

# Data, Addressability and the Quantification of Advertising



# The Way We Used To Do It!

## Traditionally Ambiguity within Display Process



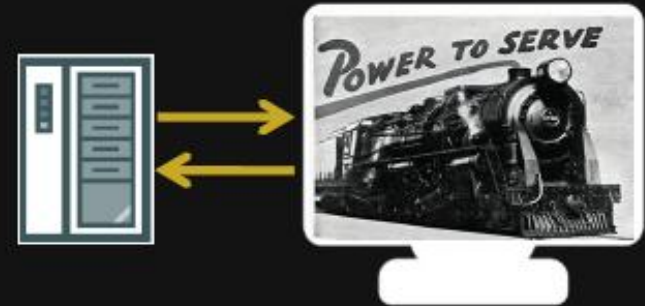
# Data Use in an Addressable World



Aggregate

Static

Retrospective



Atomic

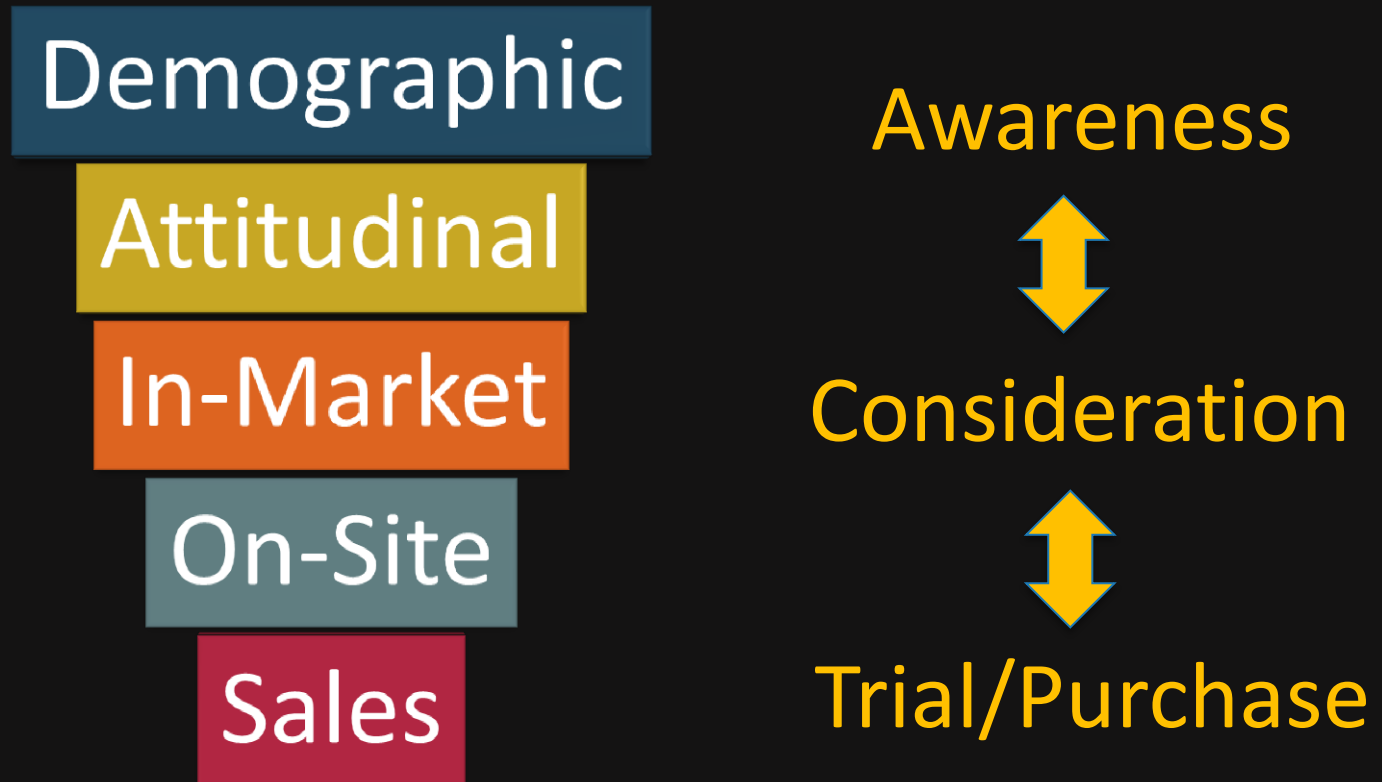
Dynamic

Predictive

# Successful data use depends on understanding...

1. Business objectives
2. Types of data (targeting)
3. Where the two intersect
4. How overall success is defined

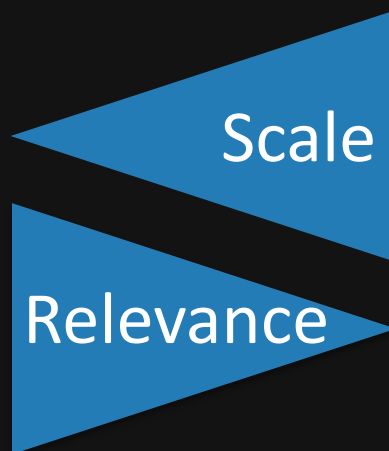
# Different Data, Different Parts of “Funnel”



# Data Origins Can Vary Widely

1<sup>st</sup>

PARTY



3<sup>rd</sup>

PARTY

# What Makes for Great Data?

Consistency

Scale

Freshness

Relevancy

# Data Usage Status Quo (“first generation”)

3<sup>rd</sup> Party  
Centric

Human  
Hypothesis

Low  
Dimensionality

Positive  
Signal

# Next Generation Data

1<sup>st</sup> Party  
(when available)

Automatically  
Modeled

High  
Dimensionality

Comprehensive

# What about....



RTB

# Data Application Must be Expansive

Cookies Geography  
Browser Creative  
Placement Content  
Inventory Site Device  
Context Business Day-part

# RTB Introduces New Challenges

Very High  
Dimensionality

Cold  
Start

Dynamic  
Valuation

Scaling  
Performance

# Organization, Data & Technology

Data has to be converted to actionable information

## Brains

- Machine learning
  - Audience estimation
  - User estimation
  - Model selection
  - Live traffic modeling
- Cluster supercomputing
- Distributed edge prowess

## Brawn

- Massive data sets and a capacity for examining them
- Repeatable, consistent statistical processing
  - good experiment design
  - high experiment velocity
  - careful monitoring

# Quantcast Data & Technology

300,000,000,000+

New records incorporated every month

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1.2 Billion

Internet users / month

Millions of Sites

Continually measured

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300,000

Transactions / second

1.5 PB

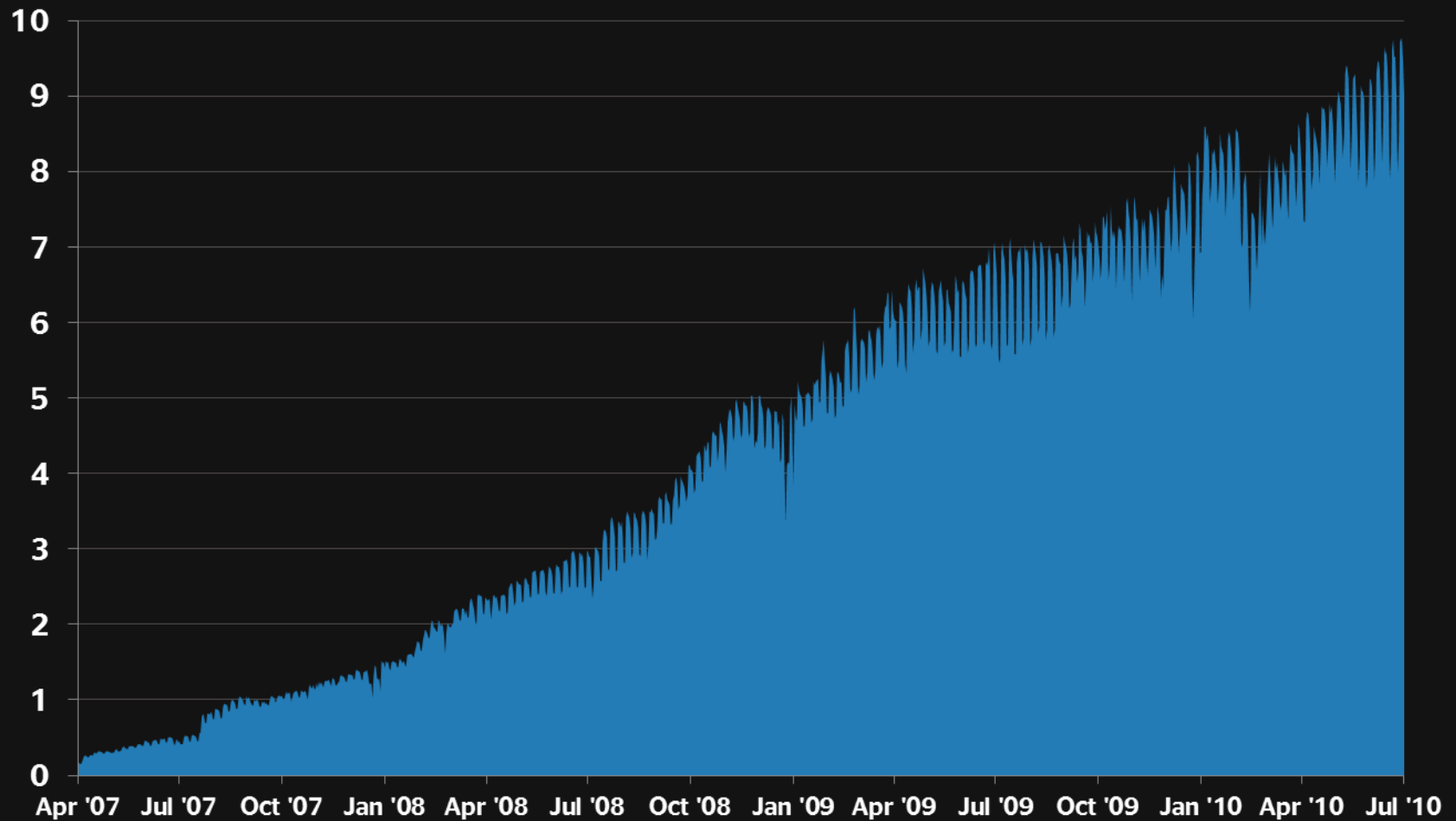
Every Day

Avg.  
Processing  
Load

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# Explosive Growth

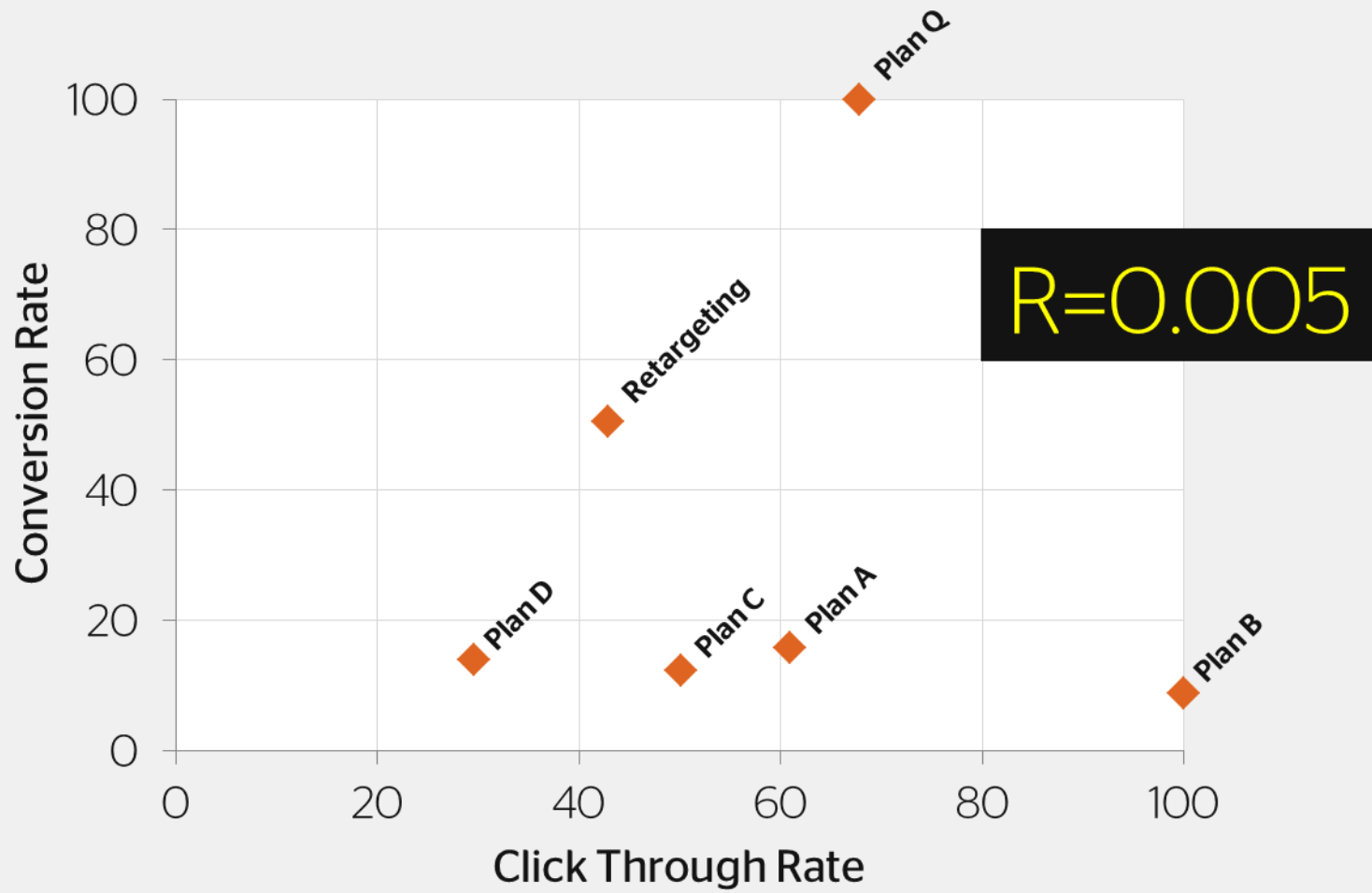
Billions of Media Consumption Events / Day



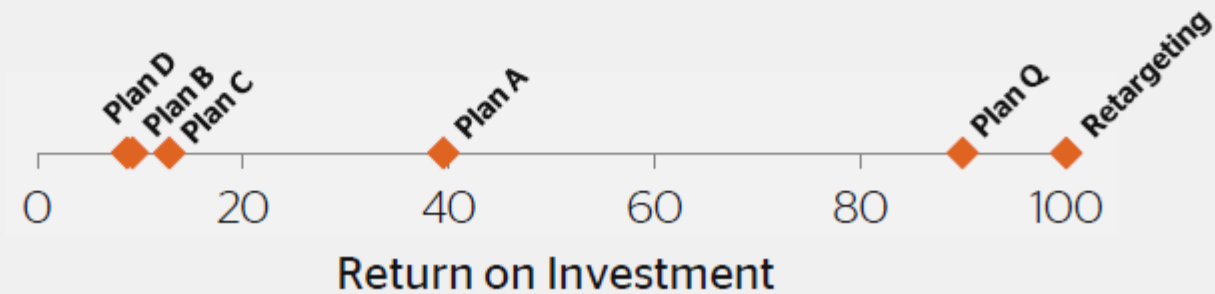
# What is Performance?



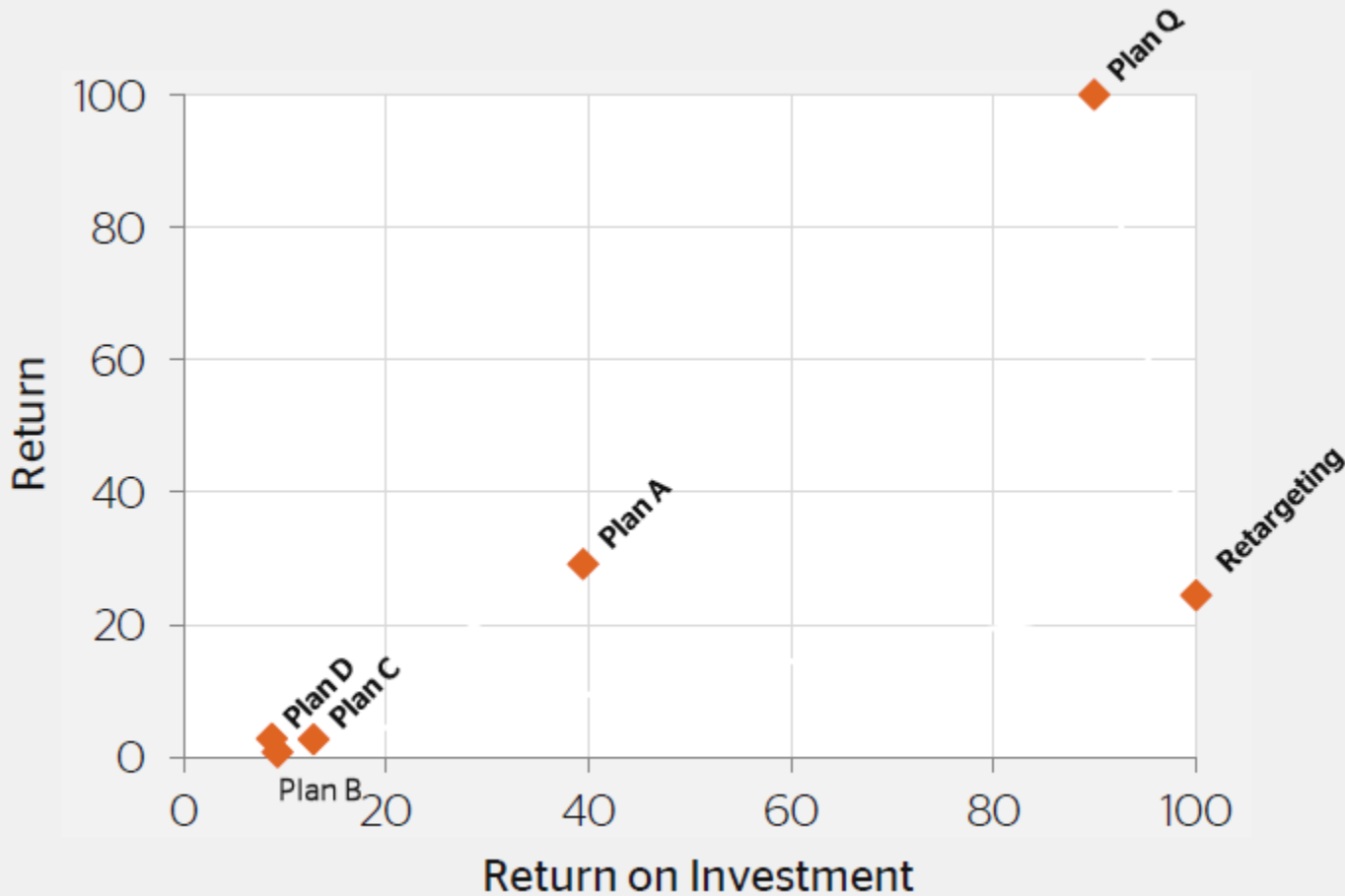
# Metrics: Focus on the Objective



# Ratios, Don't Forget the Numerator



# What use is ROI without R?



# But how are we different...

1. We start with **YOUR** data
2. Based on **SPECIFIC** objectives
3. **SCALED** across the Web
4. Optimized **CONTINUALLY**

# Summary

# Summary

- Find good data
  - by doing the following well
- Model what matters
- Measure what matters
- Build frameworks for consistent evaluation of data performance
- Experiment!

# It's Your Audience. We Just Find It!™



Top 50 Innovative Company  
#3 Web Innovator

AlwaysOn  
Global 250  
'09 Overall Winner



*“The most ambitious attempt at shifting the online ad business...”*

- Advertising Age

*“Quantcast Shakes Up Ad-Targeting Model”*

- Wall Street Journal

*“Top 10 Private Company to Watch in 2010”*

- MIT Technology Review