Using Connected Data Intelligence to Measure Brand Performance

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Using Connected Data Intelligence to Measure Brand Performance

1. Why Now? Disruption in Marketing and Research
2. Our Philosophy: What we need to do Differently?
3. Connected Data Intelligence in Action
   - **Aggregate Level Insights:**
     - Patterns of Relationships between Search, Social, and Brand Data
     - Embedding a System of Analytics for Better, Faster Insights
   - **Consumer Level Insights:**
     - Stitching Data Together to Map Consumer Journeys
Then

Now
Dealing with disruption on marketers and researchers

“Data at scale”

“Democratization of data collection”

Managing uncertainty through context, data fusion, analytic strength and experience determines competitive advantage

“Data in motion”

“Data as uncertainty – oil or garbage?”
What we are hearing – Marketing wish list

Future orientation: moving from hindsight to *foresight*

Cohesive analytic vision: properly *integrated* data sources

- Role of *social* & search
- Role of active data collection: balance of *point-in-time* with *ongoing* tracking
- Understand interplay of emotional connection, brand equity, and in-market outcomes

Bringing forward *state-of-the-art* techniques
WE NEED TO USE CONNECTED DATA INTELLIGENCE TO UNLOCK deeper insights that fuel GROWTH
What do we need to do differently?

1. Go deeper… mine existing data assets to uncover hidden insights
2. Connect assets to create a measurement ecosystem – better utilize observations and short surveys to answer how, what, why
3. Shift towards understanding individuals as well as aggregates, moments rather than quarters
MB Global R&D: Finding the digital signals that matter most

Key questions:

• Which digital behaviors are most informative of brand health and campaign performance?

• Which sources and treatments of these behaviours give the most useful insights?

• What metrics and deliverables will enable clients to take appropriate marketing action at the right times?
MB Global R&D: Finding the digital signals that matter most

Data Sources:

• Survey based equity data (48 metrics)

• Sales, media spend

• 113 potential digital signals, including aggregations of:
  - Web traffic
  - Search Volume
  - Social listening (both within one social media platform and listening summaries that crossed social media platforms)

Analytic Scope:

• 458 time series models run to evaluate strength of relationships among different combinations of data sources and metrics

• Data explorations started simple – scatterplots, correlations, curve fitting, “eye-ball-o-metrics”

• And expanded into formal modelling - dynamic regressions to isolate short term and long term components within digital trends
Formal Modeling: Decomposing Digital Signals into Long Term Trends and Short Term Reactions

Raw digital signals

Modeled components

Dynamic linear models

Long-term trends
- Base level of signal
- Seasonal influences
- Impact of campaign spend
- Reactions to ‘events’

Short-term reactions
Digital Explorations: Signals are Influenced by Many Factors

Search and web behavioural data is heavily influenced by **seasonal factors**

Whereas social conversation is dominated by reaction to **external events** and **sharing of social content**

We need to separate these influences out before either signal can be used as a window on brand or campaign opinions
Digital Explorations: New Launches Tied to Specific Brand Strategies and Tactics, Tend to Find Equilibrium Over Time

When a brand first launches, sales and survey are obviously both zero, but the digital noise at launch is often deliberately very high. So as the digital activity settles down, and the sales grow, we see a strong inverse relationship over the first few months.

Later in the brand’s lifetime, the two signals start to move much more in line with each other.
We know that movements in equity for most brands occur over years, so it is the long-term trends in the BASE components that we would expect to align with sustained brand growth or decline.

As brands grow, this increased equity is mirrored in increases in base levels of the digital signals.
Search volumes across a category indicates how top of mind the brand is when searching for that product or service.

This usually relates to how salient a brand is overall.

Underlying search levels reflect changes in the interest and salience of the brand over time.

These tend to have a strong relationship with sales performance.
Search: But The Relationship Varies By Situation

The nature of the relationship between search patterns and sales seems to depend on both e-commerce strategy, and type of purchase.

For brands with direct e-commerce channels, short-term movements in search are likely to relate directly to conversion. The best sales relationships often with raw signals.

For all other brands, search volumes are acting as a proxy for broader brand salience and interest, and so short term movements are less likely to have a far less direct map to sales, therefore the best sales relationships often with the modelled components.

- Retail brand
- Shampoo brand
- Car brand

Sales in seasonal categories relate best to base + seasonal search components
Sales in non-seasonal would relate best to base search volumes

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Buzz levels for different brands reflect how much that brand is worth talking about: the strength of its digital word of mouth. 

This often relates to whether the brand is seen as doing new innovations or having new ideas.

Sudden spikes in the immediate talkability of the brand are often signals of involvement of the brand in a news story, or PR backlash.

These spikes indicate reactions that could impact the brand longer term.
Both search and social **respond strongly to advertising**

Uplifts in search are also higher for ads with more **new news**

Uplift in social are higher for ads with higher **creative quality**

% increase in Search volume and Social conversation

- Decrease in spend: -4%
- No change: 0%
- Small increase in spend: +4%
- Big increase in spend: +10%

+10% increase in Search volume
+10% increase in Social conversation
+5% increase in Search volume
+4% increase in Social conversation
-4% decrease in Search volume
-5% decrease in Social conversation
And that the level of brand conversation uplift can be a measure of creative impact

Efficiency of impact of spend on social conversation

Average increase in social mentions per increased GRP

- Campaigns with Low AI: 2%
- Campaigns with Medium AI: 6%
- Campaigns with High AI: 12%

Uplift in conversation is related to effectiveness of the creative

Includes first week of each new AI period
Beverages Case Study:
Qualitative Nature of Social Content Needs to Be Accounted For

<table>
<thead>
<tr>
<th></th>
<th>Brand A</th>
<th>Brand B</th>
<th>Brand C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume of Social Buzz</td>
<td>Medium</td>
<td>Large</td>
<td>Small</td>
</tr>
<tr>
<td>Focused on Communications</td>
<td>27%</td>
<td>13%</td>
<td>10%</td>
</tr>
<tr>
<td>Focused on Brand Experience</td>
<td>70%</td>
<td>81%</td>
<td>81%</td>
</tr>
<tr>
<td>Impact of Social on Equity in Surveys</td>
<td>Medium</td>
<td>Strong</td>
<td>Strong</td>
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Weaving a path to better insight

By connecting the dots beyond the digital behavioral assets to equity collected via surveys, sales data, media, ... we can see the network of relationships that drives brand success:

Social activity driven by marketing and experience; serves as a contributing link to building equity and sales.
Automated survey elements, non-survey data streams or combinations of both
Embedding Automated Systems: **Widening gap** on Average Price vs. Worth What You Pay

‘Worth what you pay’ / Average Price

\[ R = -0.37 \]

Worth what you pay   Average Price
Hot Alert Trigger – Automated Analytic insights to Drive response

‘Worth what you pay’ / Average Price

Brand “HOT ALERT”

Worth what you pay Average Price

R -.37
OFFERINGS THAT MEET DIFFERENT NEEDS AND PURSES

Programs that dynamically combine all available data streams and apply sophisticated analytics* to derive maximum insight e.g. predictive simulations and alert to abnormal patterns in data.

Multiple different survey and non-survey data sources packaged into programs that efficiently address a number of business questions also allowing for customization.

Utilizes comprehensive survey based approach to manage a broad base of purchase influences and brand growth.

Standardized, affordable survey to monitor specific KPIs related to business performance and individual business questions.
Likelihood to Return to STORE on the Next Trip

LINE LENGTH

1 or fewer

2 or more

The Friendliness Effect

Customers who experience a friendly cashier even when lines are long are 2x more likely to return on the next trip.
Stitching Data Together to Map Consumer Journeys

Leveraging Granularity Across Multiple Data Sets

We mine the best data sources available in each market to understand details behind consumer engagement with different touchpoints throughout the day.

If behavioral data is not available for a particular screen, it is supplemented with syndicated industry data and a custom survey.
Pushing Towards Single Source

Using proprietary data fusion techniques and look-alike modeling, all individual data streams (observed and claimed) are merged together to create a dataset with respondent-level cross-screen behavior.

Bayesian modeling is used to map the consumer journey from exposure to brand assets to brand evaluation and ultimately purchase.
Example Output: Summary of Media Consumption

- **EARLY MORNING**
  - TV goes on for half hour in the morning
  - While simultaneously browsing Facebook on mobile
  - And then checking email on mobile
  - 4 minutes on Blogspot on PC
  - 9 minutes reading news articles on PC
  - Searches for dinner recipe on PC
  - Pins the selection

- **MID MORNING**
  - 2 minute work break to tweet
  - 5 minutes watching a video on YouTube on mobile

- **AFTERNOON**
  - 18 minutes browsing Facebook on mobile
  - 18 minutes watching YouTube on PC
  - While shopping on Amazon on PC
  - 90 minutes watching TV
  - 18 minutes playing Candy Crush
  - 15 minutes browsing Reddit on PC
  - While listening to Pandora for 20 min. on mobile
  - Then checking Instagram on mobile

- **EVENING**
  - 8 minutes browsing Facebook on mobile
  - 18 minutes playing Candy Crush
  - 18 minutes browsing Facebook on PC
  - 18 minutes watching YouTube on PC
  - 4 minutes on Blogspot on PC
  - 9 minutes reading news articles on PC
  - Searches for dinner recipe on PC
  - Pins the selection

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The output helps marketers act on a number of key business questions.
In Summary

Connected Data Intelligence in Action

Aggregate Level / Generalized Insights:

- Underlying search levels reflect changes in the interest and salience of the brand over time
- Social is reflective of digital word of mouth, strongly influenced by events
- Both metrics highly elastic to media investment and creative quality
- For deeper dive, analyze particular content of social comments for given brand AND estimate impact across network of marketing relationships

Consumer Level Insights / Leveraging Granularity:

- Stitching data together is ultimate form of data curation, requires the right hooks to be successful and provides unique insights
In Summary

**What Do We Need to Do Differently?**

1. Go deeper… mine existing data assets to uncover hidden insights
2. Connect assets to create a measurement ecosystem – better utilize observations and short surveys to answer how, what, why
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1. Leverage digital behavioral assets and analytics to inform brand planning
2. Marketing does not occur in a vacuum, and neither should your analyses of research and data – always connect the dots
3. Push for micro level insights and build up whenever possible, and leverage the best possible macro level data assets when consumer level does not exist

*Embed Analytics / Expertise via Automation to Maximize Impact*
ANY QUESTIONS?
Thank you

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