Digital Marketing
Balancing Analytics and Privacy in a Connected World

Brian P. Blake

SoftNet 2016 – Rome, Italy
Afternoon Keynote - August 22, 2016
Outline

- Who am I?
- How did we get here?
- Where exactly is “here”?
- What does data-driven mean?
- What data is doing the driving?
- What is the current state analytics?
- What does the future hold?
Who am I?
How did we get here?
From the first computers in the 1950s…
To the massive interconnected Marketing Technology Landscape that exist today.
How It All Began

Early Digital Timeline

- 1920: 1st Computer Created
- 1930: Internet Launches
- 1940: 1st Ad / eCommerce Surge

Legend:
- Early Milestones

Timeline:
- 1920
- 1930
- 1940
- 1950
- 1960
- 1970
- 1980
- 1990
- 2000
A More Recent Timeline

- Yahoo! Founded
- AT&T buys first banner ad from HotWire.com
- First Clickable ad is sold
- DoubleClick Founded
- DoubleClick Ad Server
- Google AdWords
- First PPC Search Auction (GoTo.com)
- First Ad Exchange
- Google acquires DoubleClick for $3.1B
- Yahoo acquires Right Media Exchange for $680M
- MSFT acquires Aquentive for $6.2B
- First DSP
- Facebook
- Offline Onboarding at Individual Level
- Acxiom RelevanceX
- Acxiom Acquires LiveRamp for $300M
- Oracle acquires BlueKai for $400M
- Adobe Acquires Demdex for $58M
- Facebook acquires Atlas for ~$500M
- 1993-2015 Internet Users
A Brief History of Digital

1995-2000
- Publishers – Big CPMs
- Rise of the Portal
- Search – little understood

2000-2005
- Portals Mature
- Publishers Proliferate
- CPMs take a hit
- Search Explodes

2005-2010
- Rise of the Ad Networks
- Performance marketing grows
- Exchange market born
- Web 2.0 → Social Media

2010-2015
- Rise of RTB & Programmatic
- Data fuels growth
- CPMs crushed
- Agency Trading Desks evolve
- Fraud worries
Where exactly is “here”?
We Live In a Connected World

Our bodies

The cars we drive

And... adoption is **FAST**.

Smartphone ownership grew from 10% to 60% of U.S. population in only 5 years.
How Consumers Want to be Engaged is Evolving...

61% of online adults are using at least 3 internet-connected devices from multiple different locations, multiple times a day.

...and now they are always addressable.
All About Consumer Experience

MARKETING TO CHANNELS → MARKETING TO PEOPLE
The Old Marketing Funnel is Gone
Mobile First with Focus on Need States

**I-want-to-know moments**

65% of online consumers look up more information online now versus a few years ago.²

66% of smartphone users turn to their phones to look up something they saw in a TV commercial.³

**I-want-to-go moments**

2X increase in "near me" search interest in the past year.⁴

82% of smartphone users use a search engine when looking for a local business.⁵

**I-want-to-do moments**

91% of smartphone users turn to their phones for ideas while doing a task.⁶

100M+ hours of "how-to" content have been watched on YouTube so far this year.⁷

**I-want-to-buy moments**

82% of smartphone users consult their phones while in a store deciding what to buy.⁸

29% increase in mobile conversion rates in the past year.⁹
Basic Version of Ad Sales

Advertiser ➔ Demand Side Platform (DSP) ➔ Ad Exchange ➔ Supply Side Platform (SSP) ➔ Publisher

Wants to buy an ad ➔ Real Time Bidding Happens Here ➔ Wants to sell an ad
How Do Digital Ads Work?

AD SERVING CRITERIA

- Cookies
- Browser Type
- Time of Day
- Weather
- Content on the page
- User Geo-location
- Data modeling
- Predictive modeling
- Demographics
- Exposure to other ads
- Device Type, version
- Carrier (if mobile)
Ad Blocking

- Browser extensions that prevent ads from loading.

- Use of mobile and desktop ad blocking software grew by nearly 50% in 2015 (Q2 2015 - 45 million Americans; 198 million users globally)

It is argued that widespread ad blocking results in decreased revenue to a website sustained by advertisements where blocking can be detected.

A 2015 report, by Adobe and Pagefair, estimates the cost to publishers in 2016 alone could be as much as $22 billion.
What does data-driven mean?
More than ever, data is driving...

- Customer Insights
- Real-Time Decision Making
- Intelligent Ad Delivery
- Accelerated Optimization
The Power of Data

What is “Big Data”?  
A large collection of data from traditional and digital sources that represents a source for ongoing discovery and analysis

Volume / Velocity / Variety / Veracity / Value / …

Two-fold power of data: Marketing & Analytics

Personalized experience
Targeted ad spend
Closed loop measurement
Being “Data-Driven”

Collection, Processing, & Utilization of DATA

Culture & Capabilities

Operationalize

That Improve...
- Customer Experiences
- Operating Efficiencies
- Competitiveness
- Responsiveness
- Channel Effectiveness
- Marketing Optimization

Timely Decisions

Enabling
How Does it Work?

Collect
- Sources
- Insights
- Patterns
- History

Analyze
- Segments
- Pathways
- Offers
- Responses

Optimize
- Channels
- Messages
- Targeting
- SVOC

Execute
- Delivery
- Compliance
- Preference
- Personalization
• What sources of data will you / can you collect?

• What customer insights are most important to you?

• What patterns have you observed or would like to observe?

• How much program / campaign history do you have on your customers?
Analyze

• Have you segmented your customer data? Which segments are most likely to convert?

• Will your segmentation schema drive better understanding of pathways to engagement?

• Which offers are right for which segment? How do your offers differ in terms of revenue contribution? Or in terms of contribution to profit?

• How are you connecting response data (clicks, visits, interactions, email opens, call center inbounds, etc.) to your customer insights?
• By what means do you plan to deliver your customer segments into your advertising channels?

• What steps have you taken to appropriately anonymize your customer data to adhere to modern privacy standards/laws?

• When current or prospective customers respond, by what method will you gather and store their preferences for communications from you?

• How will you leverage preference data to personalize your customers’ experiences?
• How do you plan to attribute sales/acquisition credit to each channel you utilize? How will you optimize your channel choices?

• How will you leverage customer data to alter the content, the look & feel, the offer, or the frequency of the messaging you use?

• How will insights from your customer data drive an effective AND efficient targeting methodology? How will targeting methods vary by channel?

• Will your data-driven strategy allow you a single view of customer so that optimization decisions are fact-based – (i.e., not based on intuition/guesswork)?
What data is doing the driving?
Types of Data

Covered Information

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Choice

PII
PERSONALLY IDENTIFIABLE INFORMATION

NON-PII OR DII
DEVICE IDENTIFIABLE INFORMATION

DE-IDENTIFIED INFORMATION

AGI
AGGREGATE INFORMATION

SANI
PSEUDO-ANONYMOUS

Ease of Technical Re-identification

100%

0%
It’s a Data Party!

1\textsuperscript{st} Party – Relationship Driven Client Data

2\textsuperscript{nd} Party – First Party Data from Other Companies

3\textsuperscript{rd} Party – Outside Data, Collected by Providers
Third Party Data Suppliers

**Ancillary Data:** Typically not about a customer… can include current weather, or geo-specific data such as elevation or ZIP Code

Using **social media data**, a person’s interests can be inferred based on what their friends are interested in

**Purchase data** can include information about prior purchases or products they own, predicting a customer’s next purchase

**Info about people:** Socio-economics, Age, Gender, Credit Rating, Homeownership

Demonstrated in-market readiness to buy something, like a car or vacation, or to do something – like fill out an insurance quote request

**Attributes of current customers predict prospective customers**
Second Party Data Providers

• Shaping up to be both the biggest opportunity and challenge for the industry

• Limited buy-in (9% in US)

• Privacy and security control questions must be addressed to unlock potential
Social Media: “Closed Gardens”

- All major social properties have a proprietary advertising platform
- Method to buy on Facebook: Ads Manager

**Highlights of Facebook Ads Manager:**

- ✔ Built in data targeting capabilities leveraging FB data - location, demographics, interests, behaviors, connections
- ✔ Ability to create, discover and target ‘similar audience’ to previous FB campaigns
- ✔ Ability to upload existing customers emails or place FB pixel on your website and FB will perform lookup and hashes, delivering to you a look-a-like audience you can target your campaign to
- ✔ Ability to upload your prospect contact list to Ads Manager and target
Vendor Neutral “Open Gardens”

Customers & Prospects

Marketing Analytics Environment

Channels

1. Segment
2. Segment
3. Segment

Multichannel Analytics

2nd and 3rd Party Data

Enhance

Match

Anonymize

Online Mobile and TV Users

Online Targeting

Mobile Targeting

TV Targeting

DMP or DSP

Offline Activity

Offline Activity
LiveRamp/Acxiom - 2nd Largest

OFFLINE RECOGNITION

R. Jones
10 Main St
Plano, TX

Rebecca Smith
becky@workpc.com
IP 222.58.1.10

Rebecca Wilson
20 Stag Dr
Chicago, IL

Becky Smith
I23 Sunrise Ave
Plano, TX
Phone 555-1212

Rebecca Wilson
20 Longhorn Ave
becky@homepc.com

Rebecca Smith
Cell phone: 555-2323

ONLINE RECOGNITION

ABILITEC LINK
abc12345

De-identification via secure one-way hash

HASHED LINK
a7b9j7ag
What is the current state of measurement and analytics?
In the beginning, Marketing Analytics looked exclusively backwards…

….And rarely did the findings change the road we were on
Today, Marketing Analytics functions much more as a navigational tool.
Temporal Dimensions for Analytics

PAST: Historical Trends & Analysis

PRESENT: Measures that Matter Today

FUTURE: Predictive Analytics & Modeling

REALTIME: Instant Recognition & Decisioning
Historical Trends/Analysis looks at “Historical” Data

- Answers the question “what happened?”
- What events, factors, measures are correlative to the result? Can cause and effect be isolated?
- Were we measuring the right things?
- History can be a guide: What conclusions can we make from what this campaign or program yielded in terms of results?

Examples of Historical Analytics

- Last years’ web traffic trends by consumer segment versus seasonality
- Email interaction by customer type: Lapsed, Infrequent, loyal, etc.
- Facebook “likes” driven by various mobile apps versus segments
Analytics that are “In the Moment” – The Here and NOW

- Think alerts, triggers, if/then decisions that marketing analytics can assist
- Today’s numbers are not guaranteed to be any better or worse than yesterday’s, but if you have a view into them they can be changed for tomorrow
- What conflation of factors are contributing to the present situation? What immediate tweaks or switches can we make to change it?

Examples of “Measures that Matter Today” Analytics

- Today’s Click-through rate is down 50% versus the average – what’s unique about the dynamic banner creative today?
- The email open rate for today’s “Fashionista” segment emails is unusually high – let’s go find out what’s so compelling about the subject line
Future-term Analytics are “Predictive” in Nature

• Predictive analytics make use of current data to forecast future probabilities of events and outcomes within a certain range of confidence.

• Statistical models (typically built from Regression processes) are assembled, predictions are made and assessed, and then the model is validated.

Examples of Predictive Analytics Applications

• A telco company wants to create a model to predict the precise combination of messages that will “save” a customer from canceling

• An eCommerce company wants to predict the exact frequency of display ads required to inspire purchase of an item previously placed in the shopping cart

• A hotel chain builds a model to predictively estimate bookings based on a special deal they’re planning to offer in three weeks
Real-Time Analytics are the Wave of the Future

- Real-time analytics are executed by computer systems (often referred to as artificial intelligence or “machine learning) to make split-second decisions based on observed data at the moment of delivery
- Real-time analytics are by nature quick and nimble – Latency is minimized, and the need for time-consuming batch ETL is eliminated

Examples of Predictive Analytics

- An ecommerce company wants to predict the next book you’ll buy by instantly accessing your purchase history, account details that will allow them to consider your demographics and using predictive modeling to present that perfect title
- A social gaming company wants to test the value of a new feature that users must pay for – Real-time analytics allows hyper-fast reporting of success or failure based on preset benchmarks/expectations
A Conceptual Model for Media

**EARNED MEDIA**
- Mentions
- Posts
- Forwards
- Reviews

**PAID MEDIA**
- Display
- Retargeting
- Paid Influencers
- Paid Content
- Social Ads

**OWNED MEDIA**
- Website
- Mobile Site
- Social Media Pages

**Point of Convergence:**
Best marketing programs take advantage of all three

Measuring Each Media Vehicle

Metrics under analysis:

PAID MEDIA
- Clicks vs. Impressions
- Engagement
- Viewability

EARNED MEDIA
- # Shares
- Social Media “Mentions”
- Propagation Mapping
- Reviews

OWNED MEDIA
- Website Visitation
- User Flow at the Site
- Conversion Metrics based on traffic source

Typical Partners:
- doubleclick by Google
- Integral Ad Science
- Brandwatch
- social media
- OMNITURE
- Google Analytics
What does the future hold?
We are living in a world in which virtually any and every thing can be connected to the Internet.

By 2018, M2M devices are projected to account for more than 40 percent of connected devices in the United States, as compared to 19.7 percent globally.

The sheer amount of data being captured and capable of being analyzed is staggering.
Towards a New Digital Ethics

Giovanni Buttarelli – Euro. Data Protection Supervisor

• The fundamental rights to privacy and to the protection of personal data have become more important for the protection of human dignity than ever before.

• Technology should not dictate values and rights, but neither should their relationship be reduced to a false dichotomy.

• In today's digital environment, adherence to the law is not enough; we have to consider the ethical dimension of data processing.

• These issues have engineering, philosophical, legal and moral implications.
1. Future-oriented regulation of data processing and respect for the rights to privacy and to data protection

2. Accountable controllers who determine personal information processing

3. Privacy conscious engineering and design of data processing products and services

4. Empowered individuals
User Awareness / Access / Control

Control your Google ads
https://www.google.com/settings/u/0/ads/authenticated

Ever wonder what kind of information determines the ads you see or the offers you receive? You’ve come to the right place. About The Data brings you answers to questions about the data that fuels marketing and helps ensure you see offers on things that mean the most to you and your family.

The BlueKai Registry – putting consumers in control of their digital footprint.

https://www.facebook.com/ads/preferences/

Your Ad Preferences
We show you ads based on things we think you care about. Your preferences include information from your profile as well as actions you take on and off Facebook. Add or remove preferences to see ads you’ll find relevant. Learn more.
According to a recent Ascend2 survey:

81% believe the success of their data-driven marketing is above average compared to their competitors.

(http://www.marketingdive.com/news/study-70-of-marketers-say-personalization-is-their-top-data-goal/423170/)
Thank you. Questions?