
MASB Standards Project

Brand Investment & Valuation (BIV) Project Review & Status

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August 2015
Chicago



Marketing Accountability Standards Board
of the Marketing Accountability Foundation

Should we care?

% Mkt Cap

21%

25%

15%

2011	Value (\$B)	Rank	Movement	Change
Interbrand	\$42.8	#5	↓	-10%
BRANDZ™	\$50.3	#10	↑	+12%
BRAND-FINANCE®	\$30.5	#7	↓	-4%
CoreBrand	N/A	#25	↑	+2%

How to manage if not sure where it stands or if it's going up or down?

On the one hand...

The variability of the alternative brand values makes their validity and utility highly suspect

While on the other...

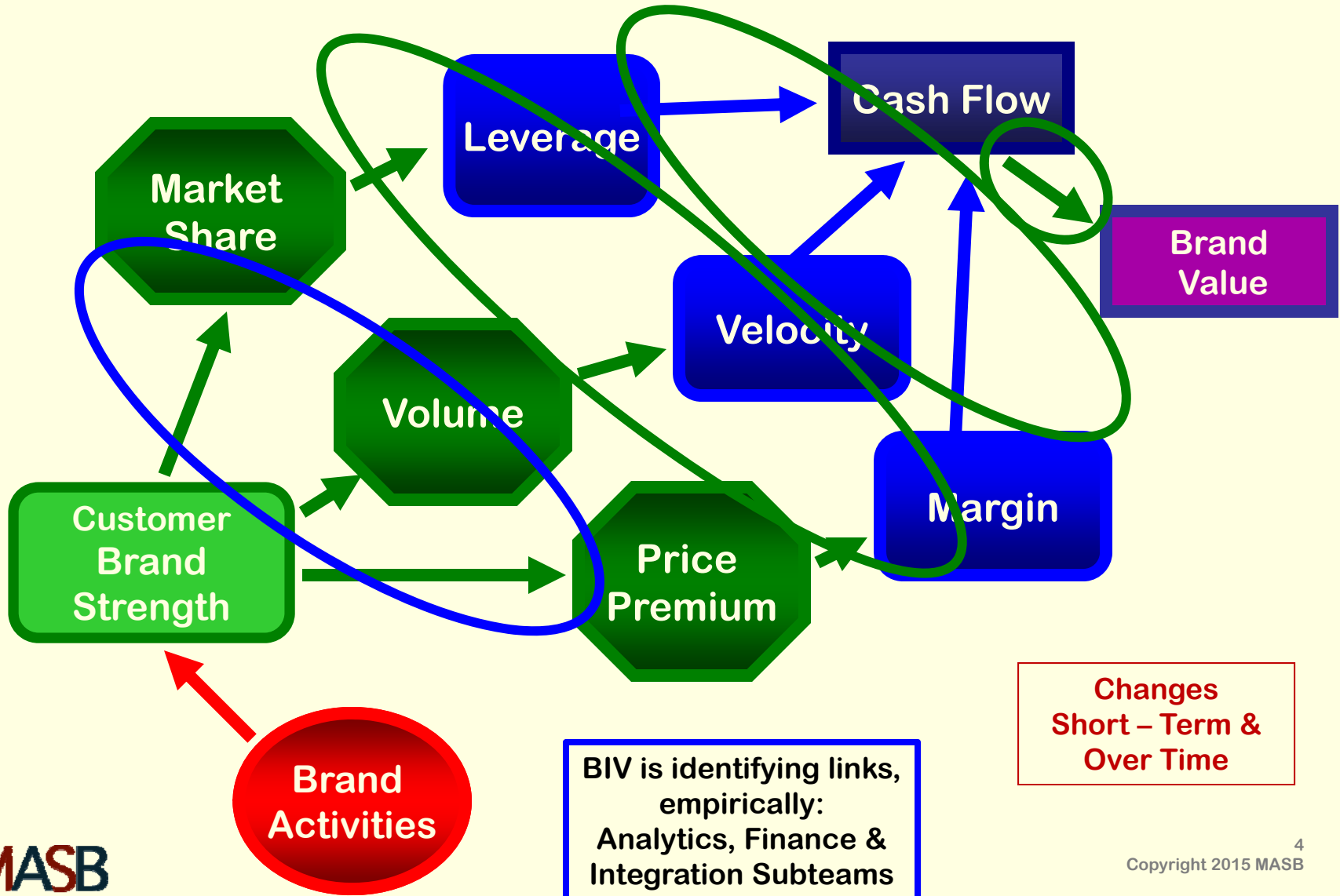
Their prominence and visibility necessitates proactively managing and interpreting the results.

Source: Cayabyab (GE) 2/16/12

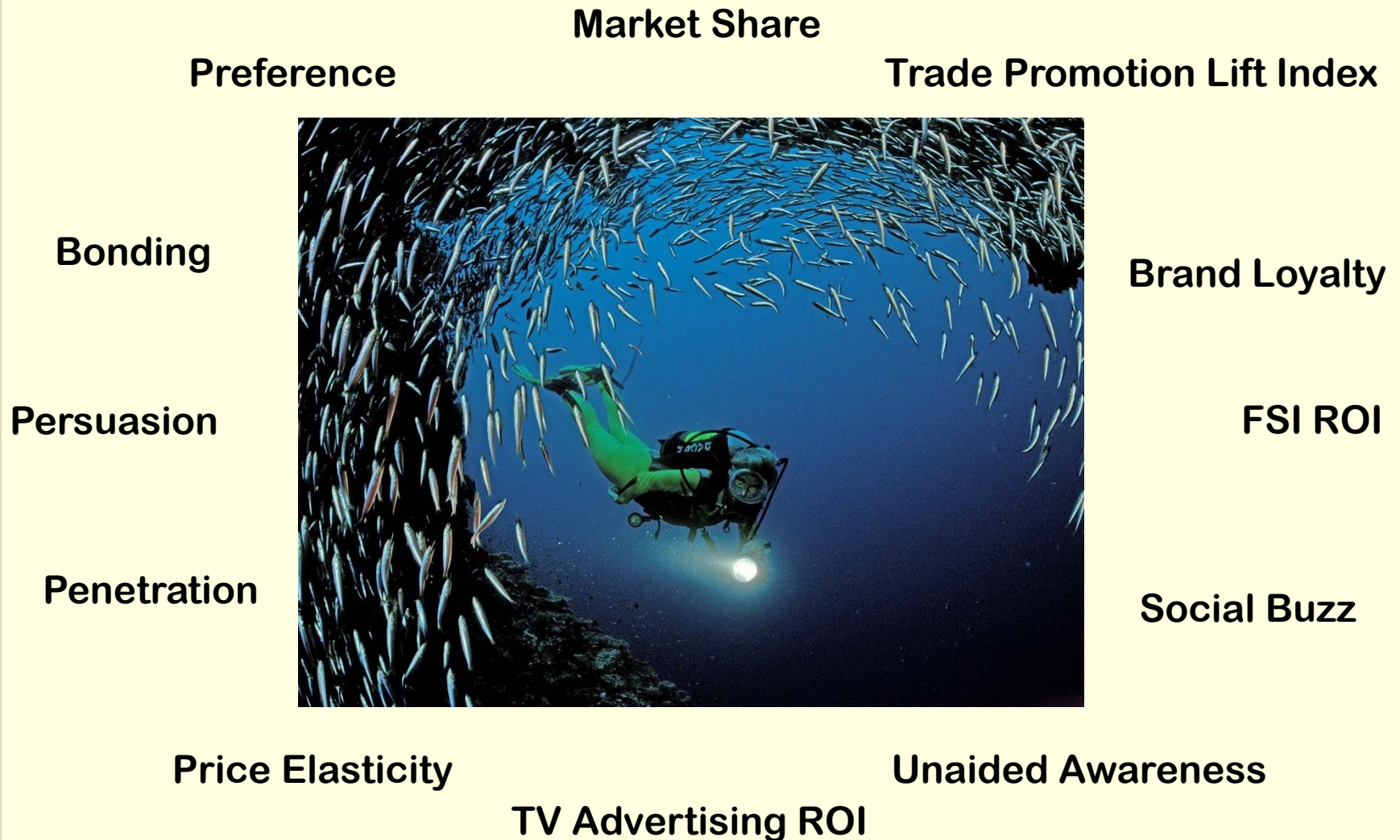
BIV: The Game Changer

Project	Brand Investment & Valuation (BIV) (Stewart & K Richardson)	
Issue Addressed	Brand represents great Value (but how much)	Strategy Build bridges from customer metrics to market metrics to financial metrics... empirically.
Project Objective	Establish “generally accepted brand investment & valuation standards”	
Expected Outcome	Empirically proven model for valuing brands & guiding investment decisions	
When	2015	

MMAP: Brand Investment/Valuation Model (Conceptual Links)



Why this is Important – Swimming in Data



Why this is Important – To Finance



Expected Benefits

Building these bridges (or links) and highlighting the measures will be phenomenally powerful for the marketers' decision making process:

Making more informed “investment” decisions

Meeting organic growth targets more often

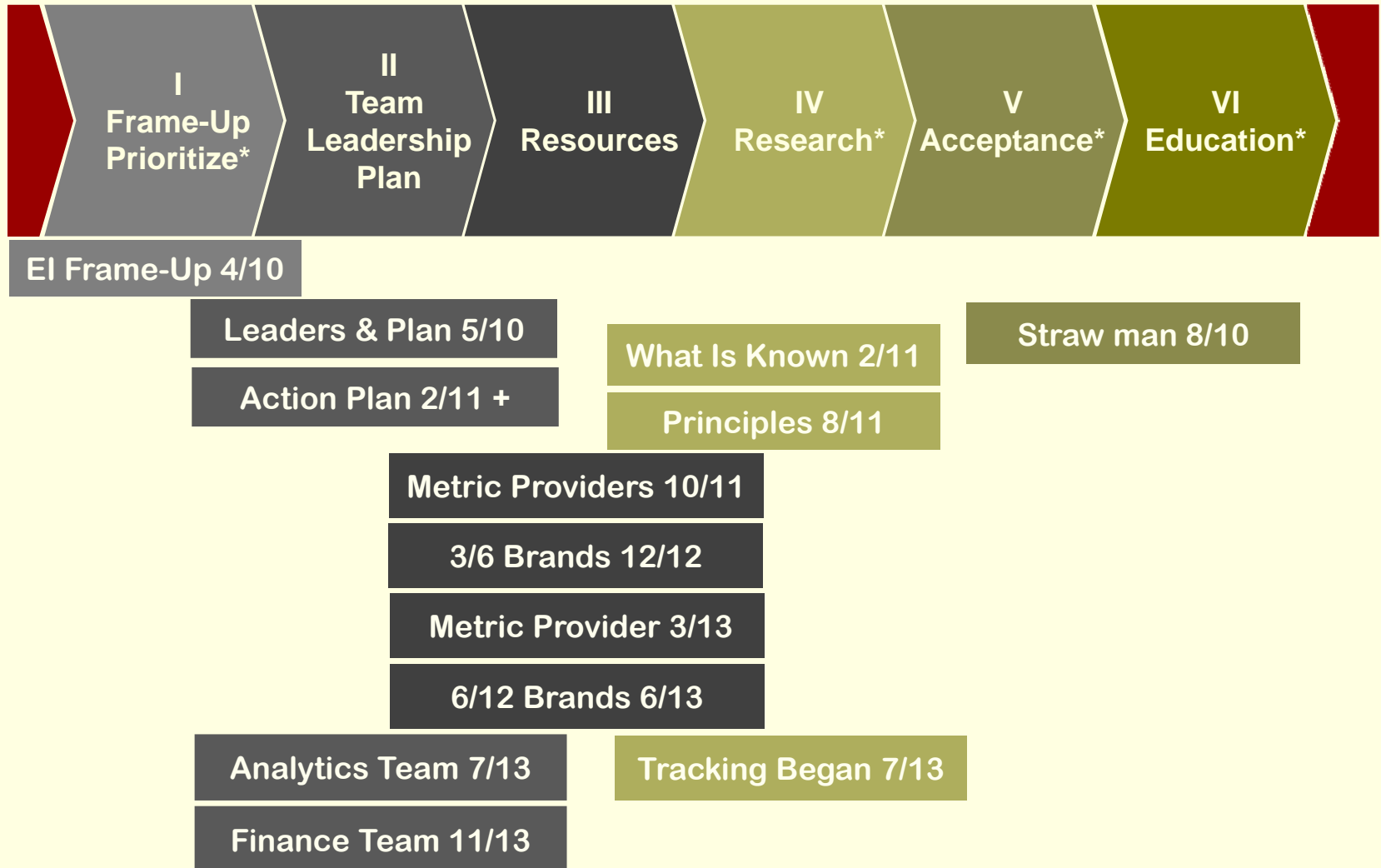
Learning how to improve performance as measured by customer, market and financial outcomes

Building strong brands more profitably and consistently

Who needs it?

- **All performance oriented managers including**
 - **CMOs, because their job is to create, build & protect the brand (asset) which represents both short and long term growth potential (revenues at a premium price/margin)...and they need to demonstrate this on an on-going basis.**
 - **CFOs, because their job is to forecast return from various “investments”... and they currently view marketing as discretionary expense because they have not seen proof otherwise.**
 - **CEOs, because their job is to determine where to invest for both short and long term corporate performance.**
 - **Investors, because their job is to understand what the firm’s future growth potential looks like.**

BIV Milestones (2010 – 2013)



BIV Milestones (2014 Thru Feb 15 Meeting)



Initial Findings – AST 2/14

More Findings-AST 8/14

Straw man- FST 8/14

Other Measures 10/14

More Findings-AST 2/15

Initial Findings/Other-AST 2/15

MC Internal Intro-FST 1/15

MC Feedback-FST 2/15

BIV Milestones (Since Feb 15 Meeting)



Integration Team 3/15

MC model intro - FST 4/15

Final Findings AST 7/15

Full Model IST 8/15

BIV Team & Sub-Teams

Team Leaders



Kevin Richardson
Nielsen



Dave Stewart
LMU

Team Heroes



Jamie Richardson
Kimberly-Clark



Chris Ciccarello
ConAgra



Scott Shinners*
ConAgra



Rafael Alcaraz
Hershey



Frank Findley
MSW*ARS



Shyam Venugopal
Frito-Lay



Jim Meier
MillerCoors



Bill Bane
Kimberly-Clark



Marc Fischer
U of Cologne



Don Sexton
Columbia



Rajeev Batra
U of M



Jonathan Short
Frito-Lay



Lori Kuehn*
GM



Jeff Long
MillerCoors

Admin



Meg Blair
MAF/MASB

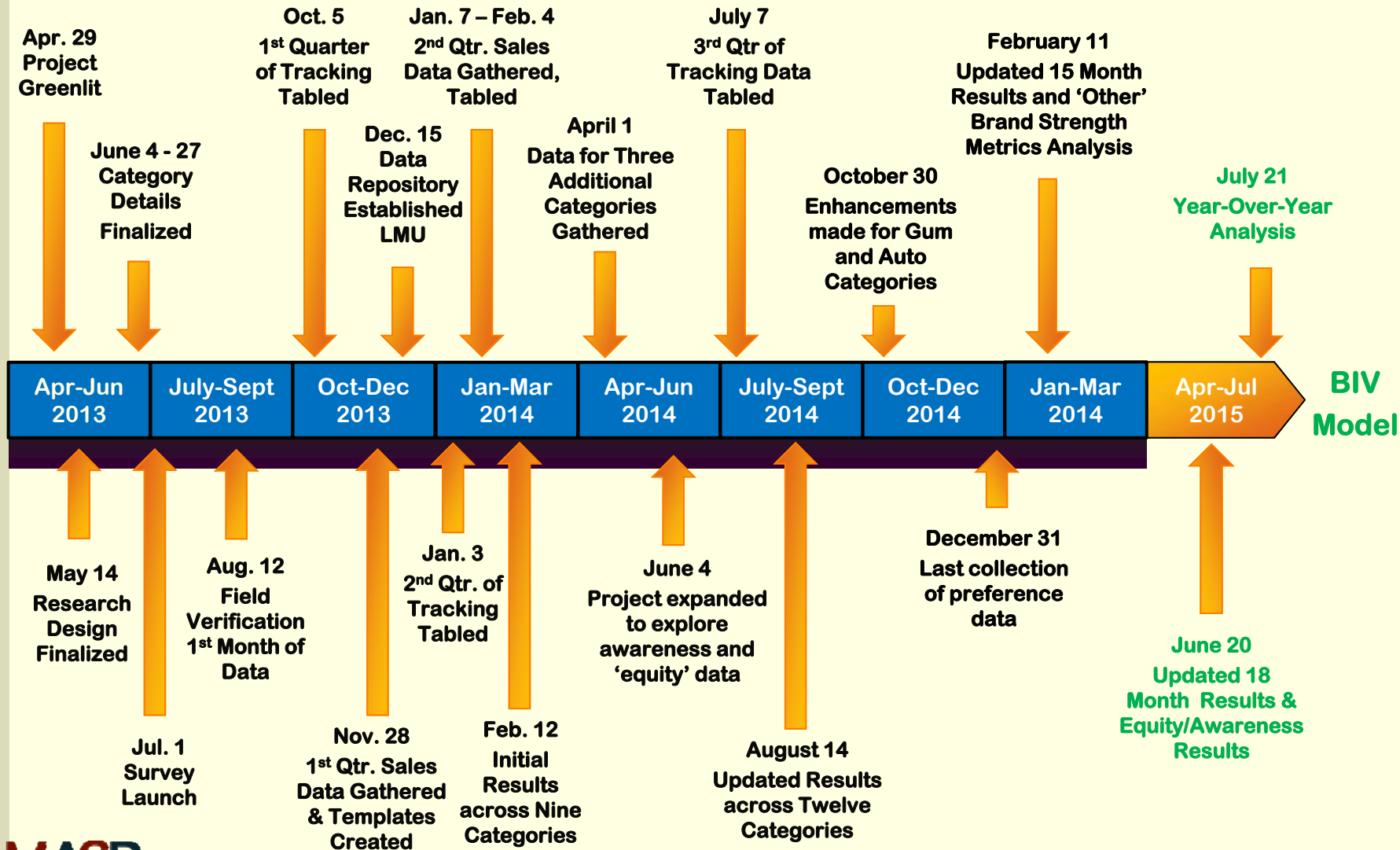


Allan Kuse
MMAR Center

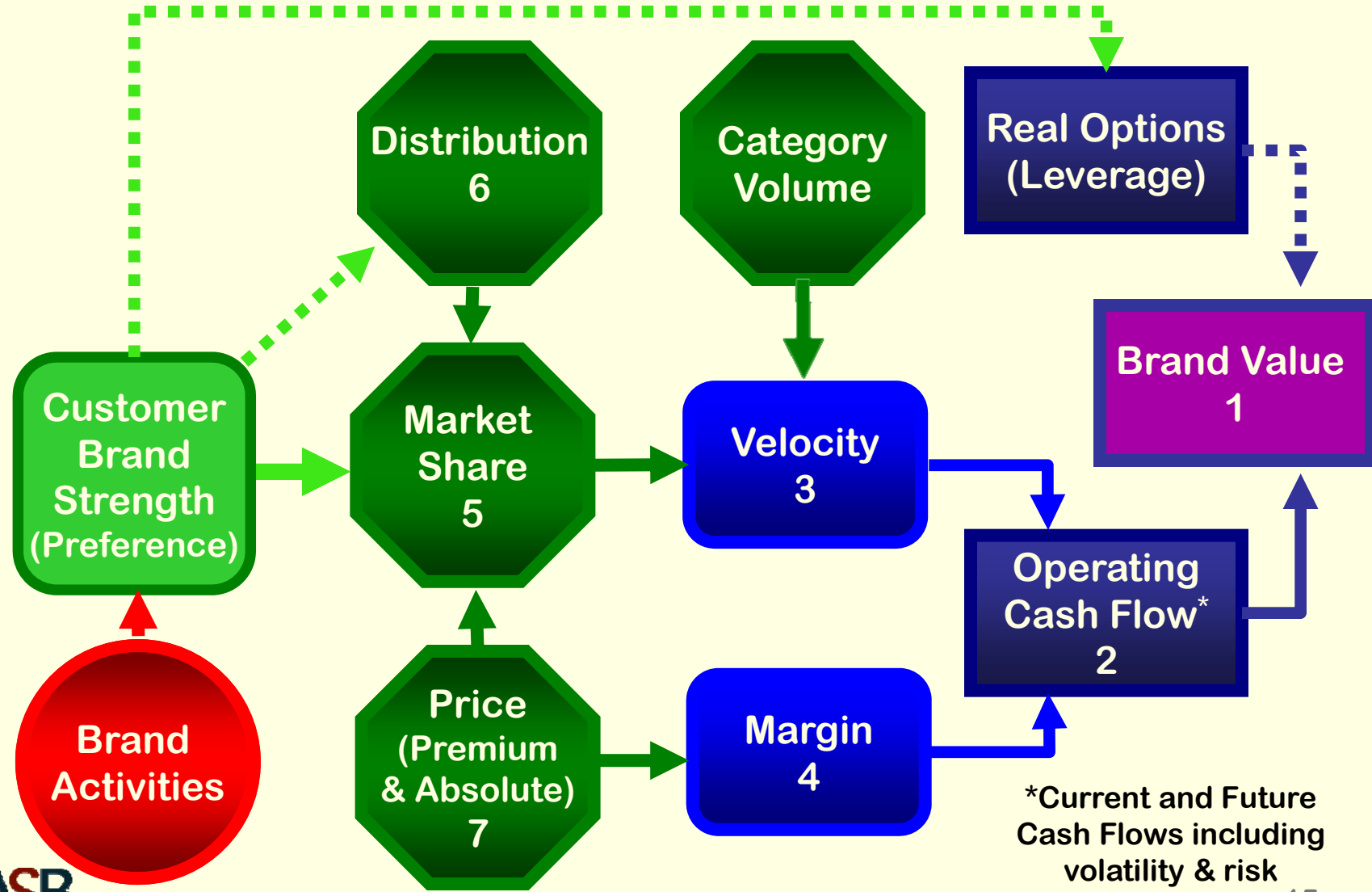
Analytics & Finance Sub-Teams

BIV Report of All Sub-Teams (Frank)

Where we are on the tracking journey



Brand Valuation Model - Conceptual Links



Brand Investment/Valuation Model: Predictive Equations & Terminology

The trials have refined our understanding of how brand strength (measured by preference) translates into Net Present Value calculations, financial ratios, and the DuPont Return on Equity model.

NPV Calculations and Financial Ratios:

- (1) Net Present Value = $\sum \{ \text{Net Period Cash Flows} / (1 + R)^T \} + \text{Terminal Value}$
- (2) Net Period Cash Flows = Brand Sales - Brand Costs (Margin: Profit/Sales)
- (3) Brand Sales = Category Size * Average Brand Unit Price * Unit Share (Velocity: Sales/Assets)
- (4) Brand Costs = Costs associated with producing sales for the brand
- (5) Unit Share \sim Brand Preference * Distribution Factor / Relative Price Factor
- (6) Distribution Factor = $f (B_0 + B_1 * \ln (\text{Distribution}))$
- (7) Price Ratio = $f (B_2 * \text{Average Brand Unit Price} / \text{Average Category Unit Price})$

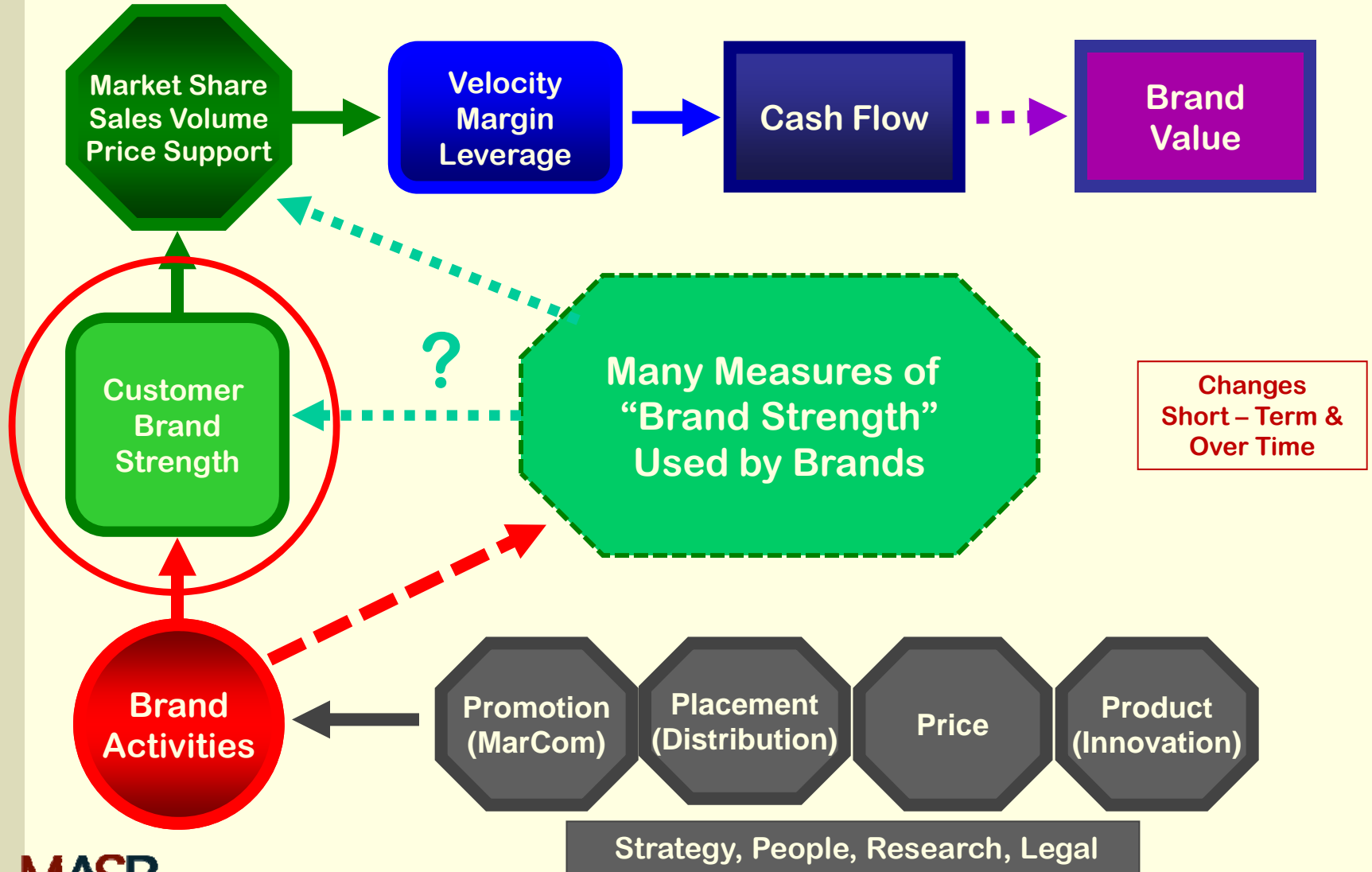
Real Options include option to generate future revenues after sale of brand (related to terminal value), potential brand extensions, potential in new markets, etc. (Leverage: Assets/Equity)

DuPont Model:

Profit/Sales x Sales/Assets x Assets/Equity = Profit/Equity = Return on Equity

Build Bridges – Step 1

Identified Brand Preference as Trials CBS Metric



MMAP: 10 Characteristics of an “Ideal Metric”

*The MSW•ARS
Brand Preference
Metric has met the
MASB Marketing
Metric Audit
Protocol
(MMAP)... 10
Characteristics of
an “ideal Metric”*

1. Relevant
2. Predictive
3. Objective
4. Calibrated
5. Reliable
6. Sensitive
7. Simple
8. Causal
9. Transparent
10. Quality Assured

What we'll
see/learn during
the BIV Project

Source: “Measuring and Improving the Return from TV Advertising (An Example),”
MASB, April 2008, May 2012

Preference is Behavioral/Choice among Brands



The MSW•ARS methodology isolates brand strength by holding everything else in the actual buying experience – price, promotion, shelf position, etc. – constant.

Marketers Participating

Each participating company selected 2 categories for tracking

Considerations for brand/category selection included:

- Market situation – one category that is generally static and one that is more dynamic
- Availability of sales and/or MMM data
- Availability of additional data, e.g. brand health/equity tracking over time
- Sufficient HH category penetration to ensure robust samples

Specs include:

- Brands in Category (as defined when measuring market share)
- Analytical Sample (those who could use/buy category)
- Critical Cell (those who do use/buy category) and Targets

Participant	Category I	Category II
K-C	Bathroom Tissue	Facial Tissue
CAG	Microwave Popcorn	Frozen Entrees
HER	Chocolate Bars	Gum
FTL	Caramel & Toffee Corn Snacks	Salty Snacks
M-C	Premium Light Beer	Value Priced Beer
GM	Full Size Pick-Ups	Compact Cars

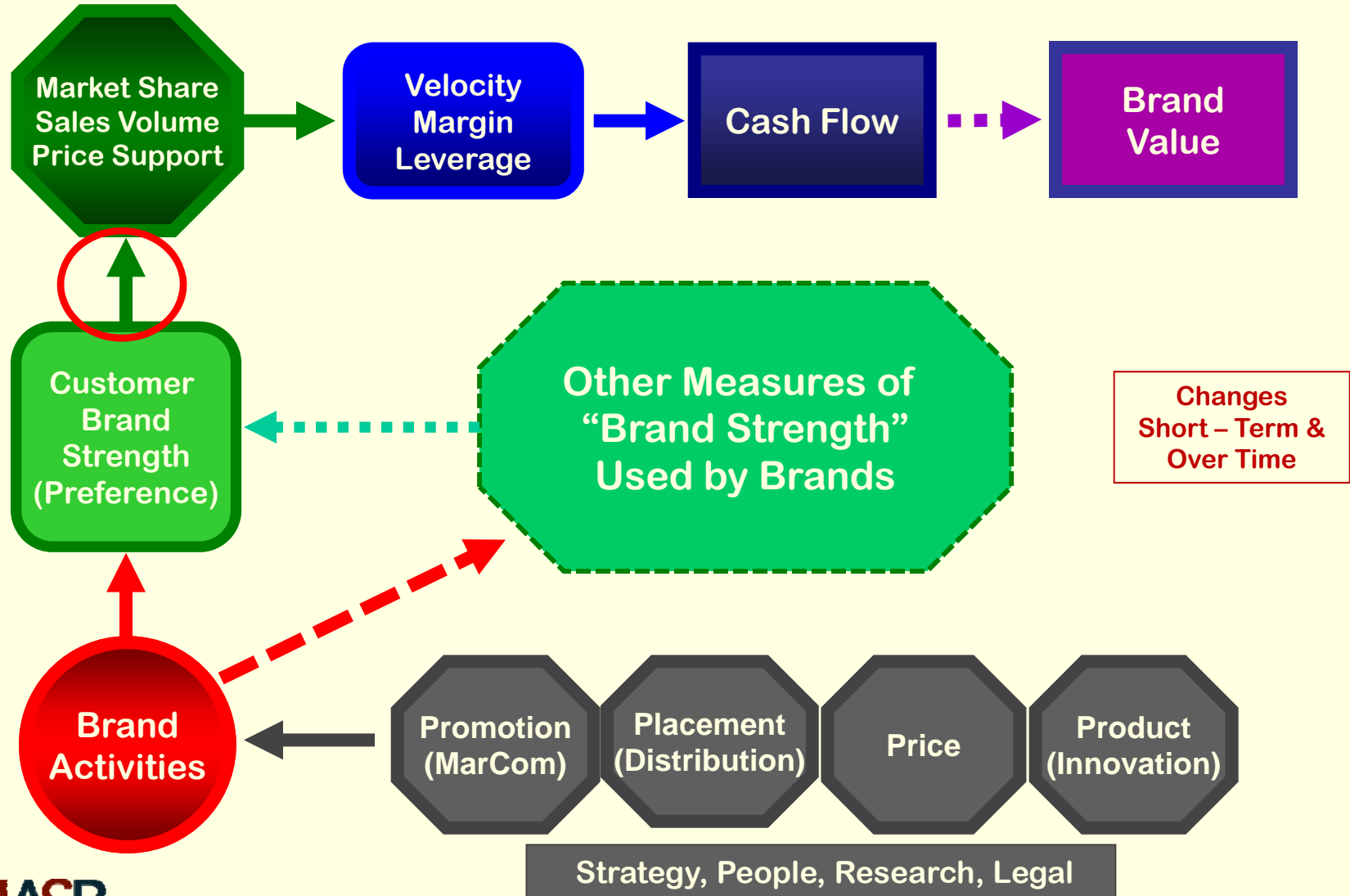
The Project includes 12 member brands plus competitors in each of the 12 categories (100+ Brands)...and over 6 fiscal quarters...very healthy sample size or number of observations!

Other

- **Data Structure**
 - Flat file in Excel
 - Calendar monthly and quarterly, time periods in columns
 - 16 months beginning July 1, 2013
- **Data Housing**
 - [Loyola Marymount University](#)
 - Point Person
- **Outputs**
 - Descriptive results of metrics & analytics
 - Description of process & protocol
 - Desk-Top Simulator

Build Bridges – Step 2

Quantified the BP to Market Impact



Changes from Previous Reports

Updates (8/15)

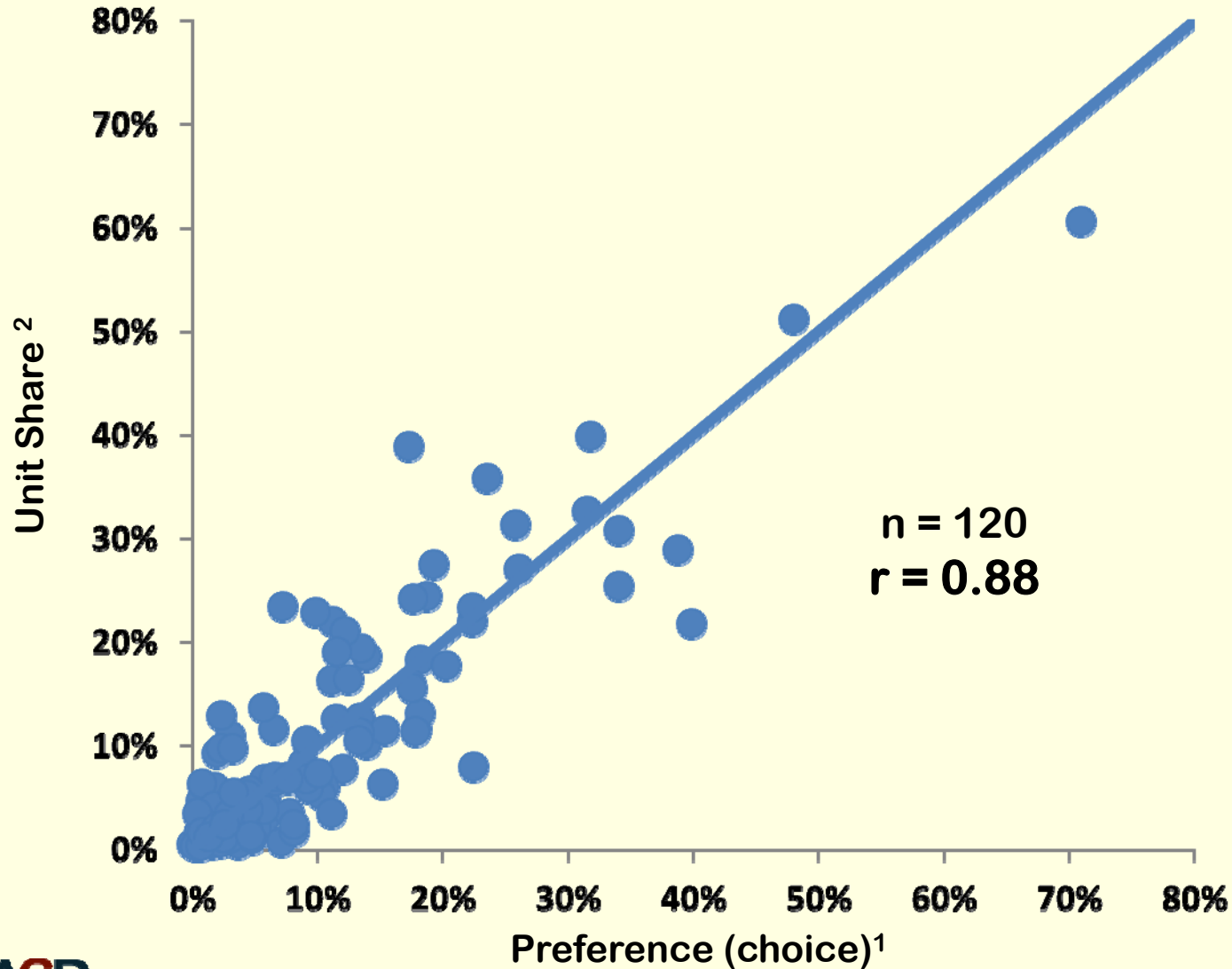
- Dataset includes 12 categories and 120 brands
- Links between market share, preference, price premiums, and distribution confirmed on 18 months of data
- Revised to use category 'purchaser' preference
- For sedans dealership distribution revised

New Learning (8/15)

- Reliability
- Sensitivity across sub-groups
- Sensitivity to changes over time

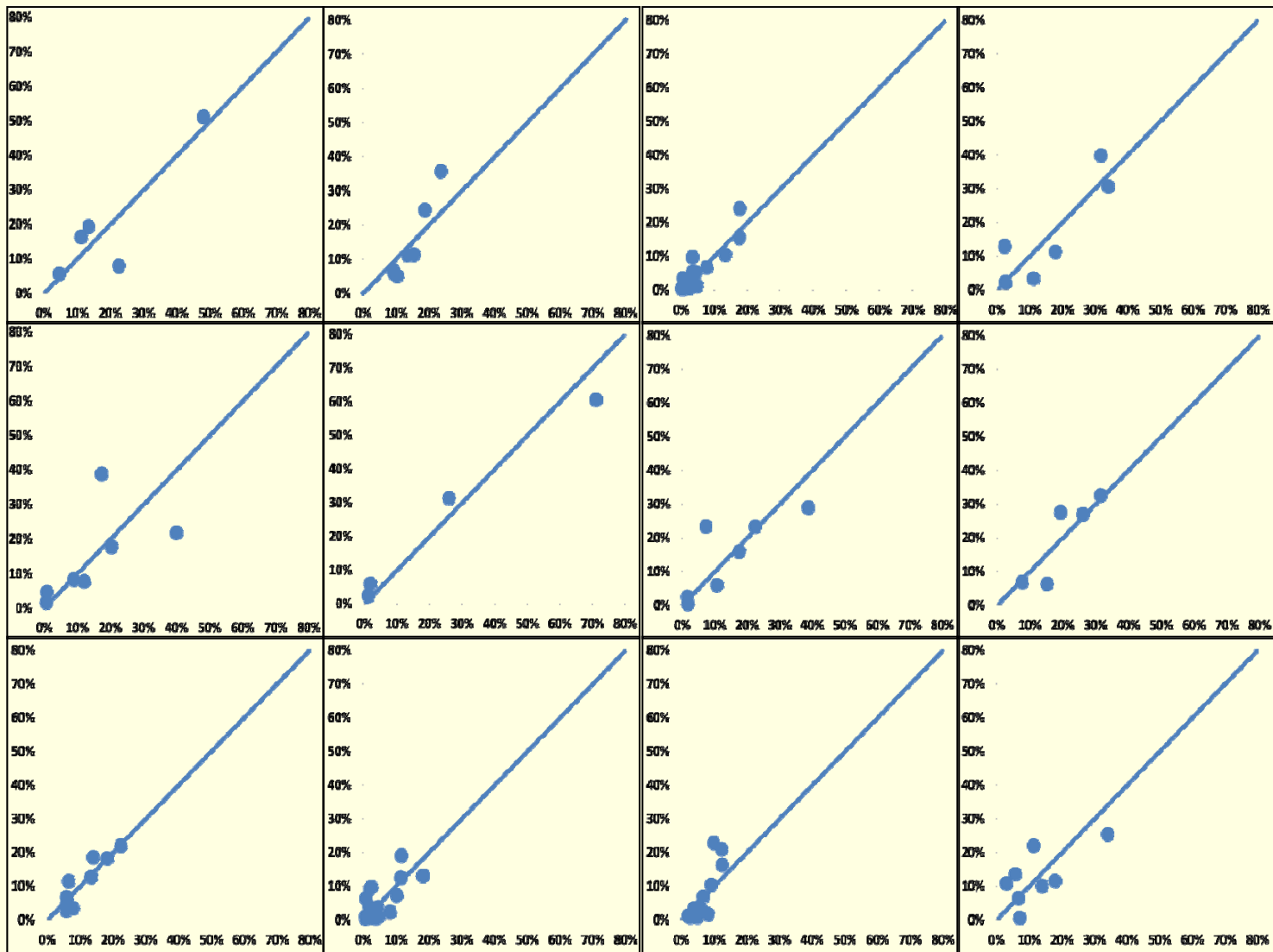
Link Between Preference and Market Share

Point-In-Time: 12 Categories, 18 Month Averages



Link Between Preference and Market Share

Point-In-Time: 12 Categories*, 18 Month Averages

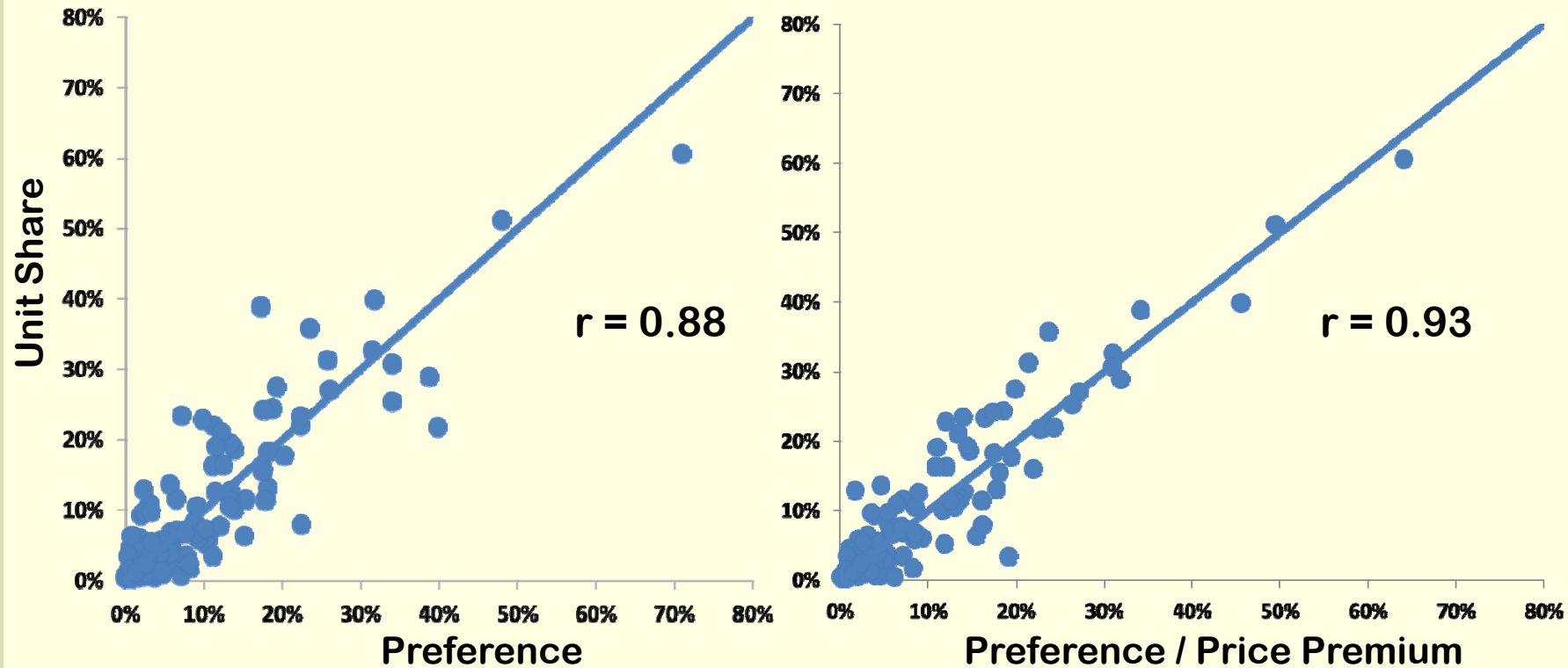


Updated Results (8/15)

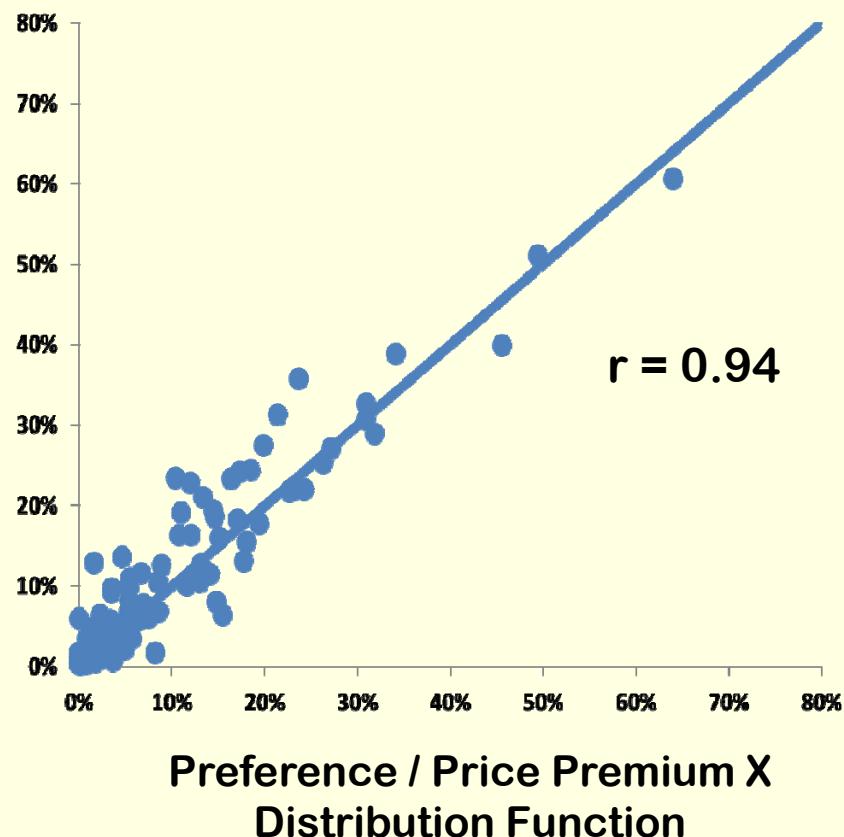
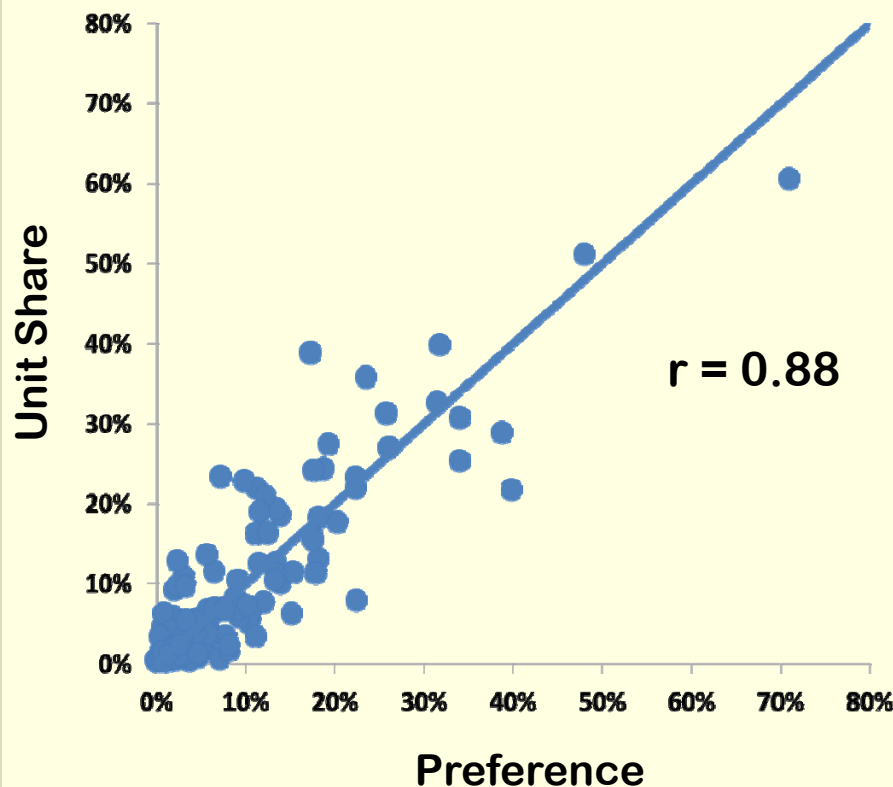
- How strong is link between preference and market share (at a point in time)?
 - Preference (choice) is a strong indicator of “brand strength” within all categories examined
 - Explains 77% of the variance in unit share across 120 brands in twelve categories examined

Conclusions did not change

Link Between Market Share & Preference, Price Premium Point-In-Time: 12 Categories, 18 Month Averages



Link Between Market Share & Preference, P.P., Distr. Point-In-Time: 12 Categories, 18 Month Averages



Updated Results (8/15)

- How strong is link between preference and market share (at a point in time)?
 - Preference (choice) is a strong indicator of “brand strength” within all categories examined
 - Explains 77% of the variance in unit share across 120 brands in twelve categories examined so far
- How strong is link between preference, price premium, and distribution (at a point in time)?
 - There is a direct trade-off between price premium and preference
 - Low price results in higher share than brand preference, high price lessens share
 - Distribution also plays a role but to a lesser degree
 - Explained variance rises to 89% when both taken into account

New Learnings (8/15)

- Reliability
- Sensitivity across sub-groups
- Sensitivity to changes over time

Reliability – Randomized Split Sample

Brand Preference	
Number of Pairs (12 months across 12 categories)	144
Correlation Between Pairs	0.98
Variation Observed	± 1.38
Variation Expected from Random Sampling	± 1.51
Statistical Conclusion (f-ratio)	Not Significant

- There is no indication of extraneous variance
- The Brand Preference measure is as reliable as the laws of random chance allow

Sensitivity Sub-Groups – Generation Example

	Brand Preferences Among:	
	All Men & Women (N=6908)	Millennials (N= 2336)
Brand A	34.7%	46.1%
Brand B	19.8%	20.4%
Brand C	11.9%	8.5%
Brand D	10.2%	8.0%
Brand E	4.3%	3.3%
Brand F	3.1%	3.2%
Other Brands	16.0%	10.5%

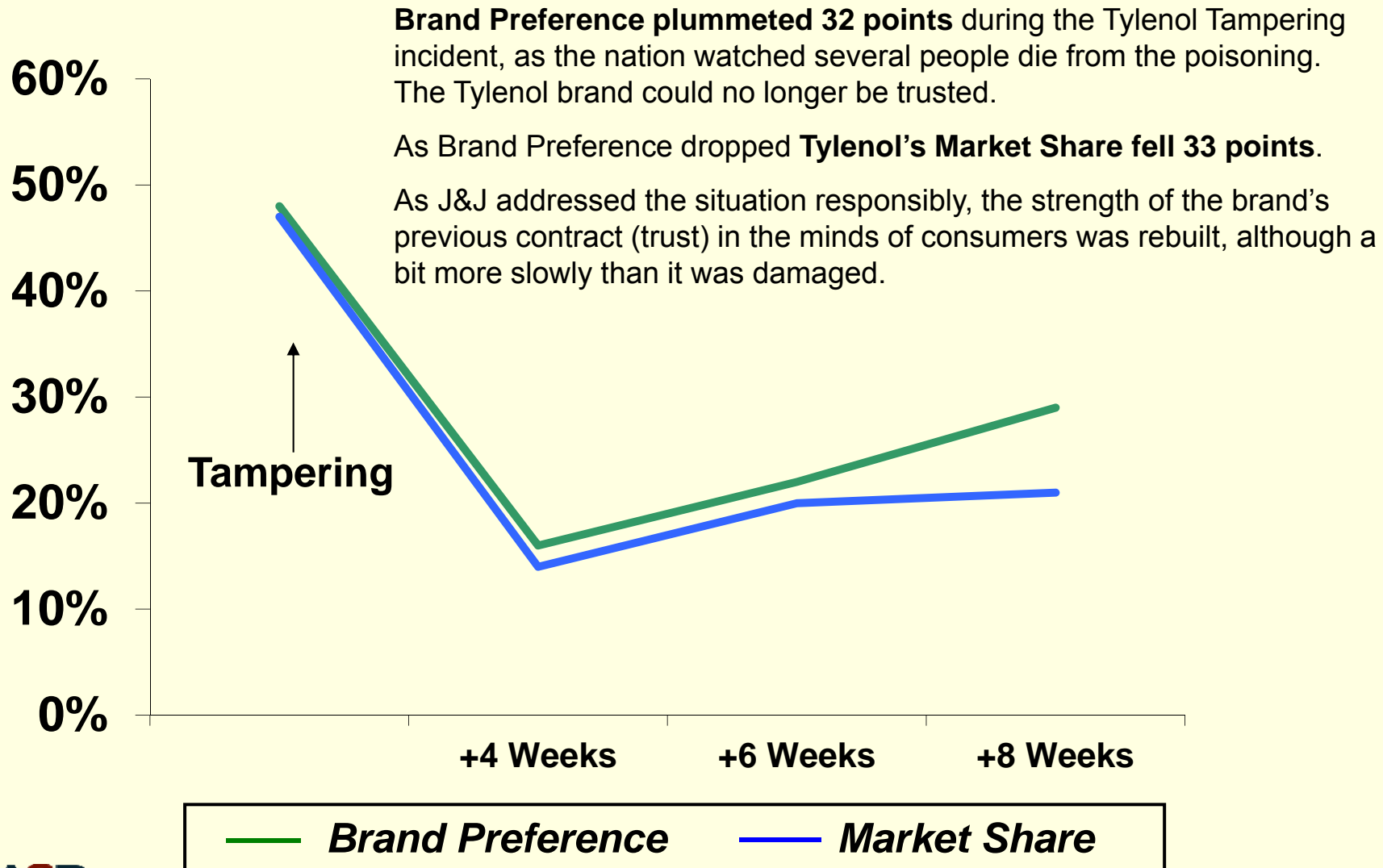
- Colors indicate significant differences from overall sample at 95% confidence level (sub-sample t-test)
- Brand A (which released a younger targeted varietal and ad campaigns) has created a significant lead among millennials

Sensitivity Sub-Groups – Ethnicity Example

	Brand Preferences Among:		
	All Men & Women (N=7200)	African American (N=862)	Hispanic – Acculturated (N=439)
Brand A	66.0%	69.6%	71.0%
Brand B	21.3%	18.2%	14.6%
Brand C	1.9%	1.4%	0.2%
Brand D	1.3%	1.4%	1.1%
Private Labels	9.5%	9.4%	13.1%

- Colors indicate significant differences from overall sample at 95% confidence level (sub-sample t-test)
- Brand B is lagging behind leading brand A among AA and Hispanic consumers
- Opportunity exists for all brands to make additional inroads into Hispanic market by targeting private labels

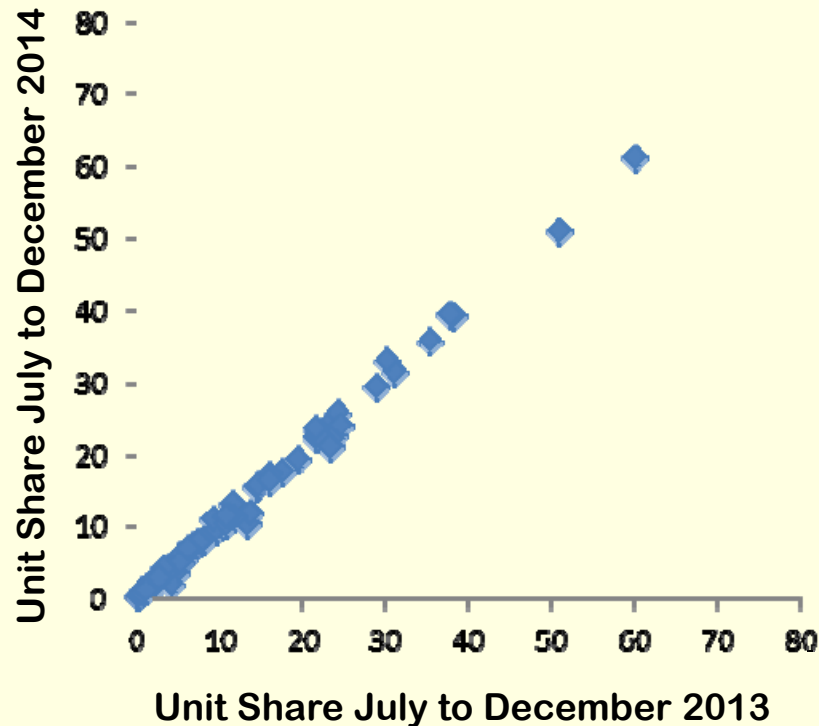
Sensitivity Over Time – Tylenol Tampering Case*



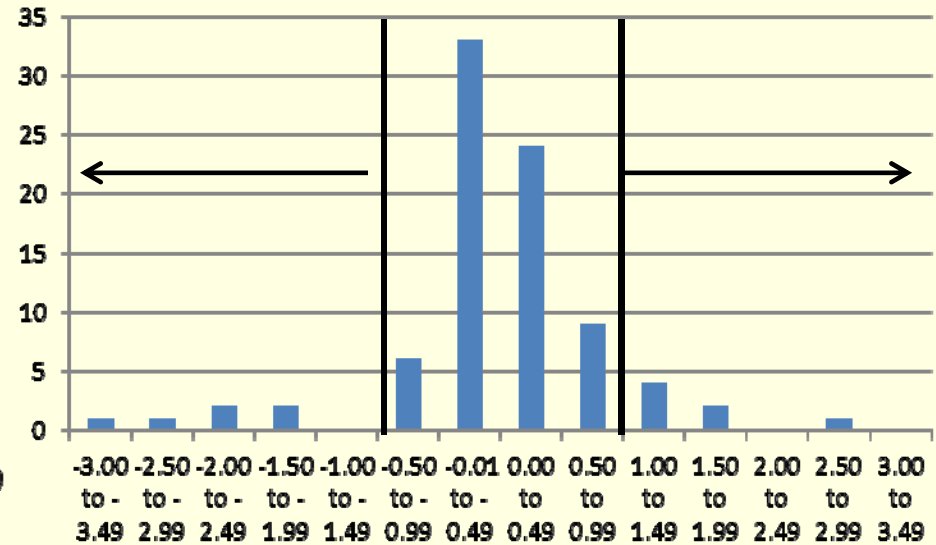
Sensitivity Over Time – Year-Over-Year Analysis

- Normally a brand's share of market changes much more slowly over time than the movement illustrated in the Tylenol example
- To explore more typical brand changes, we conducted a Year-Over-Year analysis using the tracking dataset
- Preference, Unit Share, and Price Premium data broken into two groups covering July-to-Dec. 2013 & Jul.-to-Dec. 2014
 - 9 categories
 - 85 brands
- This neutralizes seasonality effect seen in some categories thus ensuring apples-to-apples comparison
- Based on sample sizes used, movements in preference would be expected to detect changes in unit share of one share point

Sensitivity Over Time – Year-Over-Year Analysis

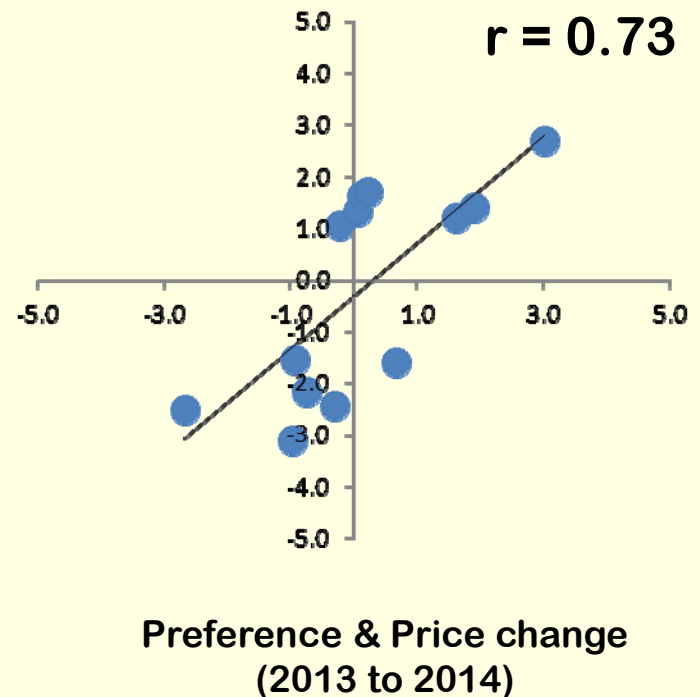
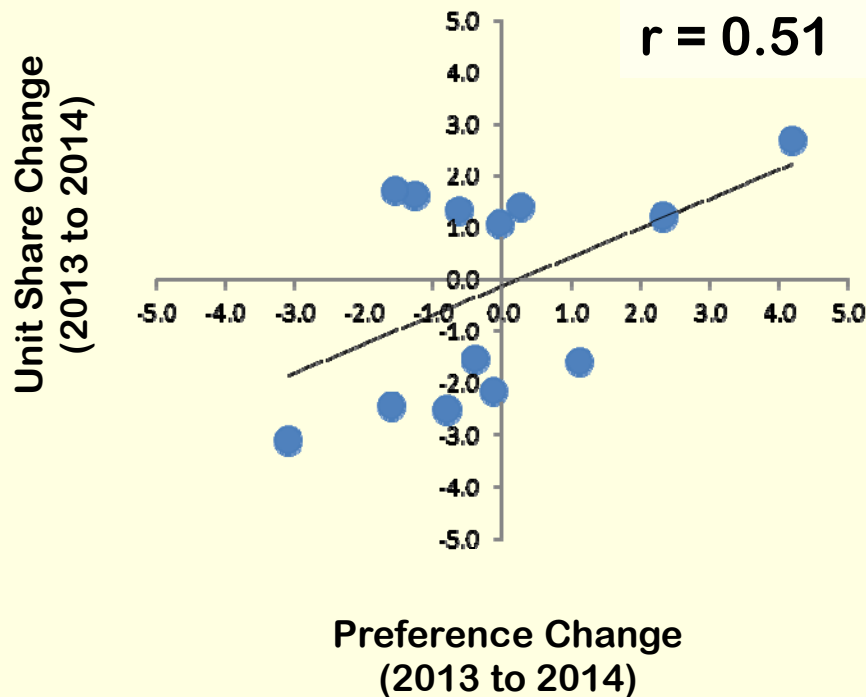


Histogram of Unit Share Changes



- For most brands examined unit share was very stable between 2013 and 2014
- Based on sample sizes, changes in preference should detect changes in share for brands to the left and right of lines on histogram (n=13 cases)

Sensitivity Over Time – Year-Over-Year Analysis



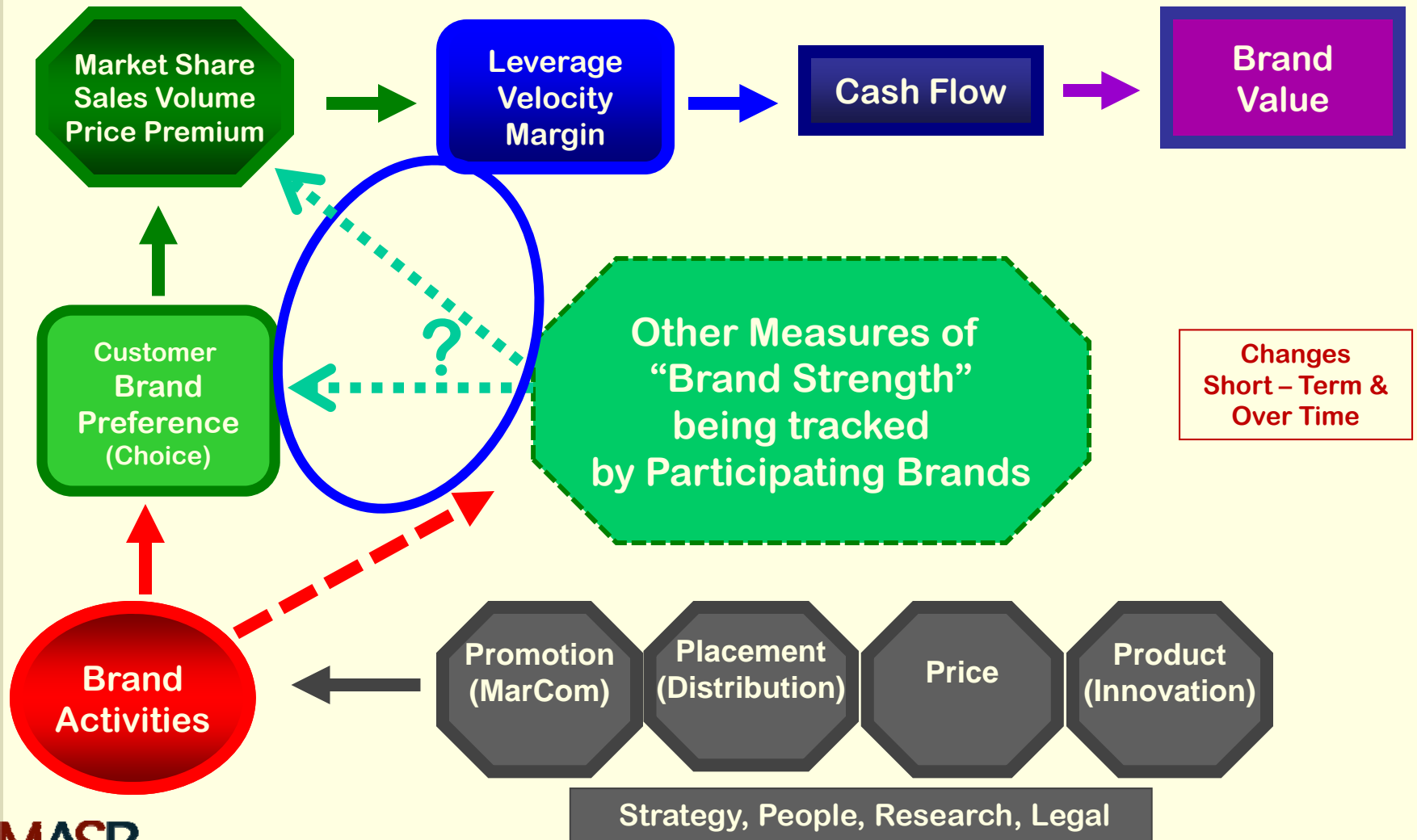
- Changes in preference and price explain 53% of the variance observed in year-to-year change in unit share. Preference is the larger factor of the two.
- Note that a negative change in preference is generally related to a negative change in share and vice versa

New Learnings (8/15)

- **Is brand preference reliable?**
 - Brand preference is as reliable as the laws of random chance allow
- **Is brand preference sensitive to differences between different groups of consumers and changes in market share over time?**
 - Brand preference is able to detect differences between groups of consumers and changes in market share over time

Build Bridges – Step 3

Uncover Links between BP and Other Measures



Learning Other Measures (8/15)

- Other “Brand Strength” metrics including awareness examined
- Data submitted from participants
 - 6 categories
 - 33 brands (generally only largest brands included)
 - Time period and format (e.g. scale) varied by category
 - 70 different questions
 - 7 broad concepts consistent across at least 4 categories each

Seven Common Classes/Concepts of Metrics *

- **Awareness Unaided** - report of brand name when prompted with category (no brand list given)
- **Awareness Aided** - brand name recognized from a list of brands
- **Brand Loyalty** - brand is one that they plan to consistently purchase and/or use when need arises
- **Value** - brand provides good value for the money
- **Purchase Intent** - likelihood to purchase brand in future
- **Brand Relevance** - brand fits lifestyle and/or needs
- **Advocacy** - brand is one that they would recommend to others

* Verbal Q & A vs Behavioral (Preference/choice)

Link Between “Brand Strength” & Share Common Metrics

	Average Unit Share Variance Explained	Median Unit Share Variance Explained	Number of Categories with Correlation > 0.30*
Preference (choice)	68%	80%	6 / 6
Awareness – Unaided	48%	44%	4 / 4
Brand Loyalty	45%	43%	5 / 6
Value	32%	44%	3 / 4
Purchase Intent	27%	26%	4 / 6
Brand Relevance	19%	18%	2 / 4
Awareness – Aided	18%	26%	4 / 6
Advocacy	15%	13%	2 / 4

- Seven common classes show moderate cross-category relationships to share
- Cross-category consistency weak for all but unaided awareness
- Their performance is substantially lower than that for preference (choice)

*Source: Cohen’s convention for correlation strength (1988) r = 0.1 – 0.29 Weak r = 0.3 - 0.49 Moderate r = 0.5+ Large

Link Between “Brand Strength” & Share/Preference Common Metrics

	Average Variance Explained in	
	Preference (w/Price & Dist.)	Unit Share
Awareness – Unaided	52%	48%
Brand Loyalty	50%	45%
Value	41%	32%
Purchase Intent	33%	27%
Brand Relevance	28%	19%
Awareness – Aided	28%	18%
Advocacy	23%	15%

- Other “Brand Strength” classes show similar relationships to preference & share
- Suggesting again* that these common classes of metrics are captured by preference (choice) & therefore not likely to add any predictive power

See next slides for conclusions from previous investigations

Theoretical Framework - Ambler

“...we have classified and reviewed prior research of intermediate and behavioral effects of advertising using a taxonomy of models...

Although such models have been actively employed for 100 years, we find them flawed...the concept of hierarchy (temporal sequence) on which they are based cannot be empirically supported...

We also suggest that behavioral (brand choice, market share)...measures be compiled in...databases to enable researchers...to test the interaction of content, intermediate effects, and long-and short-term behavior. In this effort, we also must relieve measures from cognitive bias.”

Sources: Vakratsas and Ambler 1999; MASB 2008 & 2010.

Theoretical Framework - Stewart

“...research efforts would be more insightful if the focus were on measures of...behavioral change, rather than exclusively on cognitive measures such as recall (awareness) or attitude change.

The present study is among the very few to use (a behavioral brand choice measure) of demonstrated reliability and validity.”

Sources: Stewart et al 1986; MASB 2008 & 2010

Updated Results Summary (8/15)

- **How strong is link between preference/share and other “Brand Strength” metrics?**
 - **Several common “Brand Strength” metrics show a positive relationship to share**
 - **Strength varies by category suggesting none alone suitable as a standard for brand strength across industries**
 - **These relationships are weaker than that between preference and share**
 - **The metrics show similar correlations (usually somewhat stronger) to preference as to share**
 - **Suggests that these other “Brand Strength” metrics don’t substantially add to the preference-to-share relationship**
 - **Can be used diagnostically to understand brand preference and uncover brand opportunities**

MMAP: 10 Characteristics of an “Ideal Metric”

*The MSW•ARS
Brand Preference
Metric has met the
MASB Marketing
Metric Audit
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Characteristics of
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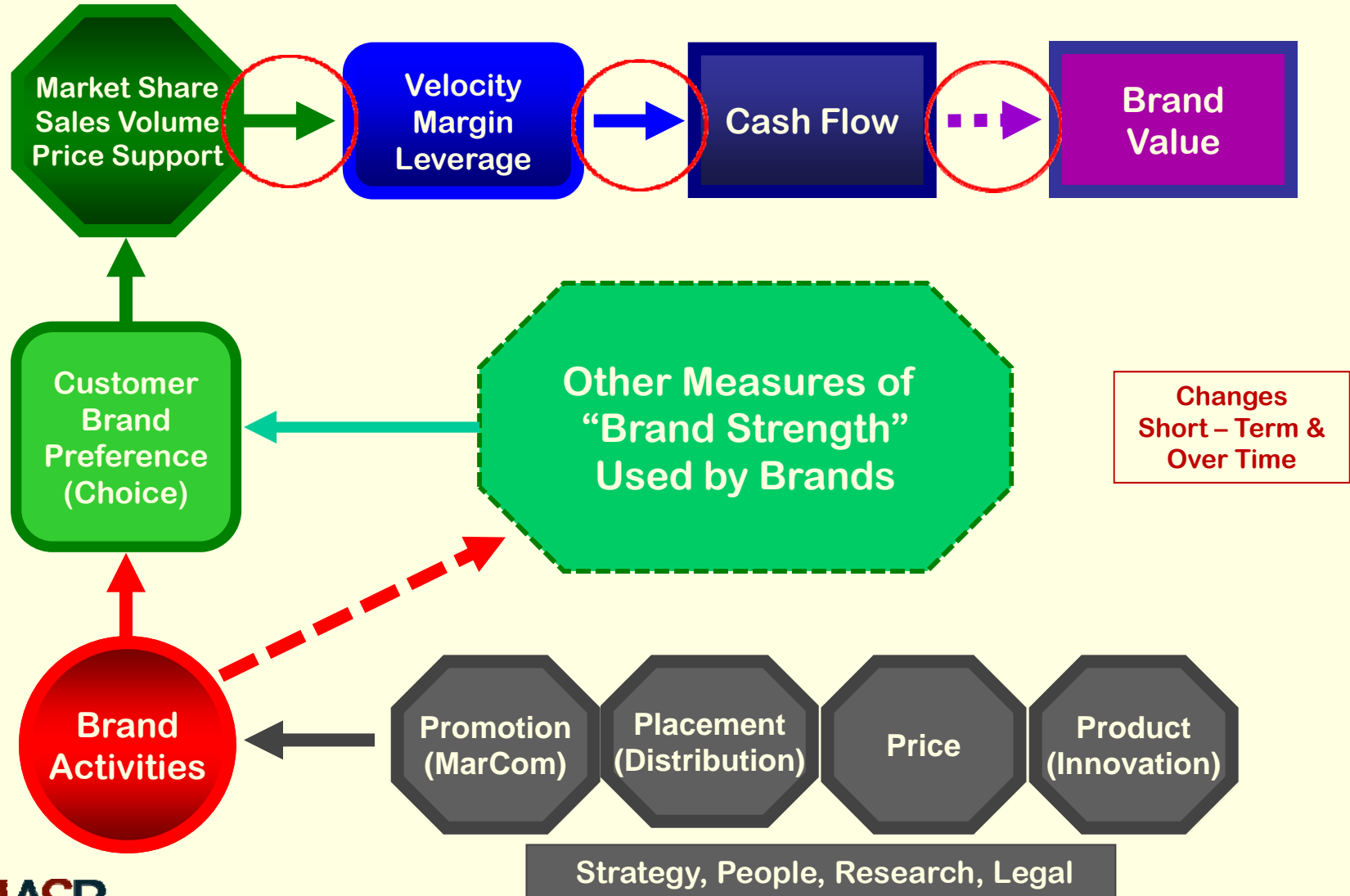
What we have seen/learned during the BIV Project

Not so much for other measures collected in tracking “surveys”

Source: “Measuring and Improving the Return from TV Advertising (An Example),”
MASB, April 2008, May 2012

Build Bridges – Step 4

Extend BIV Model to financial metrics



Brand Investment/Valuation Model

Predictive Equations & Terminology

The trials have refined our understanding of how brand strength (measured by preference) translates into Net Present Value calculations, financial ratios, and the DuPont Return on Equity model.

NPV Calculations and Financial Ratios:

- (1) Net Present Value = $\sum \{ \text{Net Period Cash Flows} / (1 + R)^T \} + \text{Terminal Value}$
- (2) Net Period Cash Flows = Brand Sales - Brand Costs (Margin: Profit/Sales)
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- (5) Unit Share \sim Brand Preference * Distribution Factor / Relative Price Factor
- (6) Distribution Factor = $f(B0 + B1 * \ln(\text{Distribution}))$
- (7) Price Ratio = $f(B2 * \text{Average Brand Unit Price} / \text{Average Category Unit Price})$

Real Options include option to generate future revenues after sale of brand (related to terminal value), potential brand extensions, potential in new markets, etc. (Leverage: Assets/Equity)

DuPont Model:

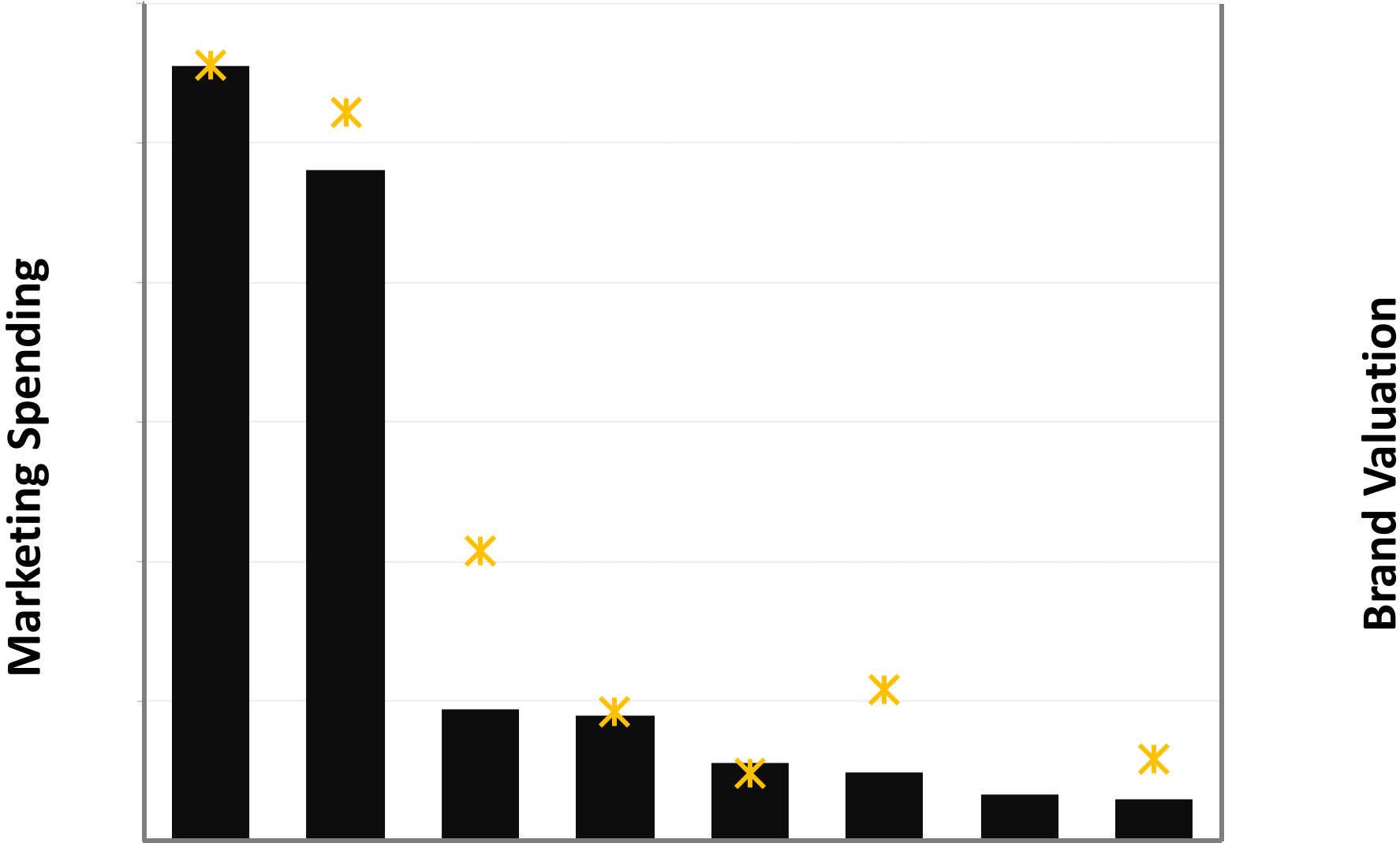
Profit/Sales x Sales/Assets x Assets/Equity = Profit/Equity = Return on Equity

MillerCoors Cash Flow Modeling

- **Brand Level Free Cash Flow Model**
 - Will use for internal purposes decision-support (e.g. portfolio strategy and resource allocation)
 - NOT intended for balance sheet or transactional valuations
 - Intended to focus management on changes in brand valuation over time (not just point in time valuations)
- **Other Considerations**
 - DCF valuations are provided for multiple time frames
 - Brand preference measures help to inform future-year assumptions (e.g., pricing, volume growth/decline)
 - Useful to inform what time period represents a reasonable valuation term
 - Brands could “earn” a higher valuation based on improved brand preference which would remove uncertainty relating to future financial assumptions and the longevity of the brand

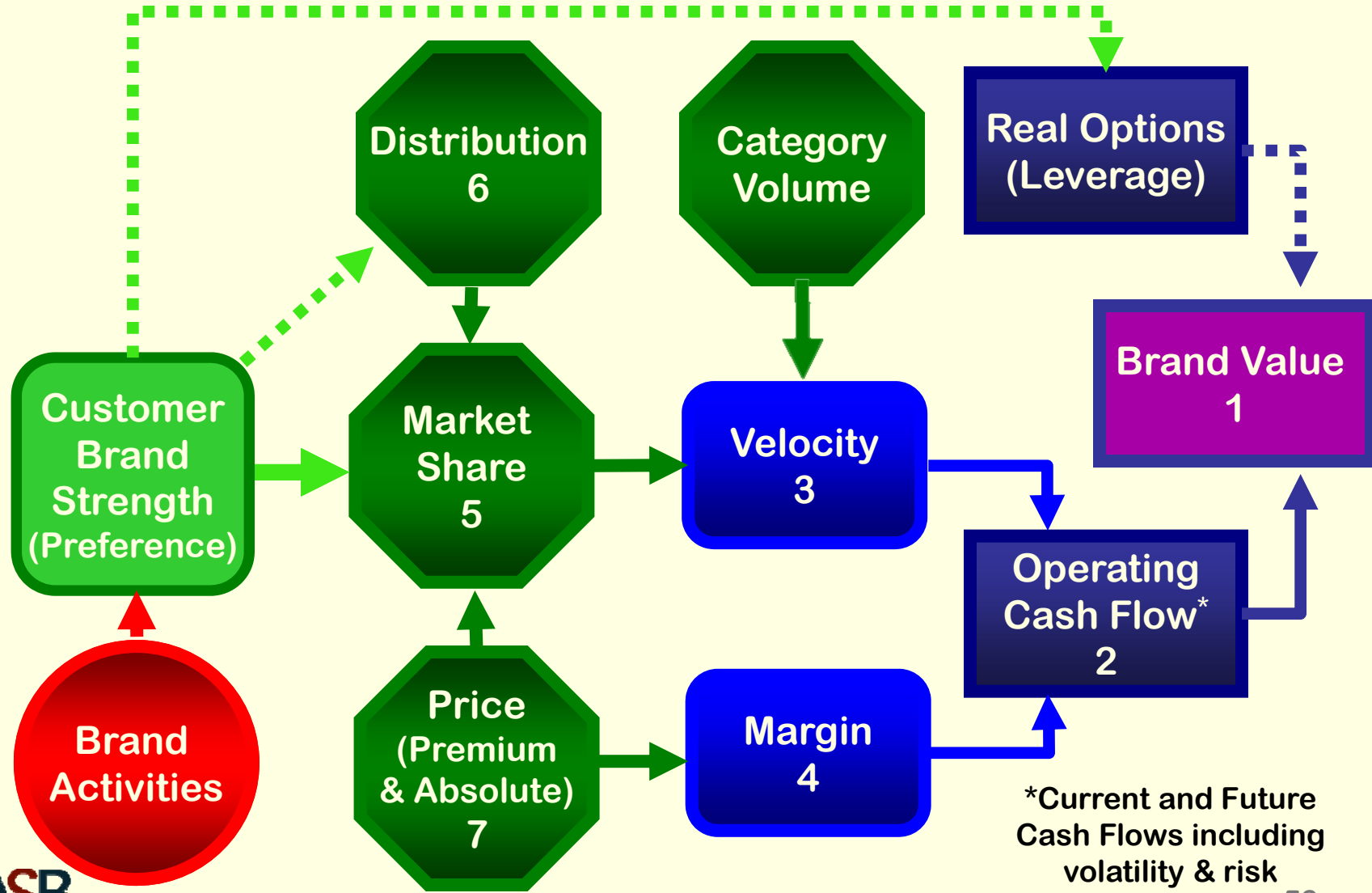
Source: James Meier (MillerCoors), MASB Summit 2/2015

Marketing Spending vs Brand Valuation



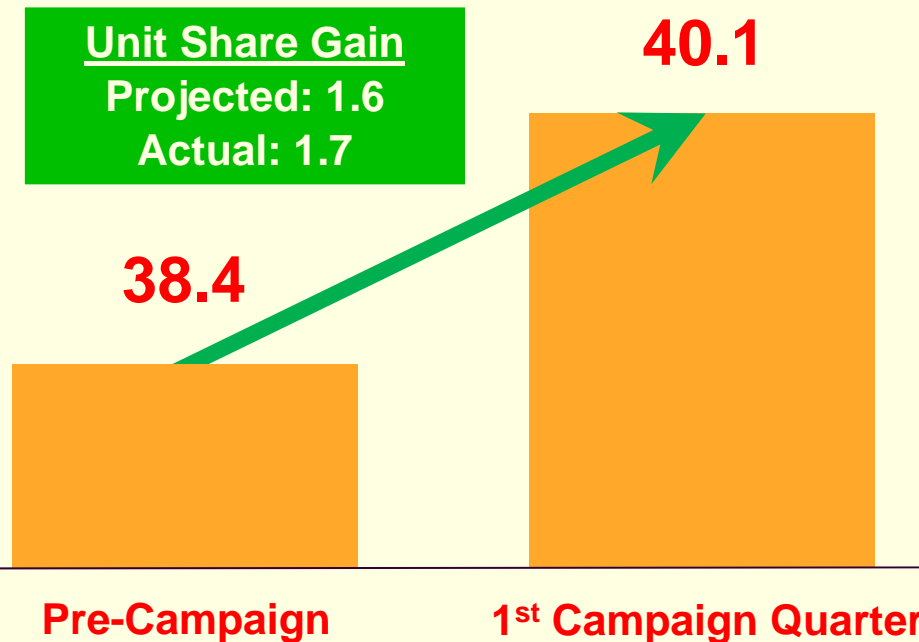
Refined Brand Investment/Valuation Model

Conceptual Links



A Brand Value Model is also a Brand Investment Model

StarKist Tuna in a Pouch Launch Copy Case



“The results from the initial advertising quarter yielded an ROI of 76 percent, an enormous improvement over the break-even ROI we had expected for the quarter using a traditional approach. Incorporating the costs and incremental profits involved with the unplanned – or second – flight, we were up to 368 percent return on our TV advertising activity.”

— Barry Shepard, VP of Marketing

- Starkist used brand preference from copytesting, planned media spend, and the product price level to accurately project in-market ad performance
- ‘What if’ scenarios showed the brand was “leaving money on the table” - additional airing would continue to significantly grow preference/market share
- The brand team took this knowledge to management and they approved an increase in the media budget – the result was a dramatic improvement in ROI

BIV Project Next Steps

- Dissolve Integration Sub-team: job done
- Publish findings paper
- Work with MarCom Team to introduce model
- Expand to corporate brands (stock price)?
- Expand to B2B?
- Expand to media brands?



Thank-you!



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of the Marketing Accountability Foundation**