2014 Merkle’s CRM Executive Summit
The Rise of the Platform Marketer: Connected CRM in a Digital World

MEASUREMENT AND ATTRIBUTION
Introducing the Platform Marketer Competencies
Introducing the Platform Marketer Competencies
Session Content

• Measurement in an Omni Media World

• Best Practices in Measurement and Cross-channel Attribution

• Case Studies

• Insight and Action Tools

• Summary - Key Takeaways
Measurement in an Omni Media World
The Measurement Dilemma

• Many marketers are having difficulty defining and delivering effectiveness metrics across digital channels
• Adobe’s ‘Digital Distress’ study from 2013 cited:
  – Only 34% believe their company is proficient at digital marketing
  – 37% feel overwhelmed by the pace of change across the digital domain

But assertions that marketing activity lacks measurability across the digital media spectrum are untrue
• The trick is to put measurement protocols in place correctly, in the right combination and the right time
• The crux of the problem is too many tools and too many options leaving marketers in an analysis paralysis panic
• Requires marketers to roll up their sleeves and get familiar with a lot more technology and analytics than they have been used to
Questions You Should Be Able to Answer

“Can we understand which banners ads should be served to different customers?”

“If the digital media is not meeting the benchmarks, should we change the creative?”

“Are my paid media campaigns properly set up for tracking, reporting, and measurement?”

“What is the incremental conversion impact of my Digital campaign in Q1, 2014?”

“How will the results match with my Marketing Mix model?”

“Should we increase or decrease the spend on Video Advertising?”

“If I have an additional million dollars to spend, should that be used to buy more TV spots Toronto, target deeper in direct mail deciles or spend more on targeted Facebook ads?”
As marketing evolves, a more sophisticated measurement approach is needed to understand the relative contribution of each marketing touch on conversion and to the customer journey.

**Customer Relationship Marketing maturity model**

- **Level 1**: Infrastructure focus, basic capabilities
- **Level 2**: Single campaign, simple data, little offer and customer customization
- **Level 3**: Basic multi-channel, model integration, and campaign automation
- **Level 4**: Contact Optimization, multi-touch campaigns, integrated measurement platform
- **Level 5**: Customer Value Optimization, fully integrated programs & campaigns

Moving from Level 3 to Level 4 is hard.

**Customer focused**

- High value

**Campaign focused**

- Low value

**Enterprise engagement**
## Why Attribution Is So Important

<table>
<thead>
<tr>
<th></th>
<th>Last Touch</th>
<th>Proportional</th>
<th>Modeled</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Direct Mail</td>
<td>$0</td>
<td>$100</td>
<td>$50</td>
</tr>
<tr>
<td>2. TV Ad</td>
<td>$0</td>
<td>$100</td>
<td>$150</td>
</tr>
<tr>
<td>3. Display Impression</td>
<td>$0</td>
<td>$100</td>
<td>$40</td>
</tr>
<tr>
<td>4. Search Click</td>
<td>$0</td>
<td>$100</td>
<td>$125</td>
</tr>
<tr>
<td>5. Email click</td>
<td>$0</td>
<td>$100</td>
<td>$75</td>
</tr>
<tr>
<td>6. Call Center Contact</td>
<td>$600</td>
<td>$100</td>
<td>$160</td>
</tr>
<tr>
<td>Profit / Conversion</td>
<td>$600</td>
<td>$600</td>
<td>$600</td>
</tr>
</tbody>
</table>
Best Practices in Measurement and Cross-channel Attribution

What it is and How it Works
Measurement strategy – A “must have” first step to ensure an organization properly scopes and plans to implement a world-class measurement and attribution system

1. Metric Playbook (scope)
   - Measurement manual
   - Defines metrics, their importance, and how they relate to each other
   - Includes:
     - Comprehensive metrics
     - Consistent calculation
     - Broad application for all measurement levels and dimensions
     - Use right method for each metric
   - Drives organizational alignment

2. Implementation Roadmap (build plan)
   - Build plan for integrated measurement platform
   - Addresses enablement:
     - Data management
     - Analytics methods & processes
     - Reporting capabilities
   - Timing and level of effort
   - On-going operational model
   - Change management
   - Integration points with other capabilities
How Cross-channel Attribution Works

Leverages a fractional approach to attribution and quantifies the incremental impact of each marketing activity.

- **Actual experience**: Day 0-1 (100%)
  - Credit over applied to bottom of funnel touches. Other touches often 'invisible'
  - Creates flawed financial view of performance

- **Direct or Rules Based**: Day 1-7
  - 3%
  - 14%
  - 3%
  - 5%
  - 5%
  - 5%
  - 15%
  - 5%
  - 5%
  - 40%

- **Modeled**: Day 8-30
  - 3%
  - 14%
  - 3%
  - 5%
  - 5%
  - 5%
  - 5%
  - 15%
  - 5%
  - 5%
  - 40%

**Mass and Offline**
- Direct mail sent
- TV view
- Alt Media

**Digital**
- Display view
- Website visit
- Email
- Paid search click

© 2014 Merkle Inc. | Confidential
Illustrative Example - Connecting digital and offline interactions

One individual gets a DM piece and passes to his spouse who then is browsing online, clicks a banner and gets a quote

- By integrating CRM and anonymous data, we can see the interaction effects across all media and how they impact response
- This process can be done across all media including display, PPC, aggregators, DM, print – any media where we can tag or collect a name/address

<table>
<thead>
<tr>
<th>Customer ID</th>
<th>First</th>
<th>Last</th>
<th>Address</th>
<th>DM Key Code</th>
<th>Campaign ID</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>123322777</td>
<td>Owen</td>
<td>Mccorr</td>
<td>123 Main St.</td>
<td>DM42343</td>
<td>999</td>
<td>12/15/2011</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quote ID</th>
<th>Date</th>
<th>Channel</th>
<th>Email</th>
<th>First</th>
<th>Last</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1234</td>
<td>01/30/2012</td>
<td>Agent</td>
<td><a href="mailto:nmccorry@gmail.com">nmccorry@gmail.com</a></td>
<td>Nancy</td>
<td>Mccorry</td>
<td>123 Main St.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quote ID</th>
<th>UID</th>
<th>Time</th>
<th>Event</th>
<th>Site/Page</th>
<th>Creative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1234</td>
<td>98765</td>
<td>12:30 PM</td>
<td>PPC Impression</td>
<td>Google</td>
<td>A1</td>
</tr>
<tr>
<td></td>
<td>98765</td>
<td>2:10 PM</td>
<td>Banner Impression</td>
<td>Facebook</td>
<td>B2</td>
</tr>
<tr>
<td></td>
<td>1234</td>
<td>2:25 PM</td>
<td>Quote Complete</td>
<td>Quote</td>
<td></td>
</tr>
</tbody>
</table>
Marketers need to enable the creation of the Consumer Event Stream, which arrays cross-channel and media interaction data so that it is ready for attribution and analytics.

### Consumer Event Table

<table>
<thead>
<tr>
<th>User ID</th>
<th>Date Time</th>
<th>Event ID</th>
<th>Event Desc</th>
</tr>
</thead>
<tbody>
<tr>
<td>1234</td>
<td>2/1/2012</td>
<td>DM437</td>
<td>DM Delivered</td>
</tr>
<tr>
<td>1234</td>
<td>2/2/2012 3:05 pm</td>
<td>DI9076</td>
<td>Display Impression</td>
</tr>
<tr>
<td>1234</td>
<td>2/2/2012 3:06 pm</td>
<td>CC068</td>
<td>Inbound Call Center</td>
</tr>
<tr>
<td>1234</td>
<td>2/2/2012 5:05 pm</td>
<td>EM087</td>
<td>Sent Email</td>
</tr>
<tr>
<td>1234</td>
<td>2/2/2012 9:30 pm</td>
<td>EM088</td>
<td>Opened Email</td>
</tr>
<tr>
<td>1234</td>
<td>2/2/2012 9:30 pm</td>
<td>EM089</td>
<td>Clicked Email</td>
</tr>
<tr>
<td>1234</td>
<td>2/6/2012 9:00 pm</td>
<td>PS674</td>
<td>Clicks Paid Search</td>
</tr>
<tr>
<td>1234</td>
<td>2/6/2012 9:15 pm</td>
<td>Q8740</td>
<td>CC Enrollment</td>
</tr>
</tbody>
</table>

### Event Meta Data

- **Event ID**: EM088
- **Creative**: A2346 Mortgage information details
- **Offer**: OI92365 Mortgage offer
- **Product**: P978 Mortgage Line
A Best Practice - Leverage Multiple Event Streams for Modeling

» All media (digital, direct, and mass) integrated into multiple event streams
  ‣ Removes ‘natural level of data’ bias
  ‣ More adaptable to changes
    - Events streams can be added or removed over time to adapt to changing environment

» Attribution algorithm
  ‣ Estimate performance across all media
  ‣ Estimate performance to most granular level within each media
  ‣ Include estimation of external influencers like seasonality, economy, and competitive spend/activity
  ‣ Customized algorithm to account for each client’s unique business environment
Integrating top down and bottom up modeling at Media and Audience Segment levels

**Top-down media mix model**

<table>
<thead>
<tr>
<th>Tactic</th>
<th>Cost per inquiry</th>
</tr>
</thead>
<tbody>
<tr>
<td>National media (TV &amp; radio)</td>
<td>$140</td>
</tr>
<tr>
<td>Local media (TV &amp; radio)</td>
<td>$200</td>
</tr>
<tr>
<td>Direct mail</td>
<td>$180</td>
</tr>
<tr>
<td>Digital</td>
<td>$83</td>
</tr>
</tbody>
</table>

**Bottom-up consumer modeling**

<table>
<thead>
<tr>
<th>Tactic</th>
<th>Cost per inquiry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display/Video</td>
<td>$60</td>
</tr>
<tr>
<td>Social</td>
<td>$113</td>
</tr>
<tr>
<td>Paid Search</td>
<td>$91</td>
</tr>
<tr>
<td>Email</td>
<td>$80</td>
</tr>
<tr>
<td>Direct mail</td>
<td>$180</td>
</tr>
</tbody>
</table>

**Calibration layer**

- Cost per inquiry by tactic
- Young Achievers 34%
- Concerned Moms 22%
- Financially Mature 27%
- Home Moms 10%
- Solo Content 7%
Case Studies
The Impact of Attribution: Travel Media & Entertainment Case
Digital Media Example with Attribution at Segment Level

Example Insight #1
Significant differences in media intensity by segments

Example insight: Segment 1 are not the segment that should be heavily target with digital offers

Example Insight #2
Tested impact of DM/EM incremental to digital impressions for sales in a single week. DM/EM significant at driving incremental sales at ROI of over 300%

Example Insight #3
Display retargeting was most effective for “segment 2” segment, whereas non retargeting display was most effective for “segment 3”
The Impact of Attribution: Consumer Electronics Case

Based on attribution results, client gained the ability to optimize digital media spend:

• Reduce expenses by 12.4% without losing sales (for single product in multi-product lineup).
  – Total expenses for the time period was $22 MM; can save ~$2.7 MM
  – Annual expenses ~$75 MM; can save $9.3 MM

• Increase sales and/or site engagements by 10-20% for all future products when using advanced, cross-channel attribution.

• Yield a return on investment 7 times greater than the cost of the Attribution solution. Leveraging this solution for future products will increase the ROI further.
Insight and Action Tools
Best Practices for Centralized Insight and Action Tools

**Executive Dashboards**
- Focus on intuitive/easy to use
- Needs to update quickly
- More guided/less drillable

**Attribution Dashboards**
- Granular and drillable dashboards
- Enables fast creation and turnaround for new, custom dashboards
- Dynamic visualization to bring insights to life and simulate engagement

**Scenario Planning & Optimization**
- Allow setting constraints and generate optimized recommendations
- Operates across all media (digital, direct, and mass)
- Operates to lowest level granularity within each media
Executive Dashboards

- Easy to quickly digest information
- Contains key performance metrics focused on performance against goals
- Small number of dashboards designed to answer specific business questions
Attribution or Drill-down Dashboards

- Drillable reporting across all categories (like product, channel, LOB, offer, or other dimensions)
- Reports based on attribution result such as:
  - Spend & CPA by Channel Over Time
  - Media Performance Scorecard
  - Detailed Media Diagnostics / KPIs
  - Model Comparison Dashboard
  - Contact Frequency by Performance
Scenario Planning & Optimization

- Output optimal budget allocation across all media, measurement levels and dimensions, including segment
- Allows user to define a scenario and generate optimal media plan ("what if" scenarios)
- Uses same media hierarchy used in attribution modeling and reporting
- Allows user to set constraints on all levels within a media
- Customizable optimization routines
Integrated Measurement & Attribution

- One part of a larger ecosystem
- Requires handshakes and integration hooks to other key components (DMP, Decision Management, Marketing Database, and Media and Channel Execution)
- This connective tissue is critical to realize the power of a holistic solution, analytics at scale, and to help automate for operational efficiency
Measurement & Attribution Process

Data Inputs
- Digital Media
  - Cookie level
- Direct Media
  - Individual/household level
- Mass Media
  - Most granular level possible
- Other Data
  - Economic, competitive, etc

Attrition
  - Event Streams
  - Algorithm
  - Reporting Mart

Optimization
  - Scenario Planning
  - Optimization

DSP Integration
  - All levels of media
  - Scored cookie event streams

Insights
- Executive dashboards
- Performance dashboards
- Diagnostic dashboards
- Custom dashboards

Optimized media reports and plans
- 'What-if' analyses
- Impact of budget reallocation
- Media plan comparative dashboards

Solution should support multiple conversion metrics
(sales, product registration rates, etc)
Summary of Best Practices for Measurement & Attribution

- **Omni Media** – Mass, Digital, Alt and Direct Media
- **Enterprise level** – Should support the entire enterprise, not just digital teams
- **Segment-level Attribution** – Granular insights varied and actionable by segment
- **Not just cookie based** - Multiple event streams inform the underlying models
- **Transparent Models/Algorithms** – Model should be customizable; no black box
- **Integrated Scenario Planning and Optimization** – For forecasting and what-if scenarios
- **Robust support structure** to assist in Big Data handling, driving insights and supporting decisions with agility
- **Flexible and custom reporting** - One-size does not fit all
Closing thought…

Fast Company’s Steve Kerho laid out a simple framework in 2012 which is still highly relevant today:

- *Identify what success looks like...*
- *Identify all your sources of data...*
- *Wrangle them into one place...*
- *and let analytics sort it out!*
Thank You!

Ed Forman
Merkle Analytics
eforman@merkleinc.com
443-542-4599