Digital, Big Data, and the Next Generation of Marketing

January, 2015
Data, Data Everywhere...

Source: theconnectivist.com
Did I mention everywhere?

As of early 2014:

- Each engine of a jet on a flight from London to New York generated 10TB of data every 30 minutes
- Open weather data collected by the National Oceanic and Atmospheric Association has an annual estimated value of $10B
- Every day we create more than 3 quintillion bytes of data
- 90% of the data in the world today has been created in the past two years
- Google received more than 2MM search requests every minute
- Internet data will account for 1,000 exabytes (an exabyte is equal to one quintillion bytes)
- Akamai analyses 75MM events per day to better target advertisements
- Amazon changes prices on its site more than 2.5MM times every day
“Big Data” and the IoT has caused a shift in the customer engagement Paradigm and how marketers can create relevant communications.

Old Paradigm (Need More Data):
- How can I collect customer/campaign data?
- How do I measure customer engagement/interest?
- How do I manage customer campaigns?
- How do I collect stated customer preferences?

New Paradigm (How Can I Leverage “Big Data”):
- How do I organize/structure “Big Data”?
- How do I differentiate between correlation and causality?
- How do I manage the customer lifecycle?
- How do I manage a data library (for dynamic content)?
- How do I predict derived customer preferences?
“Big Data” Overview

- Big Data is a common business term which often refers to the growth in large data sets, both structured and unstructured.
- It is often associated with new **digital** sources, either connected through IoT or web/social tracking, that enable much more granular, detailed information then previously available.

**Structured data:** Organized, table-formatted information (i.e. CRM database) with common naming, fields, structure, order, and value/value ranges.

**Unstructured data:** Unorganized, free-form information (i.e. tweets, blog content) with often differences in naming, order, fields, and value/value ranges.

*According to research from IBM, about 80% of data captured today falls into the unstructured category!*
But, don’t forget the traditional data as well…

Savvy marketers are combining digital data and non-digital data
And make sure to keep a pulse on new sources connected through IoT.

How can new connected devices shape the future of marketing?
Where is all this information coming from anyway?

- Big Data can be grouped into digital and non-digital data sources:

  **Digital Data**
  - Web analytics
  - Ratings and reviews
  - Research/exit surveys
  - Social media analytics
  - Mobile analytics

  **IoT**
  - Energy
  - Wearable Devices
  - Appliance
  - Product Consumption

  **Non-Digital Data**
  - Research
  - Location-based analytics
  - Data appends
  - External, relevant data (i.e. weather, news, events)
Digital requires new tools to collect the information

**What tools can be used to collect the data?**

<table>
<thead>
<tr>
<th>Digital Data</th>
<th>Example Tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web analytics</td>
<td>Omniture, Coremetrics, GA</td>
</tr>
<tr>
<td>Ratings and reviews</td>
<td>Bizarre Voice</td>
</tr>
<tr>
<td>Research/exit surveys</td>
<td>ForeSee, ComScore, TNS</td>
</tr>
<tr>
<td>Social media analytics</td>
<td>Radian6, custom API, DataSift</td>
</tr>
<tr>
<td>Mobile analytics</td>
<td>Localytics, Mixpanel</td>
</tr>
</tbody>
</table>
The IoT are often both the tools and the data sets

What tools can be used to collect the data?

- Nest, Honeywell
- FitBit, iWatch
- Samsung
- Sony Playstation
While offline data also has its own set of collection tools

What tools can be used to collect the data?

- TNS, Nielsen
- Euclid, Placed, PlaceIQ
- Experian, Custom Modeled Variables
- Weather Analytics
The “so what”!

What does all this data help us do anyway?

<table>
<thead>
<tr>
<th>Plan</th>
<th>Measure</th>
<th>Target</th>
<th>Engage</th>
<th>Predict</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Help shape media strategy by identifying where key consumers are and their relevant behaviors</td>
<td>• Quantify consumer sentiment and feedback</td>
<td>• Intercept and target key consumers as they engage with marketing and sales channels</td>
<td>• Customize dynamic content based on individual derived preferences</td>
<td>• Quickly forecast new product or coupon/promotion success</td>
</tr>
<tr>
<td>• Identify how brand messaging/positioning resonates with consumers</td>
<td>• Measure the impact of specific campaigns/promotions</td>
<td>• Re-target key consumers through digital and offline campaigns (including channel preference)</td>
<td>• Offer management optimization</td>
<td>• Quickly identify and forecast trends</td>
</tr>
<tr>
<td>• Identify the demographic and behavioral profile of influential consumers</td>
<td>• Measure the success of key competitive initiatives</td>
<td>• Monitor product/brand feedback and consumer sentiment</td>
<td>• Create a unified, omni-channel marketing experience</td>
<td>• Identify the correlation between engagement activities and offline sales</td>
</tr>
</tbody>
</table>

Example Applications
Key Benefits

- Receive a more complete picture of customer sales
  - More accurate read of digital investments (i.e. search, display, email, etc.)
  - Understand the true value of the website
  - Optimize website UX to both online and offline conversion
- Identify enhanced opportunities for web-based triggers
  - Browse activity
  - Follow-up cart abandonment campaign (follow-up for those customers that don’t purchase online/offline within specified time period)
- Customize the website based on CRM data
- Identify web behaviors that are the precursor to sales
  - Be proactive to predict when customers are in the “consider” phase
- Develop “derived” customer preferences

Increase Measurement
Increase Efficiency/Effectiveness (\$ - typically see 500%+ lift over campaign emails)
Increase Customization
Increase Relevancy
Increase Customer Insights
Social data applications

**Opportunity:** Identify attribute propensities for individual customers based on social conversations

<table>
<thead>
<tr>
<th></th>
<th>Video Games</th>
<th>Shoes</th>
<th>Gift</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>0.7</td>
<td>0.1</td>
<td>0.8</td>
</tr>
<tr>
<td>B</td>
<td>0.5</td>
<td>0.3</td>
<td>0.5</td>
</tr>
<tr>
<td>C</td>
<td>0.2</td>
<td>0.2</td>
<td>0.6</td>
</tr>
</tbody>
</table>

**Application:** Trigger relevant communications (cross-channel) for better customize/target existing campaigns

**Example:** Identify customers that are talking about gift-giving opportunities on Facebook/Twitter and send a relevant email with customized recommendations

**Opportunity:** Forecast future events based on social chatter/conversations

<table>
<thead>
<tr>
<th></th>
<th>Shoe A</th>
<th>Shoe B</th>
<th>Shoe C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
</tr>
</tbody>
</table>

**Application:** Understand key investment opportunities and customize message/offer strategies

**Example:** Based upon social trends, the new shoe is going to be a hit. Merchandizing should increase shipments of the products and CRM should communicate the shoe, but does not need to offer steep incentives due to the high demand
Social data applications (cont.)

**Opportunity:** Improve response model performance (and other models) through the introduction of social patterns

**Application:** Enhance model targeting and CRM campaign performance through the inclusion of social data

**Example:** DM campaign 1 achieved a 10% lift in performance after including social data that was demonstrated to be predictive of future response

**Opportunity:** Identify opportunities for messaging/campaigns based on trends in social chatter

**Application:** Understand key attributes and company/product messaging, alone or relative to competitor positioning

**Example:** Based on social conversations, customers of Retailer A need ratings and reviews to better understand the best shoe to purchase, however few retailers offer this. As a result, Retailer A triggers an email with the top rated shoes and relevant reviews
Overview

Leverage location-based data to trigger relevant, real-time or future marketing communications to customers based on their movement either within stores or across other places.
So, where do we go from here?

Predictions for the future of digital marketing...

- Blurring of digital and “traditional” offline channels such as TV, print, etc.
  - Customer-centric, 1:1 dynamic targeting capabilities in traditionally “broadcast” media
  - Integrated marketing campaigns across channels
  - Closer to channel agnostic planning (i.e. find customers based on affinities, likelihoods, etc. on their channel of preference)

- Increased emphasis on measurement and accountability
  - Especially for social channels such as Facebook, etc. where they are reluctant to tie back to incremental sales/ performance

- Return to emphasis on testing
  - Why assume when you can test? Especially across a digital environment that was “made” for testing!

- Increased appetite for social text mining capabilities
  - Leverage social for derived preferences as well as the elusive “timing” customization

- Increased interest in digital’s impact on offline behavior
  - Digital’s impact is understated unless tied back to its influence on offline purchases, actions, etc.

- IoT creates a paradigm shift in the relationship between marketers, manufacturers, and analytics
  - Marketers will begin to partner with key manufacturers and vendors that collect IoT data
    - Energy
    - Product usage
    - Other
Example Applications

Leveraging Digital Data
Identify Initial Web Data Opportunities

Integration Web Audit (Retail Example)

- Optimize online marketing budgets, customize campaigns by source, and customize the website UX based on source
- Create a more “complete” view of the impact marketing and CRM efforts are having on behavior to support future budgets

<table>
<thead>
<tr>
<th>Source</th>
<th>Total Visitors</th>
<th>Known Ind_IDs</th>
<th>Top Deciles (1-3) Known Ind_IDs only</th>
<th>Total Visits (Page View)</th>
<th>Purchasers</th>
<th>Bouncers</th>
<th>Exitors</th>
<th>Purchase Conversion (Purchase Rate)</th>
<th>Bounce Rate</th>
<th>Exit Rate</th>
<th>In-Store ONLY Purchasers among Exitors</th>
<th>Web ONLY Purchasers among Exitors</th>
<th>In-Store &amp; Web Purchasers among Exitors</th>
<th>In-Store ONLY Conversion of Exitors</th>
<th>Web ONLY Conversion of Exitors</th>
<th>In-Store &amp; Web Conversion of Exitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affiliate</td>
<td>56,923</td>
<td>19,784</td>
<td>53%</td>
<td>19,784</td>
<td>2,155</td>
<td>9,249</td>
<td>8,380</td>
<td>10.9%</td>
<td>46.7%</td>
<td>42.4%</td>
<td>1,571</td>
<td>589</td>
<td>225</td>
<td>18.7%</td>
<td>7.0%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Direct Load</td>
<td>342,626</td>
<td>135,410</td>
<td>51%</td>
<td>135,270</td>
<td>14,322</td>
<td>67,698</td>
<td>53,253</td>
<td>10.6%</td>
<td>50.0%</td>
<td>39.3%</td>
<td>9,468</td>
<td>5,486</td>
<td>1,762</td>
<td>17.8%</td>
<td>10.3%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Display</td>
<td>124,222</td>
<td>37,067</td>
<td>49%</td>
<td>37,063</td>
<td>3,292</td>
<td>17,030</td>
<td>16,741</td>
<td>8.9%</td>
<td>45.9%</td>
<td>45.2%</td>
<td>3,025</td>
<td>1,093</td>
<td>386</td>
<td>18.1%</td>
<td>6.5%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Email</td>
<td>1,050,731</td>
<td>1,005,840</td>
<td>40%</td>
<td>1,005,806</td>
<td>10,297</td>
<td>592,452</td>
<td>403,057</td>
<td>1.0%</td>
<td>58.9%</td>
<td>40.1%</td>
<td>65,668</td>
<td>4,942</td>
<td>2,397</td>
<td>16.3%</td>
<td>1.2%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Marketing Progs</td>
<td>53,678</td>
<td>14,288</td>
<td>47%</td>
<td>14,282</td>
<td>1,364</td>
<td>5,518</td>
<td>7,400</td>
<td>9.5%</td>
<td>38.6%</td>
<td>51.8%</td>
<td>1,125</td>
<td>549</td>
<td>151</td>
<td>15.2%</td>
<td>7.4%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Natural Search</td>
<td>70,283</td>
<td>24,868</td>
<td>50%</td>
<td>24,868</td>
<td>2,423</td>
<td>12,765</td>
<td>9,680</td>
<td>9.7%</td>
<td>51.3%</td>
<td>38.9%</td>
<td>1,857</td>
<td>719</td>
<td>250</td>
<td>19.2%</td>
<td>7.4%</td>
<td>2.6%</td>
</tr>
<tr>
<td>Referring Sites</td>
<td>17,359</td>
<td>6,096</td>
<td>34%</td>
<td>6,095</td>
<td>449</td>
<td>3,552</td>
<td>2,094</td>
<td>7.4%</td>
<td>58.3%</td>
<td>34.4%</td>
<td>220</td>
<td>429</td>
<td>103</td>
<td>10.5%</td>
<td>20.5%</td>
<td>4.9%</td>
</tr>
<tr>
<td>Unknown</td>
<td>432,598</td>
<td>9,257</td>
<td>0%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
<td>#DIV/0!</td>
</tr>
<tr>
<td>Total</td>
<td>2,148,420</td>
<td>1,252,610</td>
<td>41%</td>
<td>1,243,168</td>
<td>34,302</td>
<td>708,264</td>
<td>500,605</td>
<td>2.7%</td>
<td>56.5%</td>
<td>40.0%</td>
<td>82,934</td>
<td>13,807</td>
<td>5,274</td>
<td>16.6%</td>
<td>2.8%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

What sources are attracting the best QUALITY customers? What sources are reactivating lapsed customers?

20% of customers that bounce are converting, but not tracked!
Digital Engagement Score – Enhanced Insights via Behaviors

• For ALL product categories and digital interactions, for ALL customers and prospects, using ALL customer data available, calculate a score measuring the level of customer interaction with that product or event.

• An engagement score level is attached to each customer & prospect for every category (product or event): High, Moderate, Minimal or No Engagement
Digital Engagement Score – Output

- Append customer classifications based on their digital engagement score to understand their “derived” preferences and behaviors.
- Customers that are not digitally engaged can be modeled via a look-a-like to provide further scale and application on the broader base.
- In addition, email and social data, as well as stated data (i.e. pref center, surveys, etc.) can be added to generate a more comprehensive view of behaviors and preferences.

<table>
<thead>
<tr>
<th></th>
<th>Video Games</th>
<th>Sports</th>
<th>Learning</th>
<th>Baby</th>
<th>Electronics</th>
<th>Price Sensitive</th>
<th>Social</th>
<th>Loyalty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer A</td>
<td>Low</td>
<td>N/A</td>
<td>High</td>
<td>High</td>
<td>Low</td>
<td>Med</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Customer B</td>
<td>High</td>
<td>Med</td>
<td>High</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Customer C</td>
<td>Low</td>
<td>Med</td>
<td>Low</td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>
Digital Engagement Score – Applications

- Inform strategic audience selection for all marketing communications
- Inform messaging and creative content for relevant customer communication
  - Guide subject line testing
  - Guide creative content – banner / dynamic content within emails
- Inform strategic cross sell initiatives
  - Targeting customers most likely to purchase
  - Target non-product purchasers to convert
- Increase overall sales and conversion rates to drive incremental business
Web Behavioral Triggers

As an application of the digital engagement score or by utilizing raw web data, there are several different types of web behavioral triggers that can be applied to customers:

<table>
<thead>
<tr>
<th>Abandonment</th>
<th>Market Basket</th>
<th>Engagement</th>
<th>Life Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cart abandonment</td>
<td>Cross Browse *</td>
<td>Lapsed web browse</td>
<td>Likelihood to purchase</td>
</tr>
<tr>
<td>Browse abandonment</td>
<td>Browse + Buy **</td>
<td>Inactive web browse</td>
<td>Life-stage migration</td>
</tr>
<tr>
<td></td>
<td>(cross-sell / up-sell)</td>
<td>Social engagement</td>
<td></td>
</tr>
</tbody>
</table>

* Cross-browse triggers are product recommendations triggered based on a combination of browse behavior and a market basket conducted using browse behavior instead of purchases.

** Browse + Buy cross-sell/up-sell triggers are combined using market basket analyses leveraging both browse and buy behavior.
Enhanced Example

The following example is the real-life cadence of another retailer that utilized a more sophisticated/integrated approach to cart abandonment triggers.

**Day 1**
- ID customers that “extensively” browse but do not purchase
- Recognize whether customers have bought, either online or in store

**Day 1**
- ID customers that place item(s) in cart but abandon

**Day 2-3**
- Trigger initial campaign customized based on product category

**Day 7**
- Trigger secondary campaign to those that haven’t purchased, potentially focusing on cross-sell or up-sell items (market basket at the category level)

**Day 9-10**
- Trigger secondary campaign to those that haven’t purchased, potentially focusing on cross-sell or up-sell items (market basket at the category level)
## Source Impact Overview

| **DEFINITION** | Customers’ Life Time Value (CLV) = a customers’ long term net spend based on customer tenure (number of years with company). Customers’ Near Present Value (CNPV) = a customers’ short term net spend based on 6-12 months. This analysis reports on historical Life Time and Near Present Value. It does not predict CLV and NPV. |
| **METHODOLOGY** | Create monthly customers groups based on first purchase date. Calculate the total spend of each customer from first purchase to current time period. Once a customers’ lifetime value is calculated, customers are then organized by acquisition initiative, where an average CLV by source is calculated to understand acquisition value and ROI. |
| **SCHEDULE** | Phase 1 – Report on total CLV to establish baseline metrics. Report on NPV by acquisition source, cost, and ROI. Phase 2 – Report on CLV by acquisition source, cost and ROI |
In this example (based on actual retailer data), we were able to help justify shifting marketing budgets from display ads to other channels.

In addition, due to the email ROI, we were able to help the company prioritize acquiring new emailable customers, by developing new call-to-actions that drove that behavior instead of direct sales.
Enhances Existing Measurement

Accounts for Total Sales
- Both online and offline purchases for a more accurate picture of channel/campaign impact

Longitudinal View of Sources
- Differentiates between sources that drive “one and done” customers and those that drive more loyalty and repeat purchases
Case Studies

Client Examples
Integrating Data Sources Enables Increased Sophistication and Campaign Relevance
Integrating Data Sources Increases Communication Relevancy

The Product Engagement Score (PES)

- 3rd Party Preference Data
- Product Browsing/Purchase History on Website
- Product Reviews Posted
- Products Abandoned in Shopping Cart

Product Engagement Score (Updated Daily)

- Product Category 1
- Product Category 2
- Product Category 3
- Product Category 4
- Product Category 5
- Product Category 6

Enables Improved Targeting and More Relevant Messaging
## Applying Product Engagement Score

<table>
<thead>
<tr>
<th>Relevancy Results</th>
<th>Adding relevancy to both selection criteria and creative content improves incremental Sales by 20% and increases ROI by 79%</th>
</tr>
</thead>
</table>

### Sample CRM Program

<table>
<thead>
<tr>
<th>Metric</th>
<th>Last Year</th>
<th>This Year</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers Emailed</td>
<td>311,544</td>
<td>214,318</td>
<td>-31.2%</td>
</tr>
<tr>
<td>Customers Purchased</td>
<td>1,455</td>
<td>1,494</td>
<td>2.7%</td>
</tr>
<tr>
<td>Conversion Rate</td>
<td>0.5%</td>
<td>0.7%</td>
<td>49.3%</td>
</tr>
<tr>
<td>Net Sales</td>
<td>$91,289</td>
<td>$94,167</td>
<td>3.2%</td>
</tr>
<tr>
<td>Average Spend</td>
<td>$62.74</td>
<td>$63.03</td>
<td>0.5%</td>
</tr>
<tr>
<td>Incremental Sales</td>
<td>$30,928</td>
<td>$37,079</td>
<td>19.9%</td>
</tr>
<tr>
<td>ROI</td>
<td>$43.10</td>
<td>$77.08</td>
<td>78.8%</td>
</tr>
</tbody>
</table>

*Last Year: Batch & Blast Generic Email to All Customers*

*This Year: Selected Relevant Targeted Audience Added Product Banners Based on PES Score*
Case Study – Web Customization

- A global Travel Services company captured customer data (via a website registration, purchase, email, etc.) for only about 10% of its web visitors, with little/no insight into 90% of their web visitors -- customer's behaviors, attributes, attitudes & preferences towards their brand. Moreover, it severely underutilized any existing data that they have and did not connect website behaviors to their CRM database. Therefore, it took a “one size fits all” approach to engagement strategies, website UX, and the overall digital experience.

- As a result, the Travel Services company wanted to customize the website experience for all of its visitors to optimize the user engagement and potential revenue streams.
## Solution Overview

Segmenting customers and personalizing their website experience based on:

Who they are & what they look like from a demographic, behavioral, and transactional perspective

How they behave & how they respond to marketing stimuli and changes in brand interactions
The solution segmented web visitors into three groups: (1) Known Visitors, (2) Unknown–Repeat Visitors, and (3) Unknown-New Visitors to account for the differences in data availability.

*Highlighted items were not integrated during initial release. They were planned as additional data sources during future enhancements.*
Customization Process - Overview

- Conduct Usability Testing
- Conduct Multivariate Testing
- Develop Hypotheses
- Create Presentation Options
- Refine Segments

CUSTOMIZATION ENGINE
# Key Steps in Customization Process

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DEVELOP BASELINE SEGMENTS</td>
<td>Based on existing site information, utilize variables such as source, IP/location, web behaviors, business, new/returning, etc. Develop initial hypotheses based on segments for use in MVT/testing design</td>
</tr>
<tr>
<td>2. DEVELOP CLUSTERS (BEHAVIORAL SEGMENTS)</td>
<td>ID behaviors and variables that differentiate homogenous groups. Incorporate hypotheses (from step above) into MVT design and test impact across all segments</td>
</tr>
<tr>
<td>3. DEVELOP CLUSTER-LEVEL HYPOTHESES</td>
<td>Analyze MVT test results across clusters to identify impact of tested variables. Develop new hypotheses, by cluster, for custom treatments</td>
</tr>
<tr>
<td>4. TEST CLUSTER-LEVEL HYPOTHESES</td>
<td>Develop test design to offer custom treatment to key behavioral segments. Develop logic to differentiate clusters (known customer information) and trigger custom treatments</td>
</tr>
<tr>
<td>5. IMPLEMENT AND REFINE</td>
<td>Implement automated rules based on test results. Map out continuous testing and refinement roadmap</td>
</tr>
</tbody>
</table>
**Customization Example**

1. **Very unlikely to pick up rental car they’ve booked**
2. **Offer incentive e.g., deeper discount to pay now**
3. **Result is fewer lapsed reservations, and increased revenue**

![Diagram with steps](image-url)
Estimated Incremental Return

- **Today**: "One size fits all"
- **6 Months**: Source-based customization
- **1 Year**: Customized experiences served to market segments
- **2 Years+**: Customized experiences served to behavioral clusters
The solution design can range from logic-based groups to artificial intelligence, facilitating both “quick wins” and scale for long-term optimizations.
Digital, Big Data, and the Next Generation of Marketing

Appendix
Utilization of web analytics with CRM creates a powerful marketing application

<table>
<thead>
<tr>
<th></th>
<th>Match online behavior with offline behavior</th>
<th>Optimize website UX</th>
<th>Trigger communications based on online behavior</th>
<th>Develop derived preferences</th>
<th>Customize website</th>
<th>Integrate with social data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail 1</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Retail 2</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail 3</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retail 4</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Retail 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
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<tr>
<td>CPG 1</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPG 2</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CPG 3</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Web Data Implementation

## Typical Implementation Objectives

### General Order of Implementation

<table>
<thead>
<tr>
<th>Level of Effort</th>
<th>Match online behavior with offline behavior</th>
<th>Optimize website UX</th>
<th>Trigger communications based on online behavior</th>
<th>Develop derived preferences</th>
<th>Customize Website</th>
<th>Integrate with social data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Effort</td>
<td>Medium</td>
<td>Low-Medium</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Impact</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td>Medium</td>
<td>Low-Medium</td>
</tr>
</tbody>
</table>
Sample Analytics Utilizing Web Data

Digital Analytics Overview

<table>
<thead>
<tr>
<th>Enhanced Customer insights</th>
<th>Source Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Combine CRM transactional data with digital engagement data to get a more complete picture of customer interests, preferences, and patterns to customize customer communications</td>
<td>• Understand the immediate and LTV impact on TOTAL Sales (online and offline) to optimize marketing performance and investments</td>
</tr>
</tbody>
</table>

Web Trigger Behaviors

• Analyze web browse patterns to trigger relevant email communications (and eventually customize the website itself)
Best Practice: Understanding the conversion path

- Visit Website
  - Total Traffic/ Unique Visitors
  - Engage with key content

- Engage with site and products
  - Product views/interactions

- Show consideration
  - Online/Offline Sales
  - ROI

- Purchase (Online/ Offline)

- Customer Value

**Metrics**

-测量重点
  - Early read on performance or small samples
  - Details around what is driving program performance
  - Financial ROI
Engagement approach to digital measurement leads to better understanding of website impact

- Since engagement value is estimated for many different core behaviors, we are able to quantify the relative effectiveness in $$ of various types of engagement.
- This provides much more granular information into the ROI drivers and help to optimize both media/campaign spend and website navigation

<table>
<thead>
<tr>
<th>Engagement Activity</th>
<th>6 Month Avg. Value*</th>
<th>Instances*</th>
<th>Total Impact*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viewing recipes</td>
<td>$13.45</td>
<td>345K</td>
<td>$4.6M</td>
</tr>
<tr>
<td>“Friending” on Facebook</td>
<td>$10.12</td>
<td>389K</td>
<td>$3.9M</td>
</tr>
<tr>
<td>Reading product information</td>
<td>$2.12</td>
<td>1,345K</td>
<td>$2.85M</td>
</tr>
<tr>
<td>Reading tips</td>
<td>$12.75</td>
<td>45K</td>
<td>$573K</td>
</tr>
<tr>
<td>Watching videos</td>
<td>$.72</td>
<td>645K</td>
<td>$464K</td>
</tr>
<tr>
<td>Viewing “find a store”</td>
<td>$.32</td>
<td>1,343K</td>
<td>$269K</td>
</tr>
</tbody>
</table>

*Numbers are for illustrative purposes only
An assessment of digital opportunities allows us to deliver custom recommendations that align to company objectives.

*Note: Results are subjective and based on experience.*
Website Measurement Solution Overview

• Evaluate site ROI through a combination of quantitatively rigorous and qualitative measurement techniques that measure the impact of both online and offline behaviors

• Leverage quantitatively rigorous approach to consider:
  • Increases in direct/indirect site sales
  • Cost avoidance savings
  • Incremental value created through engagement
  • New marketing efficiencies

• Apply qualitative project validation techniques such as:
  • Pre-post site traffic and share of traffic analysis
  • Compilation of brand sentiment, post launch media buzz and awards
  • New site impact on brand metrics such as brand preference and loyalty
Website Measurement Approach is Inclusive of All Value-Add Opportunities

- Propose leveraging research/modeling to add value generated beyond the site stemming from higher customer engagement and better ability to monetize data.
- This enables both high-level measurement as well as insights into specific actions that drive performance.

**Examples:**
- *Marketing savings* $\$
- *Better media targeting/use of campaign funds* $\$

**Examples:**
- *Better data capture* $\$
- *Deeper research/customer insights* $\$

**Examples:**
- *Retail store sales* $\$
- *Online sales* $\$

- *Viewing recipes* $\$
- *Becoming a Facebook fan* $\$
- *Signing up for CRM/newsletter* $\$

Directly Measurable Behaviors

Savings

Research/Modeling Measured Behaviors

Value
Measuring Website Value

Measure value created from both the existing (old) and new website

- Comparing the value created from the new vs. old website provides incremental lift
- The incremental lift is divided by the cost of the new website (both direct and indirect) to calculate ROI
- The value of the new website and ROI should both be calculated after 6 months (and again after 1 year) to enable enough time for customers to get “used” to the new site experience

*Numbers are for illustrative purposes only*