

Internships Reports Day Fall 2014



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**This presentation is for the use of San Jose State University
Department of Mathematics and Statistics.*

What does IDXP do?



[Product](#)

[Platform](#)

[Company](#)

[Contact](#)



Power your retail and product sales performance with
in-store shopper behavior analytics.

The IDXP Path Platform™ is a breakthrough way to manage store operations and improve brand merchandising effectiveness to increase sales conversions.

IDXP Overview

- Leverage Wifi Technology
- Monitor Real Time Consumer Behavior
- Combine with Point of Sales (POS) Data
- Provide Performance Metrics
- Actionable Insights
- Promotional Power

Consumer Behavior



- Shopper Loyalty
- Shopping Trip Length
- Path Analysis
- Product Placement
- Promotions
- Merchandising Mix
- Checkout

IDXP Promotion Power

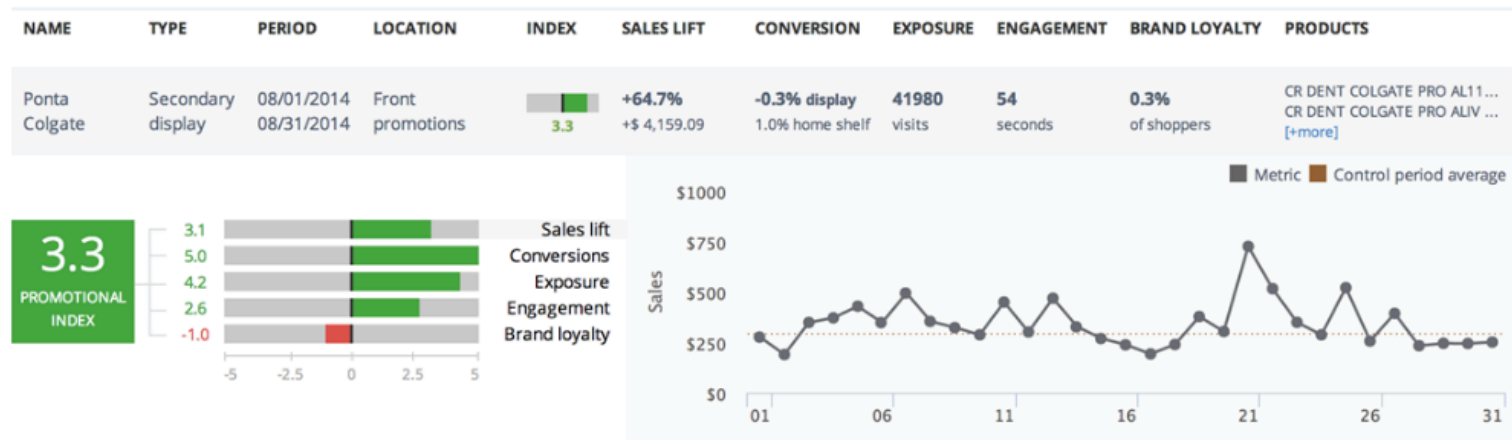
Introducing IDXP Promotion Power (TM)

A Ground-breaking Analytics Solution that Provides CPG Brand and Shopper Marketing Managers with Real-time ROI Measurement of In-Store Promotions.

[Learn More](#)


Promotions list


[Create campaign](#)



IDXP Path Platform

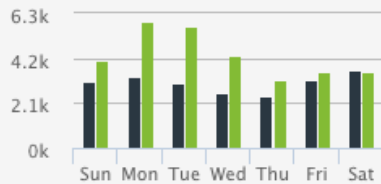
 Widget Board

 Next Path

 Promotion
Power

STORE TRAFFIC COUNT

LAST SEVEN DAYS

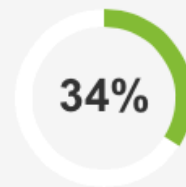


Last 8 weeks average
Last seven days count

[More](#)

STORE ATTRACTIVENESS

YESTERDAY



New Shoppers

▼ 12.0%
did

[More](#)

SHOPPER LOYALTY

LAST SEVEN DAYS

1.1

Visits

[More](#)

TYPICAL SHOPPING TRIP DURATION

LAST SEVEN DAYS

6.0

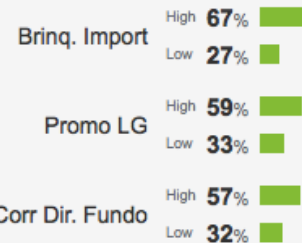
Minutes

▼ 0.9%
w/w

[More](#)

TOP 3 ENGAGEMENT RATES

LAST SEVEN DAYS



[More](#)

BOTTOM 3 BOUNCE RATES

LAST SEVEN DAYS



[More](#)

How I Got the Internship.

- Fall 2013: ***Business 193 – Data Mining***
- Classmate introduced me to a relative that worked at IDXP
- Dozens of e-mails, multiple interviews, and some time later!

Data Science Team

- **Chief Data Scientist**
 - Professor of Computer Science at SJSU
 - NASA: Mars Rover
 - IBM: SPLASH
- **Senior Data Scientist**
 - PhD Statistician
 - Former Professor at Illinois Institute of Technology
 - Financial and Stock Market
- **Data Analyst Intern**
 - Me

Data Science Team

1. Improve Location Algorithms
 2. Create *metrics* and combine to form a Promotional Index
 3. Representative Sampling
 4. Market Basket Analysis for Insights
 5. Quality Assurance
- ... and others:
- Days Open / Closed
 - Shopper Segmentation
 - Promotional Display vs. Home Shelf

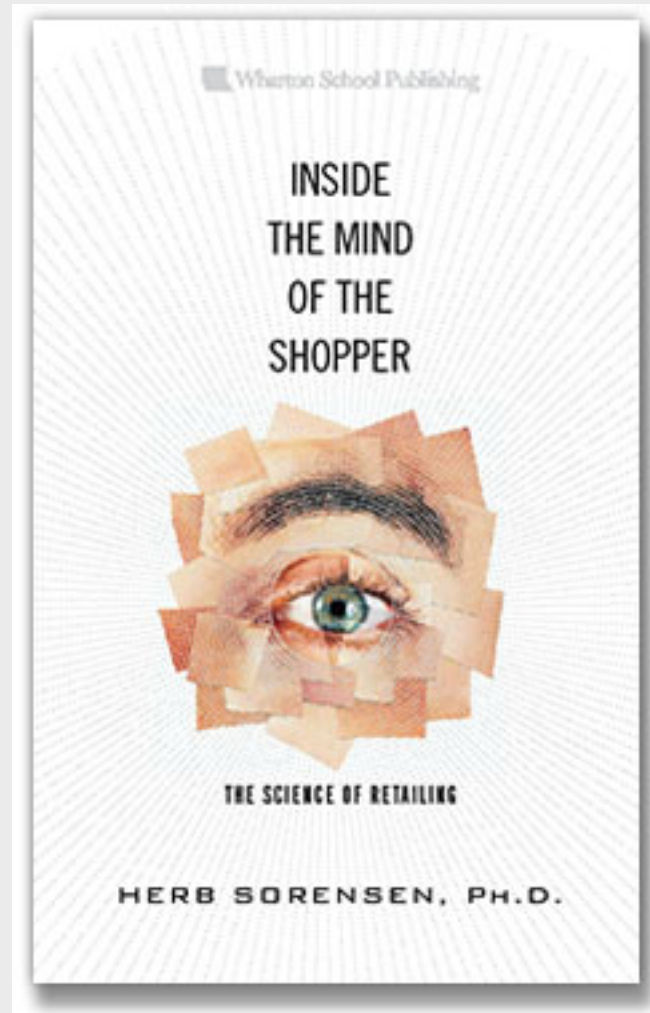
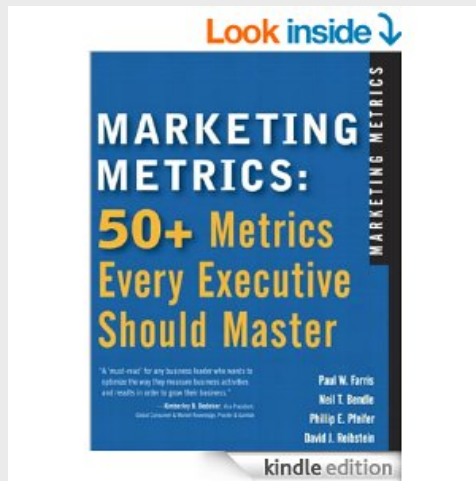
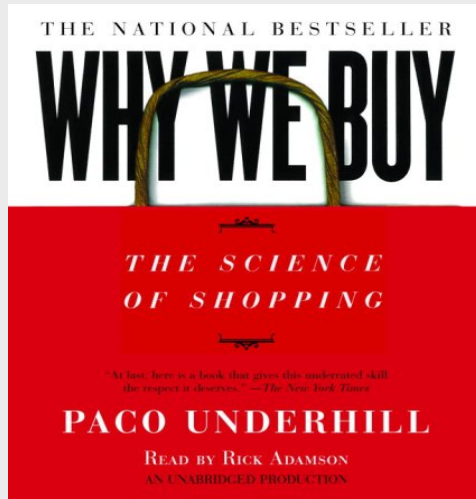
New Techniques and Tools

- Statistics / Analytics :
 - K Nearest Neighbors
 - Boosting
 - Pareto Distribution
 - OLAP Database
- Software :
 - R
 - SQL
 - Sococo / Blossom / GoogleDocs / ProdPad

...But it wasn't all statistics!

- Learned a lot about:
 - Retail Marketing and Business Strategy
 - Electrical Engineering and WiFi Technology
 - Database Structure
- Read A Lot:
 - Herb Sorensen, Paco Underhill
 - Journal Articles or Research Papers

Questions?



Contact

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