MASB Standards Project

Applying Customer Lifetime Value to CPG: Pilot Test Summary

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Marketing Accountability Standards Board of the Marketing Accountability Foundation

Other MASB Projects

Project

Issue Addressed

Project Objective

Expected Outcome

When

Customer Lifetime Value (CLV) for CPG (Analyzing)

We market to, but do not measure results at consumer level

Demonstrate how CLV models can be reliably applied to CPG (Pilot)

Process to measure & forecast impact among targeted consumers

2013



Agenda

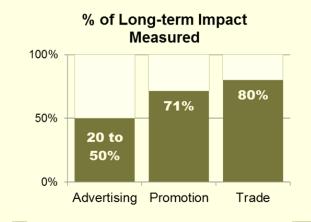
- Background on CLV Project
 - Purpose of pilot test
 - Scope
 - Methodology
- Findings
 - Questions Answered
 - MMAP Audit
 - Limitations of Test
- Conclusions
 - Implications for Marketers
 - Hypotheses for testing in larger-scale test

Note:

CLV = Customer Lifetime Value, where customer is the end-user of the consumer packaged good brand



Purpose of the CLV Pilot Test



Can the accountability gap be solved with CLV?

- Must be valid and reliable
- Roadmap from Yoo, Hanssens paper on CLV

40% Churn

CRM dB Capabilities in CPG

Measurement needed for CRM in packaged goods marketing

Behavioral targeting and personalization

Nielsen-Catalina

Advance the methodology for CPG commercial test

Digital and TV micro-targeting



Methods and Scope

Methods

- Customer Lifetime Value (Customer Equity) for Frequently Purchased Brands, Yoo, Hanssens CLV (April, 2011)
 - Purchase history can predict repeat purchase (Fader, Hardie, Lee 2005)
 - CLV is NPV value of all future purchases (Gupta, Lehmann, Stuart 2004)
 - Customer Equity is total CLV for all customers for a brand
- Econometric model to estimate marketing impact on Customer Equity
 - CE = Base prior marketing + marketing lift + price lift for prospects and customers

Scope

- Nielsen Homescan purchase transactions, 3 years
- Sports Drinks

- Diapers/Training Pants
- Carbonated Beverages
- **Baby Wipes**
- Canned Pasta



History that led us to here

What is the long from impact from marketing?

How do we measure CLV for CPG brands?

What do we already know about CLV? Can we compute a valid and reliable CLV metric in CPG?

Can this method be replicated in commercial scale?

Long-term Impact from Advertising (Hanssens)

CLC for CPG

(Yoo, Hanssens) CLV: What is Known (Kumar)

Applying CLV to CPG: Pilot Test

> (MASB CLV Team)

CLV Commercial Test

> (Nielsen-Catalina)

6 Effect Levels from repeat to org reaction

 $CE = \sum CLV$

Repeat is predictable

(Hardie, Fader)

Customers

defined by

probability of

future purchase

CLV is predictive

Used for strategic target marketing

Measures long-term impact from mktg

Can apply CRM strategies

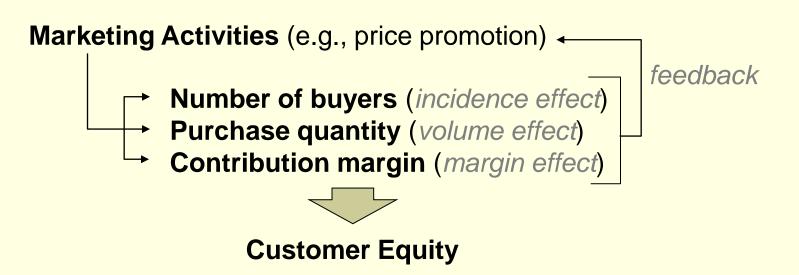
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PILOT TEST FINDINGS



CLV captures the value of future purchases which total to CE, like market cap.



| Market Cap | Customer Equity |
|----------------------|-----------------------|
| Net Present Value of | Net Present Value of |
| all Future Earnings | all Future Earnings |
| by the Firm | <u>from Customers</u> |



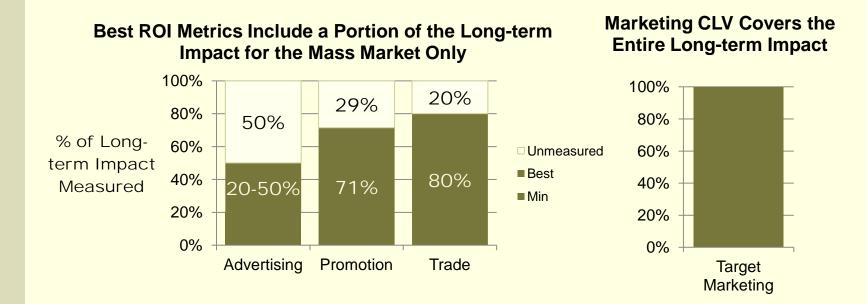
CLV for CPG can be done



This pilot demonstrates the capability of applying CLV to consumer packaged goods, not just contract-based industries.

Closes some of the accountability Gap

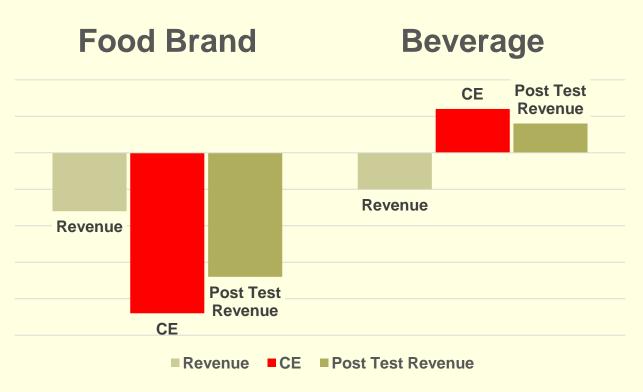
The CLV structure will help account for the full effects of marketing activities rather than just the short-term effects.





CLV can be predictive





CLV is a forward-looking metric with some prediction capabilities and is more stable than weekly sales.



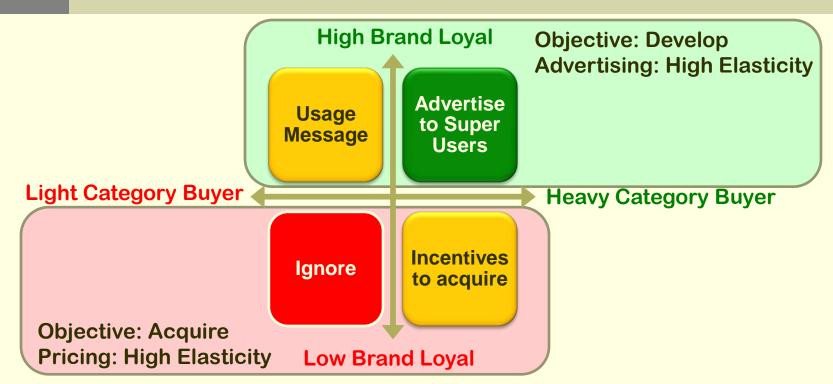
CE is a more stable metric



- CE is a slow-moving metric, it shows "direction of brand strength"
- As such, CE is important for setting strategy (e.g. advertising and promotion), assuming the brand is profitable:
 - Stable CE: continued future profitability expected under the status quo.
 - Rising CE: higher profitability is expected under the status quo.
 - Declining CE: leading indicator of deteriorating profitability. Change course.



CLV helps use of CRM strategies

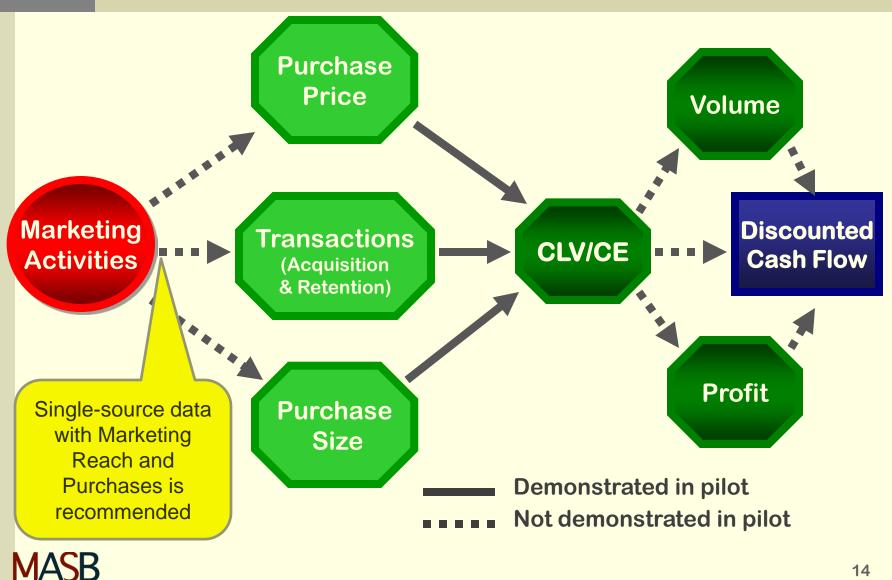


Advertising retains customers, while pricing worked to attract customers.

- Ad exposure has a longer-lasting effect for current customers, perhaps because of higher brand engagement
- Inactive buyers of the brand screen out messages for the brand more than active buyers and need an incentive to "give the brand a try"



MMAP Schematic of CLV/CE-for-CPG Pilot Project: **Marketing Activity, Metrics & Financial Links**



Limitations of Pilot Test

- Panel dataset relied on panelist participation which can wane over a time period of 3+ years causing a small downward bias
- Small sample size limited ability to measure marketing impact on target marketing segments
- Aggregate and thin marketing execution data limited the accuracy of the marketing effects measurement



Conclusions and Hypotheses for Next Phase

Conclusions

- This pilot demonstrates capability of applying CLV to consumer packaged goods.
- Advertising and pricing can be differentiated for customer acquisition and retention efforts.

Hypotheses for Commercial Test

- Passive purchase transaction data collection will reduce bias.
- Single-source reach & measurement data will improve marketing response modeling.
- The probability model can be refined for more balance between active and inactive customers for brands with stable sales.
- Test the ability to target and measure the most valuable customer.
- Test the effect of differentiated messaging on target segments.
- Test the differential effect of advertising to ethnic target segments.



Fit with MASB Mission

Brand Investment & Valuation (BIV)
(Analyzing)

CPG Customer Lifetime Value (CLV) (Analyzing)

Mission

Establish marketing measurement & accountability standards across industry & domain for continuous improvement in financial performance...

...for the guidance & education of business decision makers & users of performance & financial information.

Measuring on-line Marketing (Measuring)

Metrics Catalogue MMAP Audits (Measuring)

MarCom
Communications
(Reporting)

Improving Financial Reporting (IFR) (Reporting)



CLV to CPG Team

Team Leaders



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Team Meets: 3rd Friday Monthly, 10:30AM ET

Thank-you!

