An Intro to Digital Marketing Analytics

FOR

Middlebury
What we’ll cover today

- Introduction
  - Who I am
  - My 3 goals for today’s discussion
  - My background in digital marketing

- Digital Marketing Analytics
  - Innovation over the years
  - Digital Marketing Analytics - what is it?
  - Broad strokes of the types of work done
  - What trends are coming?
  - The talent shortage & your opportunity

- Q&A
Goal of today's presentation

1. Introduce digital marketing & analytics to this group: what is it?
Goal of today's presentation

2 Highlight skills needed & type of work, so you can determine if this is for you
Goal of today's presentation

3. Encourage your questions & discussion

If I had an hour to solve a problem and my life depended on it, I would use the first 55 minutes determining the proper questions to ask.

Albert Einstein
Malcolm Gladwell’s 10,000 hours rule

The 10,000-hours rule says that if you look at any kind of cognitively complex field, from playing chess to being a neurosurgeon, we see this incredibly consistent pattern that you cannot be good at that unless you practice for 10,000 hours, which is roughly ten years, if you think about four hours a day.

— Malcolm Gladwell —

AZ QUOTES
21,000+ hours of work experience

1 yr.  
Website product management; self help tools, online chat, etc.

5 yrs.  
Digital media analytics (paid search, banner ads)

6.5 yrs.  
Website, CRM, Email, Social, SMS, Digital Media
Modem Media

- Found in 1987 by Middlebury Alumnus, GM O’Connell
- Modem launched the First Banner Ad 1994
- IPO in 1999
- Digitas bought Modem in 2004
- I joined Modem
- Publicis bought Digitas in 2007
October 27th 1994

Have you ever clicked your mouse right HERE? YOU WILL

Advertiser  Publisher

AT&T  HOTWIRED
January 17, 2003

Contact: Sarah Ray
802-443-5794
sray@middlebury.edu

Post: January 17, 2003

MIDDLEBURY, VT - On Jan. 25-26, students will join the public at a Middlebury College conference, "Digital Bridges 2003," that will focus on whether or not an Internet that is truly accessible to the masses has arrived, and explore what implications a pervasive Internet has for businesses and individuals. Software, cyber-security, technology and manufacturing company executives, venture capitalists and legal experts will participate in a series of six panels on topics ranging from how business will be conducted in the future to entrepreneurship and cyber security.
“An Internet that can actually be used by the masses?”

"Digital Bridges 2003"
January 25-26
Room 216, Bicentennial Hall

Saturday, Jan. 25

9:30-11:45 a.m.
The Usable (Pervasive) Internet - An Internet That Can Actually Be Used By the Masses?
Wing Pepper, Vice President of Marketing Strategy, Modem Media
Jamie Gorman, Director of Finance and Business Development, DigiTerra Broadband
Ian Barkin, Senior Research Analyst, Harbor Research
Molly Campbell Voorhees, Account Analyst, Telephia

14 years ago
21,000+ hours of work experience

Website product management; self help tools, online chat, etc.

Digital media analytics (paid search, banner ads)

Website, CRM, Email, Social, SMS, Digital Media
Big Companies:

$3.4B USD

$5.4B Euros

$7.8B USD

2006

2010

2017
Digital Marketing Analytics – What is it?
Digital Marketing Innovation
Who knows what Moore's Law is?

Named after Gordon Moore co-founder of Intel
Moore's Law

- Performance (the number of transistors in a chip) doubles every 2 years while the cost to produce roughly halves.

- Performance increases => lead to productivity and new possibilities
Industry has changed rapidly as connectivity improved through innovation and price reduction

- Industry has been around roughly 30 yrs.
- A lot has changed in that time!

<table>
<thead>
<tr>
<th>1992 to 1998</th>
<th>2004 to 2007</th>
<th>2017 to ?</th>
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<tbody>
<tr>
<td>Commercial Internet &amp; Email</td>
<td>Search</td>
<td>Banner Ads</td>
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<tr>
<td>Ecommerce</td>
<td>Social</td>
<td>Mobile</td>
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<td>Internet of Things</td>
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Innovation leads to new possibilities
Digital Marketing Analytics
What is Digital Analytics?

Recommending actions to optimize customer experiences and interactions through the simple communication of complex digital data analysis
Marketing Activity Starts with a company’s business objectives

Business Objectives & Activities
- New Product Launch
- Defend Territory vs. Competitor
- Increase cart / basket size of MVC’s

Strategy & Analytics
- Customer Analytics
- Preferences, Affinity, Messaging

Execution
- Spend media budget & go live
- Analyze Results
- Optimize & Repeat

Hypothesize and define the ① who, ② where, and ③ what.
Marketers Essentially Ask 3 Questions

Who might want my products or services?
How should I reach them?
What should I say?

Analytics underlies all of these steps
How do you know who and where to reach them?
Customer Analytics: All about Data Collection & Analysis

Individual level profiles can be grouped into segments based on behaviors

<table>
<thead>
<tr>
<th>WHAT I BUY</th>
<th>WHERE I BUY</th>
<th>WHEN I BUY</th>
</tr>
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<tbody>
<tr>
<td>Dove</td>
<td>Amazon</td>
<td>Friday</td>
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<table>
<thead>
<tr>
<th>CUSTOMER VALUE</th>
<th>ECONOMIC MOTIVATORS</th>
<th>ENGAGEMENT</th>
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<tbody>
<tr>
<td>$35 per month</td>
<td>COUPONS</td>
<td></td>
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<tr>
<th>DIGITAL INTERACTIONS</th>
<th>SOCIAL ACTIVITY</th>
<th>CUSTOMER ATTITUDES</th>
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<tbody>
<tr>
<td>Gmail</td>
<td>Facebook</td>
<td></td>
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How do companies get the data?
Customer Analytics: All about Data

1st Party Data
Data that you own/have collected about a user
Examples: CRM, email subscribers, customer database

2nd Party Data
Data that a partner provides to you
Examples: AdWords click, cost, conversion data

3rd Party Data
Data you get from an outside vendor that you layer on top of your accounts
Examples: weather API, behavioral targeting
First Party Data is King – but lacks scale

- First party data
- Second party data
- Third party data
OK – so you created your hypothesis & put it into market

You know who

You know where

You know what
How do we analyze the execution?
1 way is the channel view:
Paid Search Analysis

- Bid analysis, position analysis, Cost per Click
- Branded and unbranded keyword groups
- Copy Analysis on message
- Cost per conversion
Social & Display Media Analysis

- Paid, Earned and Owned Impressions
- Shares, clicks, hearts, video completions, etc.
- Copy Analysis on message
- Cost per conversion
- Viewability, Reach
Email Analysis

- Deliverability Rate
- Open Rate
- Click Through Rate
- Conversion / Purchase Rates
- Contact Strategy – who gets what?
- Personalized Offers
- Content popularity
e-commerce Analysis

- Add to Cart
- Purchases
- Cross Sell / Upsell
- Reviews
- Customization (NikeID)
- Average Order Value
- Promo Code
What do I say?: Message Testing (Ad or Website)

Often executing a/b or multivariate tests to determine the winners.
The Customer view, however, is ideal

Channel View

Customer View
Customer View Allows for Sequencing:

- Instead of the same message across all channels you can sequence and adapt at each touchpoint.
- You can also determine attribution across channels to see who truly moves the needle. (Marking Mix Attribution Analysis)
It’s all about the pipes

• Connecting channel level engagement at the customer level can lead to personalized offers & content that will drive up engagement & purchase rates.
• This is one of the biggest investment challenges facing firms today

A Single Customer View (SCV)
Why Analytics the focus on analytics
Before Digital Age:

“Half the money I spend on advertising is wasted; the trouble is I don't know which half.”

- John Wanamaker
US department store merchant (1838 - 1922)
Digital Enables Better Tracking & Analytics
Pareto Principle

Efficiency Opportunities, if you know which 20% to focus on
Key Trends
Big investment in digital

US digital marketing spend will near $120 billion by 2021. Investment in paid search, display advertising, social media advertising, online video advertising and email marketing will pace to 46% of all advertising in five years.

- Taken from a Forbes Article citing a Forrester Study
Trends: 1:1 Personalization
Trends: Voice / Virtual Assistants

AMAZON’S ALEXA  GOOGLE’S ASSISTANT  APPLE’S SIRI  MICROSOFT’S CORTANA
Trends: Internet of Things
Cisco predicts 50 Billion IOT Devices by 2020; 14 trillion in economic impact

Trends: Big Data

About 90% of all data in the world has been created within the last two years.

Need people to sift through this data and find insights!
“Hal Varian, the chief economist at Google, is known to have said, “The sexy job in the next 10 years will be statisticians. People think I’m joking, but who would’ve guessed that computer engineers would’ve been the sexy job of the 1990s?”
Shortage of Talent: We Need you!

30-40% growth in these areas over next 10 years; much faster than average. Not enough people to fill the roles.

Supply Shortage leads to higher salaries

![Diagram showing supply and demand with higher salary](image)

- Demand before and after
- Supply curve
- Price points P1 and P2
- Quantity Q1 and Q2
Generally 3 kinds of Analytics Job Paths / Types

**Data Scientist**
- Ph.D., Statistics, Computer Science & information systems
- Programming Languages
- Synthesizing big sets of unstructured Data

**Data Analyst**
- Deep knowledge of channel tools or analytic tools such as web analytics, ad serving, SAS, etc.
- May span multiple channels providing marketing optimizations

**Consultant**
- Broad knowledge, but not necessarily technically deep
- May have knowledge in one industry
- Sales oriented; higher travel
- Often synthesizing information from data scientists and channel specialists
Four main types of firms for digital analytics work:

<table>
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<tr>
<th>Agency</th>
<th>Brand</th>
<th>Tech Firm</th>
<th>Consultant</th>
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<tbody>
<tr>
<td>Data Scientist</td>
<td>Data Scientist</td>
<td>Data Scientist</td>
<td>Data Scientist</td>
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<tr>
<td>Data Analyst</td>
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</tr>
<tr>
<td>Consultant</td>
<td></td>
<td>Consultant</td>
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## What Skills do I need?

<table>
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<tr>
<th>Technical</th>
<th>Soft Skills</th>
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<tbody>
<tr>
<td>• Excel</td>
<td>• Creative Thinker</td>
</tr>
<tr>
<td>• SAS</td>
<td>• Inquisitive Nature</td>
</tr>
<tr>
<td>• SQL</td>
<td>• Be able to tell a Story</td>
</tr>
<tr>
<td>• Python</td>
<td>• Visual Synthesis</td>
</tr>
<tr>
<td>• R</td>
<td>• Action Oriented – e.g. “so what do I do?”</td>
</tr>
<tr>
<td>• Basic understanding of programming: JavaScript &amp; HTML</td>
<td>• Time Management</td>
</tr>
<tr>
<td>• Digitally focused tool experience (Google, Adobe, etc.)</td>
<td>• Problem Solver</td>
</tr>
<tr>
<td>• Hadoop (unstructured data)</td>
<td>• Big Picture Oriented</td>
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**Need some of these**

**Need just about all of these**
How can I get some of these skills?

- Internships
- Free classes online
- Formal Classes
- On the job experience
- Side Projects of your own undertaking
Tips for getting the job you want:

1. Middlebury Network
2. Networking in general & grow Linked-In Network
3. Analyze Job Descriptions & Build Skills
4. Apply / Don’t give up

The Job you Want
Thank you!
Who is Epsilon?
We make connections that bond people to brands
Renowned Marketing Technology & Services Leader

2.2 Billion in revenue

Data & Analytics oriented Full Service Digital Marketing Company
Use both proprietary and 3rd party technologies
A brief timeline

1969 Founded as Fraternal Systems
1976 Name changed to Epsilon
1982 Develops Apple’s first customer database
1984 Epsilon goes public
1990 Acquired by American Express
Oct 2004 Epsilon acquired by Alliance Data
Apr 2006 Epsilon acquires DoubleClick Email Solutions
Feb 2007 Epsilon acquires Abacus
Jul 2010 Epsilon acquires Equifax DMS
Jun 2011 Epsilon acquires Aspen Marketing
Dec 2012 Epsilon acquires HMI
Dec 2014 Epsilon acquires Conversant
<table>
<thead>
<tr>
<th>Rank</th>
<th>Category</th>
<th>Metric</th>
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<tbody>
<tr>
<td>#1</td>
<td>U.S. Agency (all disciplines)</td>
<td>8,000+ Associates globally</td>
</tr>
<tr>
<td>#1</td>
<td>Global CRM/Direct Agency</td>
<td>70+ Offices</td>
</tr>
<tr>
<td>#2</td>
<td>Reach of Unique Online Visitors (Google #1)</td>
<td>4,000+ Live databases</td>
</tr>
<tr>
<td>#4</td>
<td>U.S. Digital Agency Network</td>
<td>1.5B Individual records</td>
</tr>
<tr>
<td>#5</td>
<td>U.S. Promotion Agency</td>
<td>278M+ Device IDs</td>
</tr>
<tr>
<td>#6</td>
<td>World’s Largest Digital Agency Network</td>
<td>47B+ Email messages per year</td>
</tr>
<tr>
<td>#12</td>
<td>World’s Largest Agency Network</td>
<td>50B+ Bid requests per day</td>
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Source: AdAge 2017, comScore, June 2014
Here are just a few of the brands we work with...

We work with 15 of the top 20 global brands and 8 of the top 10 Fortune 500 companies.
One of 2016’s most sought after employers

#21 Top talent attractor according to LinkedIn

Study was based on 433 million LinkedIn users interactions.

Our Services
Marketing Tool Reporting
Web analytics, email, social, etc.

Email & SMS Execution

Database Builds & Maintenance

Strategy Planning

Media targeting & Execution

Website Builds & Maintenance

Creative Design & Copy Writing

Advanced Data & Analytics
Our Tech Products
Consumer Data

- 200MM Consumers
- 2,000 data points
- Often used as an append to client’s first party data

Email Delivery

- 8-10 billion emails delivered per quarter in US

Digital Media Reach

- 2nd to Google in reach.
- 160 million + consumers w/ transaction data from 4k+ retailers.
- We can reach people across all their devices with 96% accuracy.
Ad Networks

What are they?

An online **advertising network** or **ad network** is a company that connects advertisers to a long tail of web sites that want to host advertisements. The key function of an **ad network** is aggregation of **ad** space supply from publishers and matching it with advertiser demand.