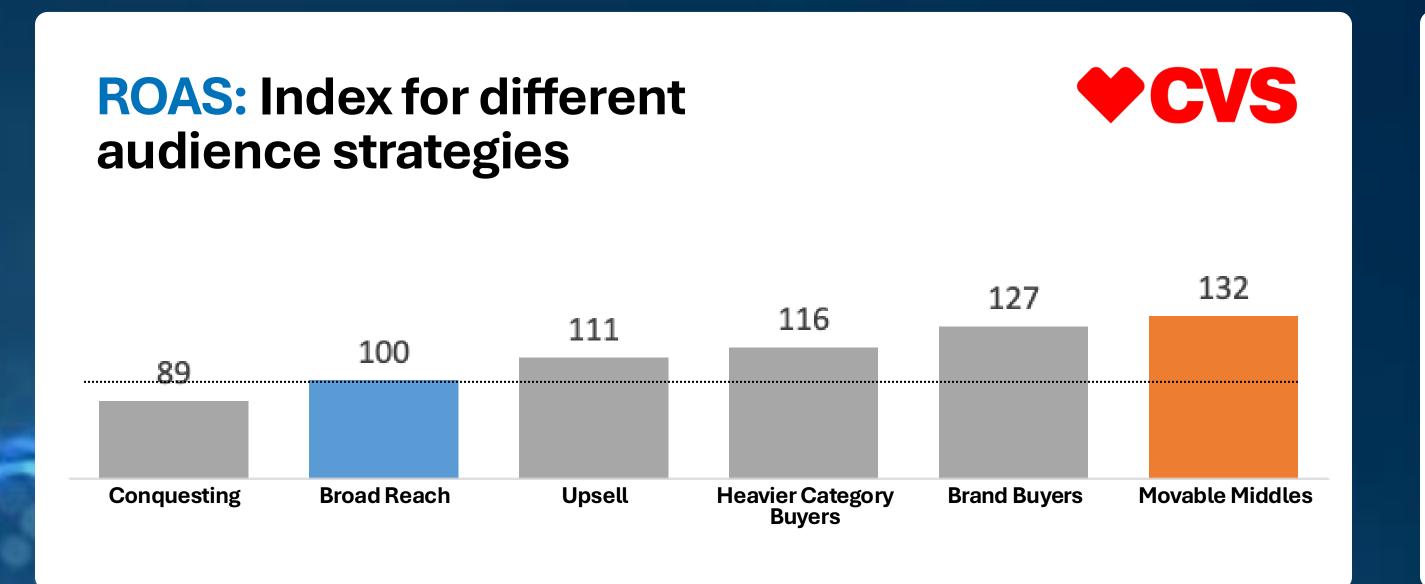


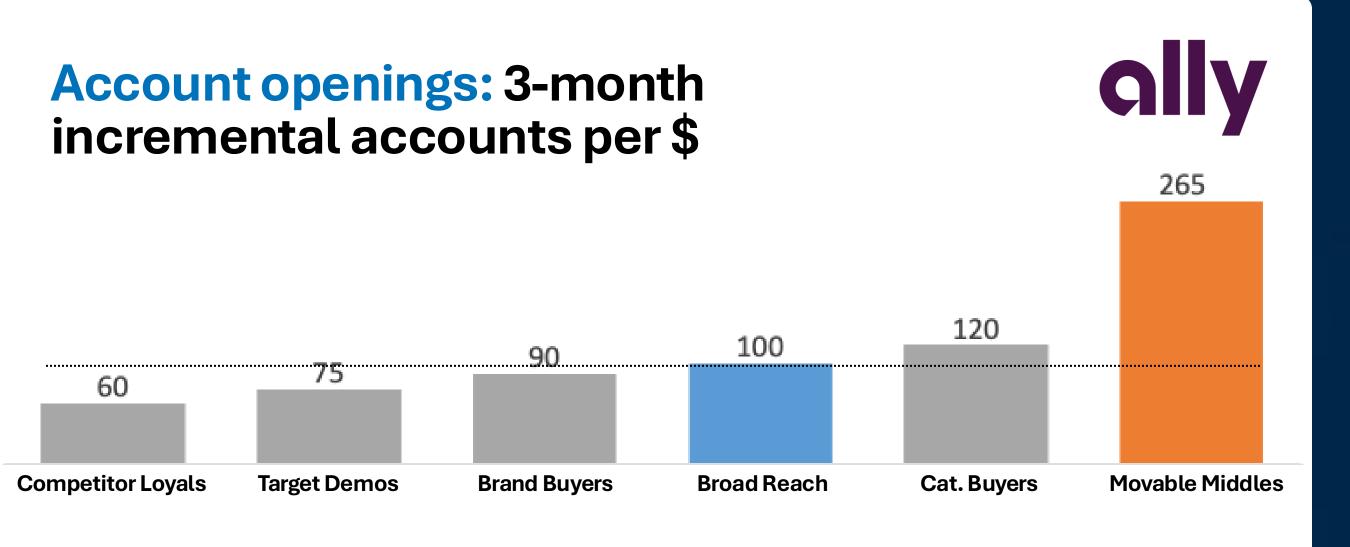


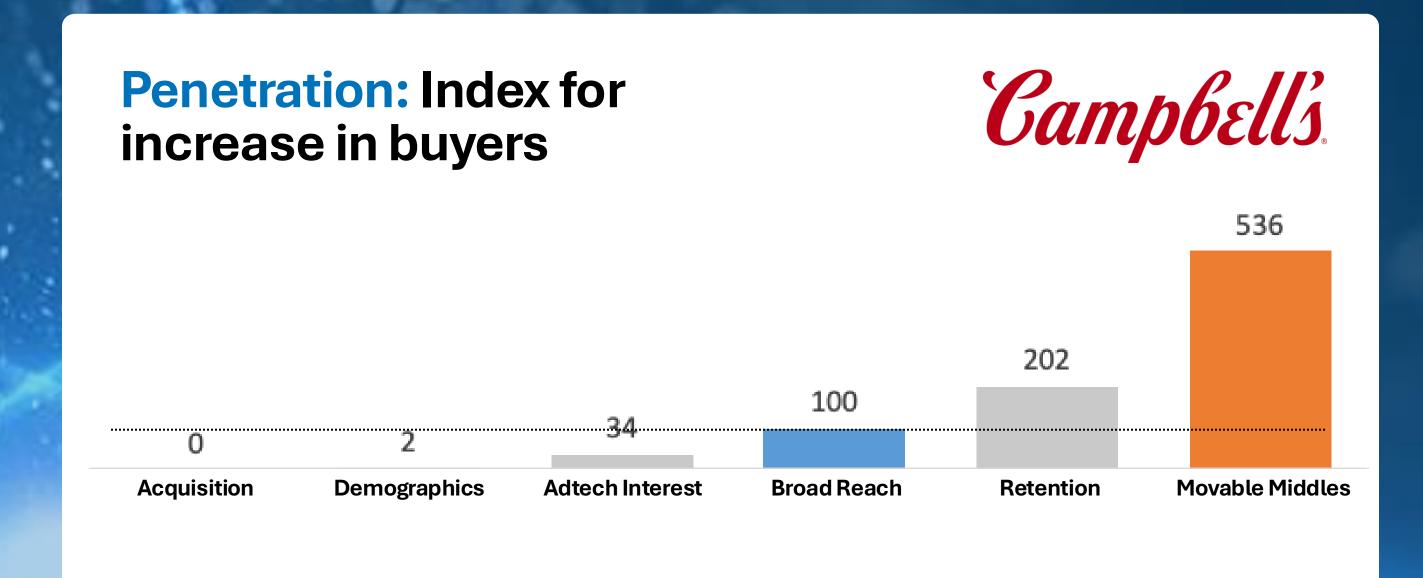


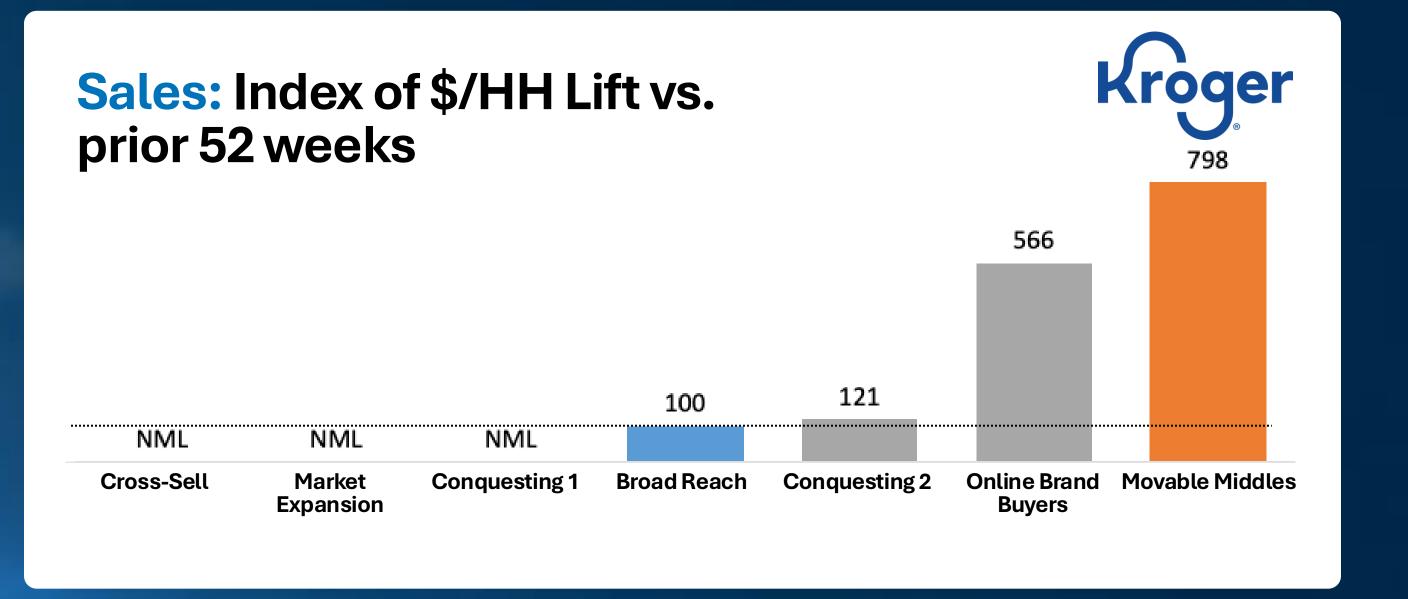


### Movable Middles Appears to Outperform All Other More Traditional Audience Targeting Strategies











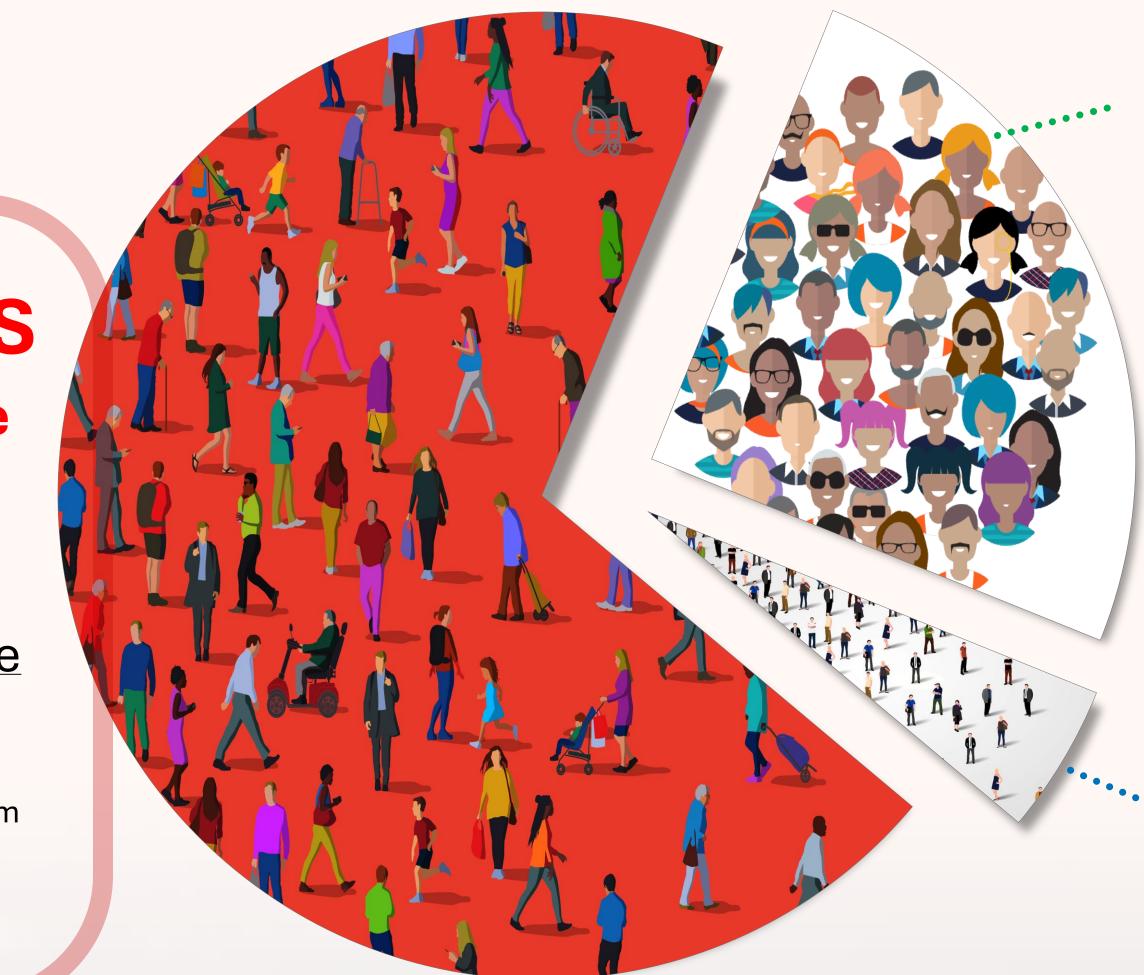
## Movable Middles™ Validates Advertising to Unresponsives is *Value-destructive*

#### UNRESPONSIVES

\$0.34 Revenue above \$1 media invested

50-90% of audience
Very unlikely to purchase
or respond to ads <sup>1</sup>

<sup>1</sup> But your advertising will still reach them given their size and that targeting is an imperfect science.



#### **MOVABLE MIDDLES**

\$4.84 revenue above \$1 media invested

10-40% of audience

2-23x more responsive to ads

#### **BRAND LOYALS**

\$0.88 revenue above \$1 media invested

2-5% of audience

Very likely to purchase anyway

Low incremental return from ads

### The Science(s) of Marketing

#### 1. Behavioral Science

- Behavioral economics
- Cognitive psychology
- Social psychology
- Decision heuristics

#### 2. Neuroscience

- Cognitive neuroscience
- Affective neuroscience
- Neuropsychology
- Neuroimaging techniques (EEG)

#### 3. Data Science

- Statistics
- Machine learning
- Predictive analytics
- Data visualization

#### 4. Decision Science

Judgment and decision-making

- Game theory
- Risk analysis
- Choice modeling

#### 5. Marketing Science

- Econometrics
- Attribution modeling
- Marketing mix modeling
- Quantitative research

#### 6. Communication Science

- Media effects theory
- Information diffusion
- Semiotics
- Linguistics

#### 7. Computer Science & Al

- Algorithms
- Natural language processing
- Automation systems

Computational modeling

#### 8. Sociology

- Social structures
- Group behavior
- Cultural norms
- Identity formation

#### 9. Anthropology

- Cultural anthropology
- Ethnography
- Symbolic systems
- Human behavior in context

#### 10. Systems Science

- Systems thinking
- Network theory
- Complexity science
- Feedback loops



## DANIEL

VINNER OF THE NOBEL PRIZE IN ECONOMICS

Kahneman points out that "We are not as rational as we think, and much of our behavior is shaped by invisible mental shortcuts."

THE NEW YORK TIMES BESTSELLED

THINKING,

FAST AND SLOW



DANIEL

WINNER OF THE NOBEL PRIZE IN ECONOMICS

"SAC manuscription: ... This is one of the greatest and most copaging collections of insights into the business mind I have read." — write case a accremit, francised Times



#### Strength in Numbers: How Does Data-Driven Decisionmaking Affect Firm Performance?

33 Pages - Posted: 24 Apr 2011 - Last revised:

#### Erik Brynjolfsson

National Bureau of Economic Research (NBER); Stanford

#### Lorin M. Hitt

University of Penneyhania - Operations & Information M

#### Heekyung Hellen Kim

MIT - Sloan School of Management

Date Written: April 22, 2011

#### Abstract

We examine whether firms that emphasize decision and business analytics ("data driven decision making performance. Using detailed survey data on the business analytics) and performance of the business and the business are surveyed as a surv

information technology investments of 179 large patmay traded forms, we find that firms that adopt DDD have output and productivity that is 5-6% higher than what would be expected given their other investments and information technology usage. Furthermore, the relationship between DDD and performance also appears in other performance measures such as asset utilization, return on equity and market value. Using instrumental variables methods, we find evidence that the effect of DDD on the productivity do not appear to be due to reverse causality. Our results provide some of the first large scale data on the direct connection between data-driven decision making and firm performance.

#### Erik Brynjolfsson

National Bureau of Economic Research (NBER); Stanford

#### Lorin M. Hitt

University of Pennsylvania - Operations & Information Management Department

#### Heekyung Hellen Kim

MIT - Sloan School of Management

"...data-driven decision-making outperform their peers in productivity and profitability..."







# 

## Here to advance marketers' knowledge and ability to create value.

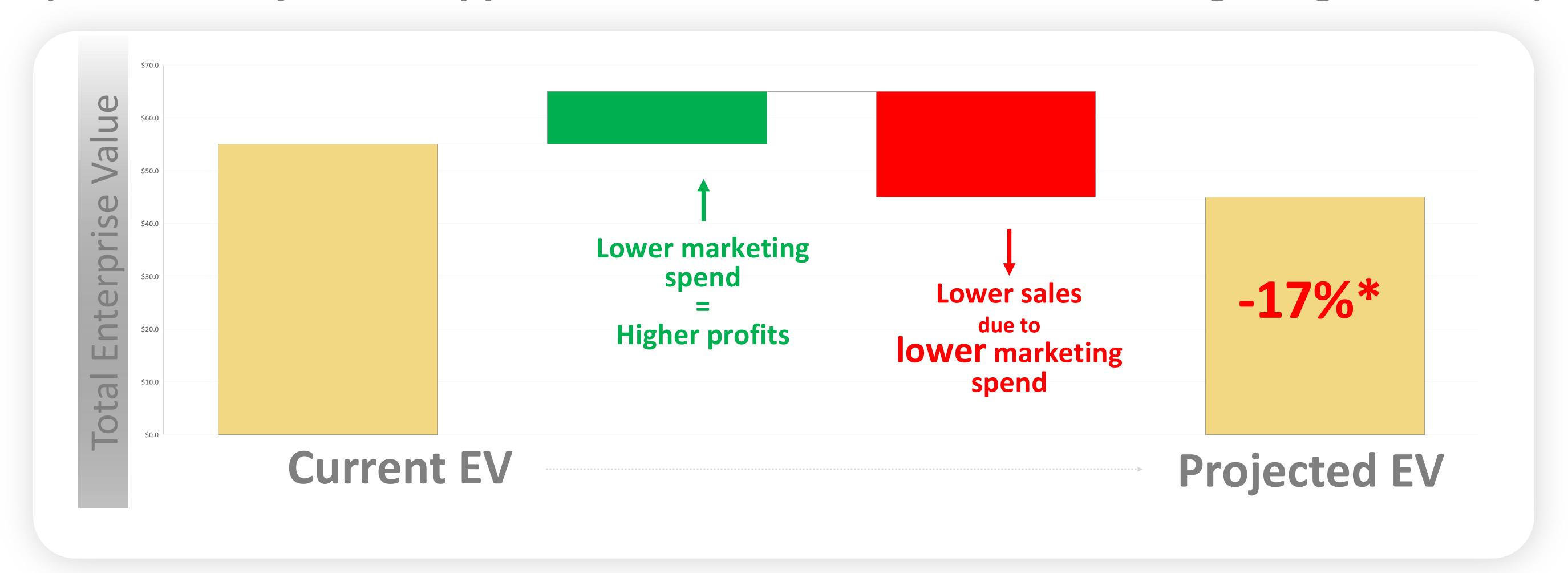
Together!





#### This is our Biggest Indictment

(We can't say what happens, with confidence, when marketing budgets are cut)



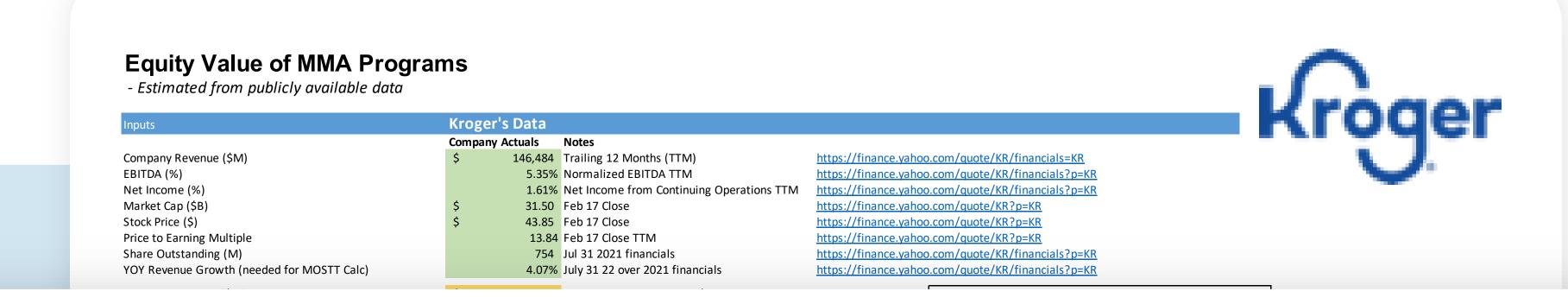
Retailer Example: MMM Vendors Report



<sup>\*</sup>Directional but not validated. Likely MMM vendor over-claiming ROI by only calculating cost as direct media cost. Actual likely closer to 8% to 10%

#### The Good News – There is Still a Lot of Room for IMPACT!

In fact, MMA projects that previous initiatives, if implemented, could add +10% to market valuation\*



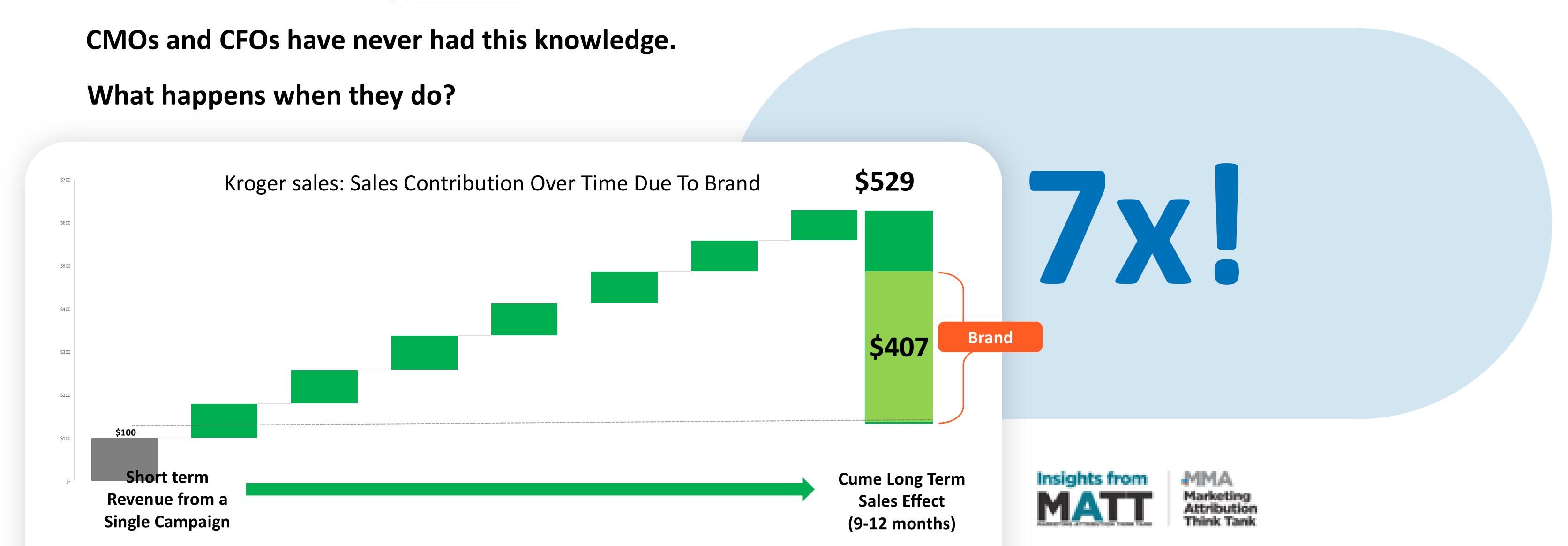
					Moveable		Brand as		Quality					ſ	Marketin	g		
			CAP - AI		Middles	Pe	erformance		Digital	Fi	rst Second	M	ulti-Touch		Org -			
MMA Program Being Modeled	NA	Per	rsonalization	F	ramework		Analysis	E	cosystem		Strategy	Α	ttribution	1	Readines	S		
(A) Percentage of Marketing Budget Impact	NA		35%		100%		100%		25%		40%		40%		100%			
(B) Boost in Performance from Program	NA		149%		40%		25%		55%		65%		30%		25%			
Incremental Market Cap from MMA Mkt Program (\$)	\$ -	\$	905,934,272	\$	694,868,090	\$	434,292,556	\$	238,860,906	\$	451,664,258	\$	208,460,427	\$	434,292,5	56	\$ 3,368,373,065	
New Share Price from MMA Mkt Program (\$)	\$ 43.85	\$	45.07	\$	44.78	\$	44.43	\$	44.17	\$	44.46	\$	44.13	\$	44.4	43	\$ 48.38	
% Valuation Increase from MMA Mkt Program	NA	<b>.</b>	2.8%		2.1%		1.3%		0.7%		1.4%		0.6%		1	3%	10.3%	

Company Revenue (\$M)	\$ 146,484	\$ 148,232	\$ 147,825	\$ 147,322	\$ 146,945	\$ 147,356	\$ 146,886	\$ 147,322	\$ 152,984
Expenses before EBITDA (\$M)	\$ 138,648	\$ 140,303	\$ 139,917	\$ 139,441	\$ 139,084	\$ 139,473	\$ 139,029	\$ 139,441	\$ 144,800
EBITDA (\$M)	\$ 7,836	\$ 7,930	\$ 7,908	\$ 7,881	\$ 7,861	\$ 7,883	\$ 7,858	\$ 7,881	\$ 8,184
Expenses after EBITDA (\$M)	\$ 5,478								
Net Income (\$M)	\$ 2,358	\$ 2,452	\$ 2,430	\$ 2,403	\$ 2,383	\$ 2,405	\$ 2,380	\$ 2,403	\$ 2,706
Calculated P/E Ratio	13.84								
Implied Market Cap - Price in P/E ratio (\$)	\$ 32,634,720,000	\$ 33,928,911,817	\$ 33,627,388,700	\$ 33,255,137,937	\$ 32,975,949,865	\$ 33,279,954,655	\$ 32,932,520,610	\$ 33,255,137,937	\$ 37,446,681,521
Implied Market Cap Increase (\$)	\$ -	\$ 1,294,191,817	\$ 992,668,700	\$ 620,417,937	\$ 341,229,865	\$ 645,234,655	\$ 297,800,610	\$ 620,417,937	\$ 4,811,961,521
Reduced Market Cap Increase by 30%		\$ 905,934,272	\$ 694,868,090	\$ 434,292,556	\$ 238,860,906	\$ 451,664,258	\$ 208,460,427	\$ 434,292,556	\$ 3,368,373,065
New Market Cap (\$)	\$ 32,634,720,000	\$ 33,540,654,272	\$ 33,329,588,090	\$ 33,069,012,556	\$ 32,873,580,906	\$ 33,086,384,258	\$ 32,843,180,427	\$ 33,069,012,556	\$ 36,003,093,065
Earnings (\$)	\$ 2,358,000,000	\$ 2,451,510,969	\$ 2,429,724,617	\$ 2,402,827,886	\$ 2,382,655,337	\$ 2,404,621,001	\$ 2,379,517,385	\$ 2,402,827,886	\$ 2,705,685,081
Incremental Market Cap from MMA Mkt Program (\$)	\$ -	\$ 905,934,272	\$ 694,868,090	\$ 434,292,556	\$ 238,860,906	\$ 451,664,258	\$ 208,460,427	\$ 434,292,556	\$ 3,368,373,065
New Share Price from MMA Mkt Program (\$)	\$ 43.85	\$ 45.07	\$ 44.78	\$ 44.43	\$ 44.17	\$ 44.46	\$ 44.13	\$ 44.43	\$ 48.38
% Valuation Increase from MMA Mkt Program	NA	2.8%	2.1%	1.3%	0.7%	1.4%	0.6%	1.3%	10.3%

<sup>\*</sup> Estimated based on publicly available data

#### 1. Sales from Brand campaigns long term?...

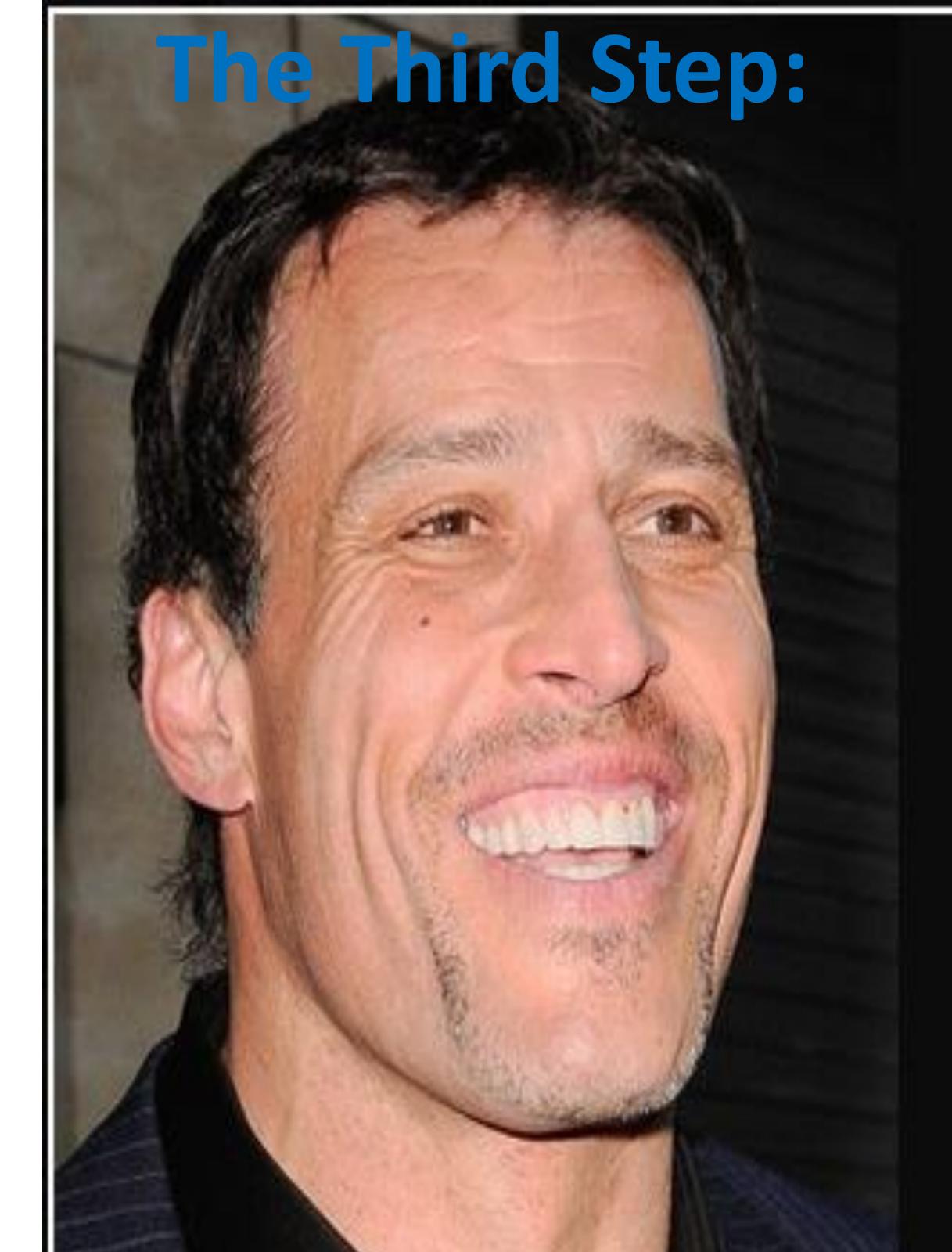
For the first time ever, we know the FULL compounding economic effect of Brand marketing <u>over time</u>.



### MMA is committed to make marketers stronger, more impactful, through better knowledge



Footnote: MMA Global is a Non-Profit Industry Body for the Greater Good of Marketers & CMOs



Knowing is not enough! You must take action.

— Tony Robbins —

ATOHOTEC

The First Step: Because you are here, you are NOT too busy to do better

