

Allure Consumer Engagement Strategies

Insights & Analytics Group

Digital Signage Analysis / 2012 NFL Season

Location: NFC Stadium



Outline

- ⊕ Project Purpose, Hypotheses & Implications
- ⊕ Methodology & Analysis
- ⊕ Results
- ⊕ Future Experiment Recommendations
- ⊕ Possibilities

Project Purpose & Objectives

Purpose

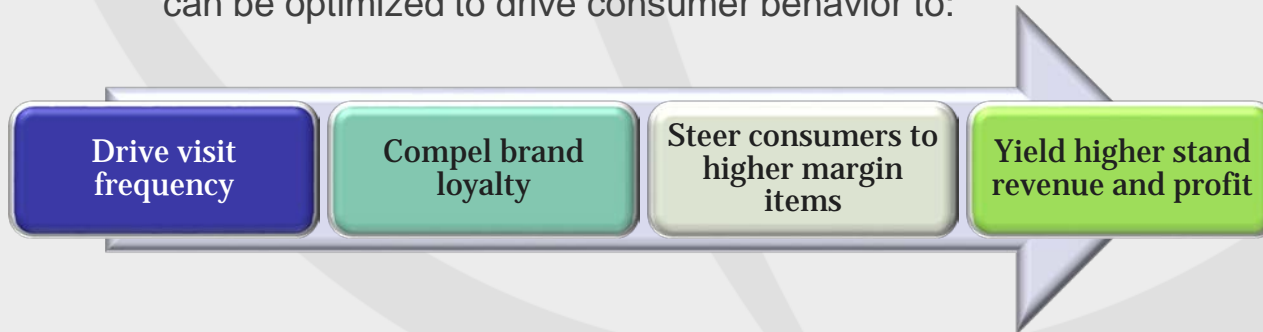
- ⊕ Prove the concept that digital signage stimuli impact purchase behavior.

Hypotheses

- ⊕ Displaying promotions for a given brand will result in higher purchase volume of that brand.
- ⊕ Stimuli may have collateral impact on adjacent items.

Implications

- ⊕ There **IS** an ideal digital signage content and channel mix that can be optimized to drive consumer behavior to:



Methodology & Analysis

Three stands in the 100-level were selected to participate in the experiment. Digital signage in each of the stands alternated between promoting Light Beer Brand A and Light Beer Brand B over 10 games (5 games each).

Aggregated P.O.S. data was provided, detailing:

- ⊕ Count of each item sold by stand, by game.
- ⊕ Key game statistics including attendance, stadium sales, stadium per caps, stand sales and stand per-caps.

Analysis

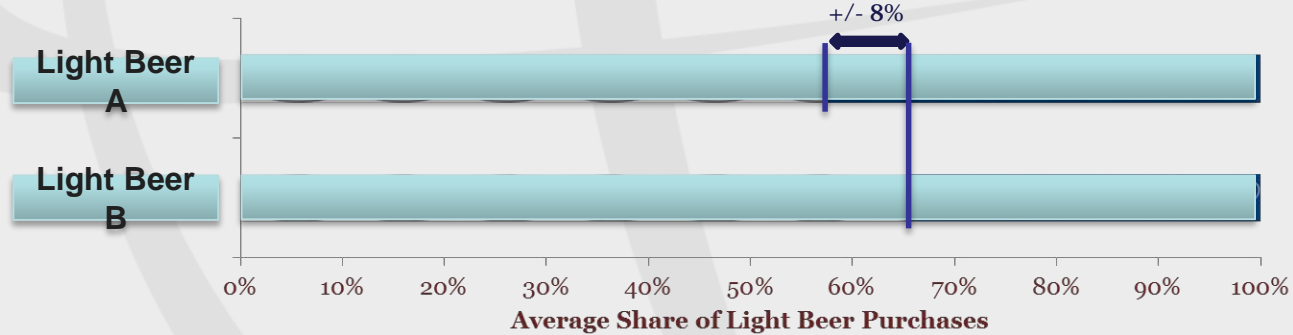
- ⊕ Data from 3 stands at 10 games was compiled to represent 30 cases or unique events in the experiment.
- ⊕ Crosstab, T-Test and Pearson Correlation Analyses were conducted to validate differences in purchase behavior between the two digital signage stimuli.

Limitations

- ⊕ Limited sample (30 cases) required high threshold for statistical testing.
- ⊕ Inability to see transaction-level data prevented trading and adjacent purchase analyses.

Results

Alternating the digital signage stimuli results in a significant and material difference in consumer purchase behavior between Light Beer Brands A & B.



		Promotion		Share Shift (impact of promotion on light beer brand mix)
		Brand A	Brand B	
Average Share of Light Beer Purchases	Brand A	66%	58%	+8%
	Brand B	34%	42%	+8%

Results (continued)

There was no impact on overall light beer sales during this test

- ⊕ The consistency of beer sales is surprising given background variation among games.

There may be other digital signage stimuli that increases overall Light Beer Sales.

		Promotion	
		Brand A	Brand B
Actual Units Sold	Brand A	8,952	8,009
	Brand B	4,593	5,523
	Total Units Sold	13,545	13,532

$\Delta = 0.096\%$

NOTE: Statistical analysis of trading among other adjacent items and impact on stand per caps is inconclusive due to insufficient detail and volume of data.

Impact Scenarios

Below are three scenarios for how the concept of shifting purchase patterns can be harnessed for profitable returns:

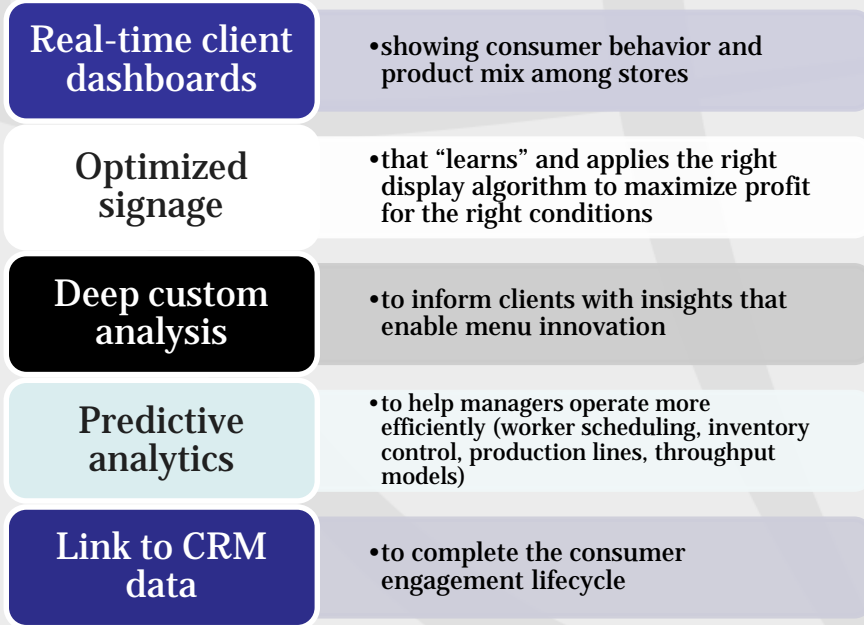
1	Tap vs. Bottle	The cost of a keg can swing the profit advantage of bottle v. tap \$0.25 per serving to either package. Assuming an 8% shift based on digital signage, below is a pro forma impact on profit:				
	2,000,000 Total beer servings per year	X	8% Percent shift to more profitable package	X	\$0.25 Profit advantage of one unit of package	= \$40,000.00 Bottom line impact of digital signage
2	Supplier Net Volume Discounts	Present the behavior shift findings to Brand B and commit to run all digital signage promoting Brand B for one year in exchange for Brand B's sponsorship of the program in the amount of 1/2 of the wholesale price of the additional 8% volume of their product.				
	1,000,000 Baseline Brand A Sales	X	8% Predicted % lift in Brand A Sales	X	\$1.50 Wholesale price of one Brand A Serving	X 50% Deal to share increased Brand A volume = \$60,000.00 Bottom line impact of digital signage
3	Drive Higher Volume	Assuming we learned that fans buy beer 8% more often when they buy a pretzel than when they buy popcorn.				
	Run digital signage to promote pretzels with beer to harness impact of adjacent lift.					

Recommendations – Future

Recommendation	Enables Analysis
Collect POS data so that each row represents a transaction, each column represents an item and each cells is populated with the count of items sold in a given transaction.	Behavior shifts within a transaction Covariance of items (e.g. do people buy pretzels with Brand B and Hot Dogs with Brand A?).
Include a “hold-out sample” (control stands or stores).	More accurate assessment of lift in target items compared to background noise.
Include more stores and/or stands to generate more data.	Conduct advanced modeling (structural equation or ensemble model) to predict behavioral outcomes.
Perform ethnography and intercept interviews during the experiment.	Refine hypotheses by talking to consumers Assess impact on qualitative variables such as satisfaction engagement and loyalty.

Possibilities

If digital signage is linked to POS...



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- ⊕ More profitable operations
 - ⊕ Able to invest in more innovation
 - ⊕ Creating more value enables extraction of more value from client engagements
 - ⊕ Positions Client & Allure Global as aggregators that strategically act on data and insights

Impact Statement



“This was a homerun, exactly what I’ve been hoping for the past two or three years – not just to clearly communicate the value of digital signage through ROI, but show our organization the path to harnessing this channel more predictably, not to mention having insights like these to empower operations, supply chain and marketing.”

– O.B., Sr. Director, Digital Marketing at national foodservice company