Marketing Analytics Bootcamp

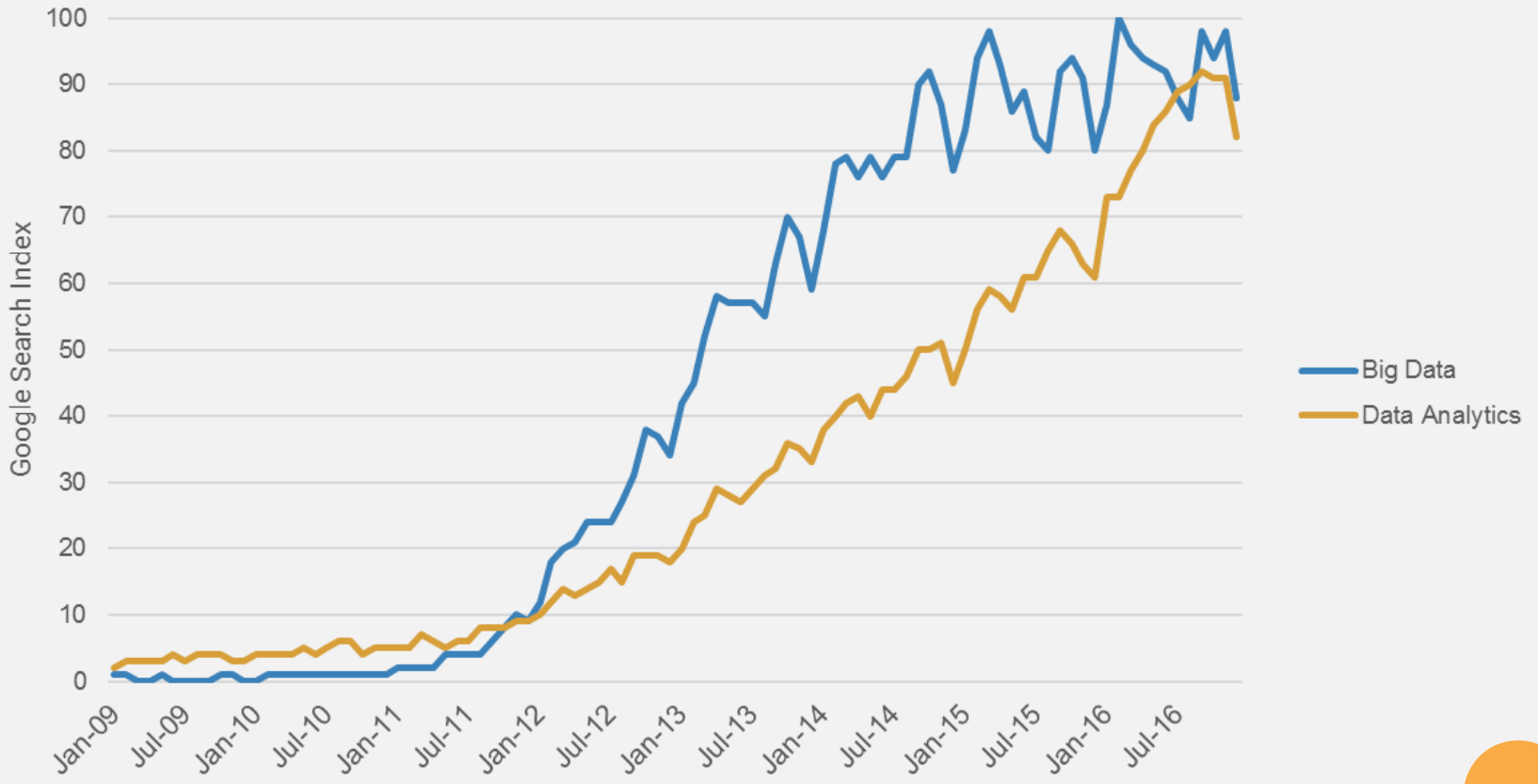
Wisdify

Intro to Big Data & Data Analytics

What do you call a bad marketer?

Anti-social.

What do "Big Data" and “Data Analytics“ mean?



What do "Big Data" and “Data Analytics“ mean?

a) Boring statistics

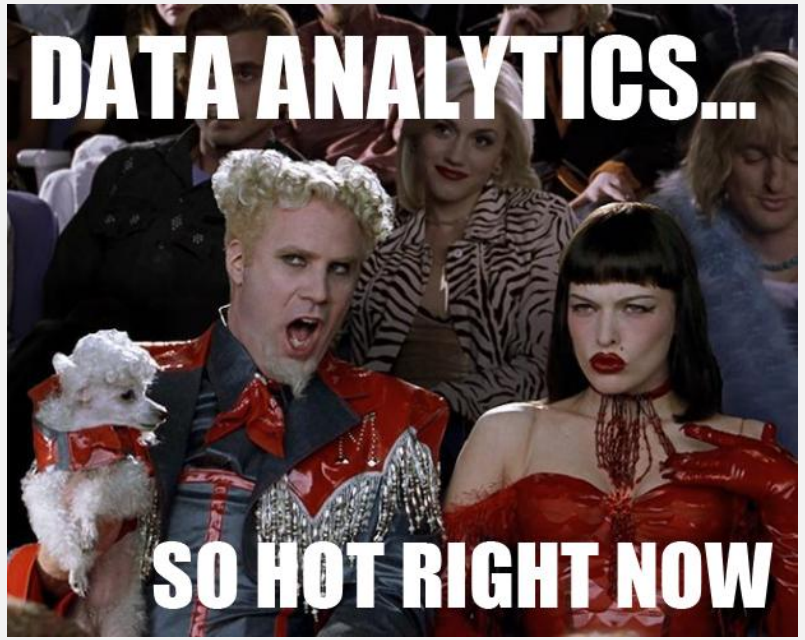
b) Buzzword

c) Graphs and charts

d) Useless

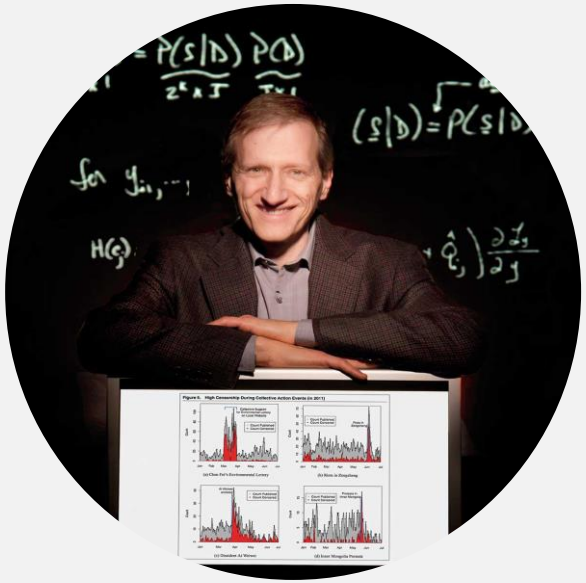
e) All of the above

f) None of the above



So, what is “Big Data”?

Big data is an extremely large data set that can be analyzed to reveal patterns, trends, and associations.



“Big Data is not about the data.”

Gary King, Harvard University

(1 exabyte = 1 billion gigs)

There were 5 exabytes of information created between the dawn of civilization through 2003, but that much information is now created every 2 days.

- Eric Schmidt, 2010

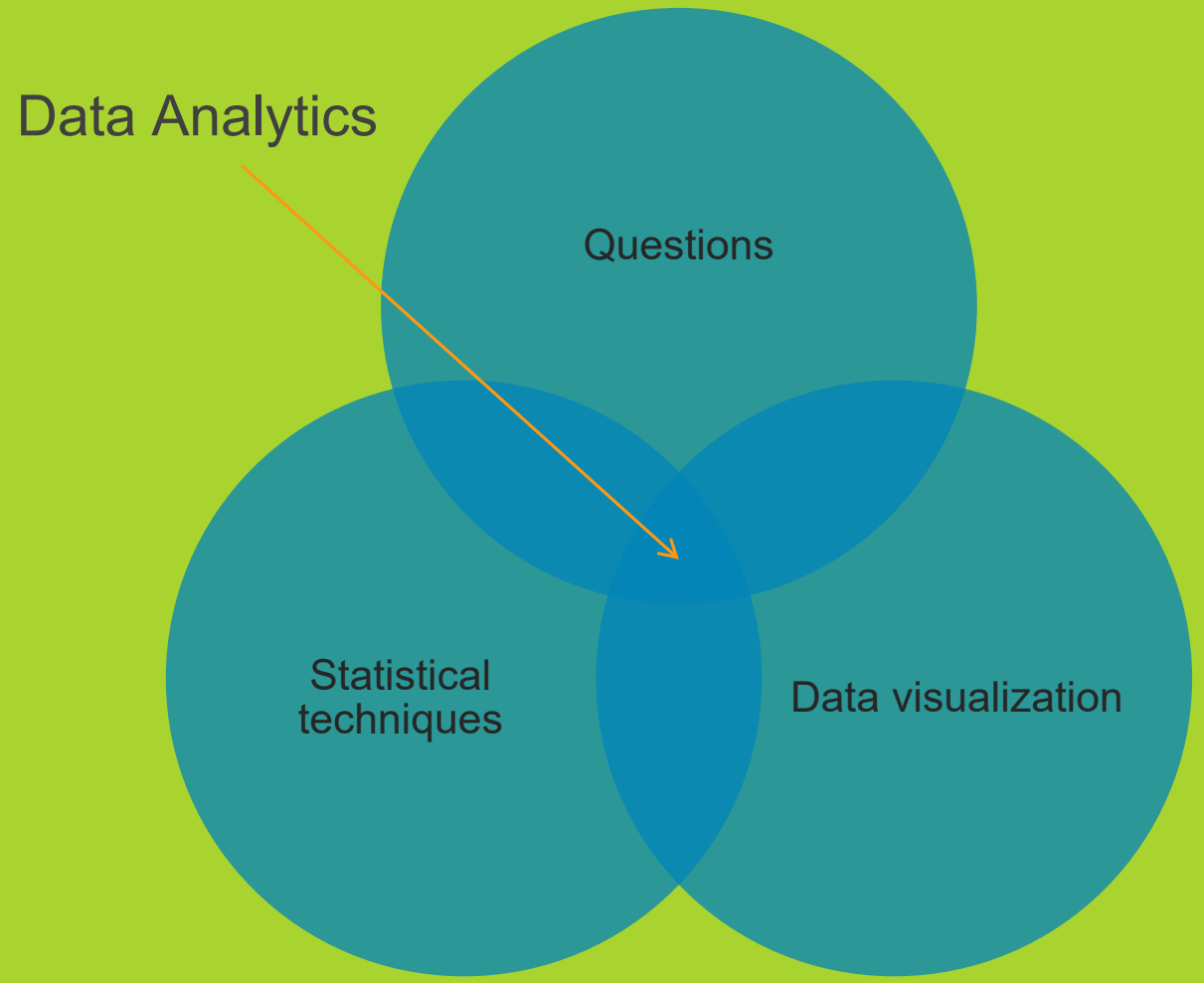
The “Three V’s”: Gartner’s definition

So, what is “Data Analytics”?

Data analytics are the qualitative and quantitative techniques used to identify and analyze patterns.

“Asking the right questions is more important than getting the right answers.”

Clayton Christensen, Harvard Business School


Data Analytics
Questions
Statistical techniques
Data visualization

Types of analytics

Descriptive Analytics

Analyze past data to see what has already happened.

“What happened?”
“What is happening?”

Predictive Analytics

Analyze past data to see why something happened or predict what will happen.

“What will happen?”
“Why will it happen?”

Prescriptive Analytics

Utilize data to determine which decisions will produce the best result.

“What should I do?”
“Why should I do it?”

Marketing: The Arts & Crafts Department?

Not anymore!

Old-school vs. new-school marketing professional

Historically, how have marketers measured their success?

Old-school vs. new-school marketing professional

Which led the executives to view the marketing department like this:

Old-school vs. new-school marketing professional

So, what can marketing analytics do for you?

- Helps convince executives to make a marketing campaign investment
- Helps you refine your marketing campaigns so you can increase their effectiveness
- Increases ROI (we'll explain how to calculate this in a few second)
- **INCREASES YOUR CREDIBILITY**

Who you need to become as a marketer:

vs.

Creating ambigous budgets w/o showing ROI	→	Creating concrete campaigns that show the ROI
Not measuring results of a campaign	→	Tracking and comparing the performance of every campaign
“If it feels good, do it” mentality	→	Only pursuing the activities that have the highest returns

In God we trust; all others must bring data.

- W. Edwards Deming (famous statistician)

How to dominate marketing analytics (#3 will will leave you in complete shock)

So.. how do I do marketing analytics?

Decide what you want the campaign to accomplish:

- Do you want to increase brand awareness?
- Do you want to generate more leads?
- Do you want to increase the number of followers?

So.. how do I do marketing analytics?

Set measurable goals that includes metrics showing ROI and impact on profits:

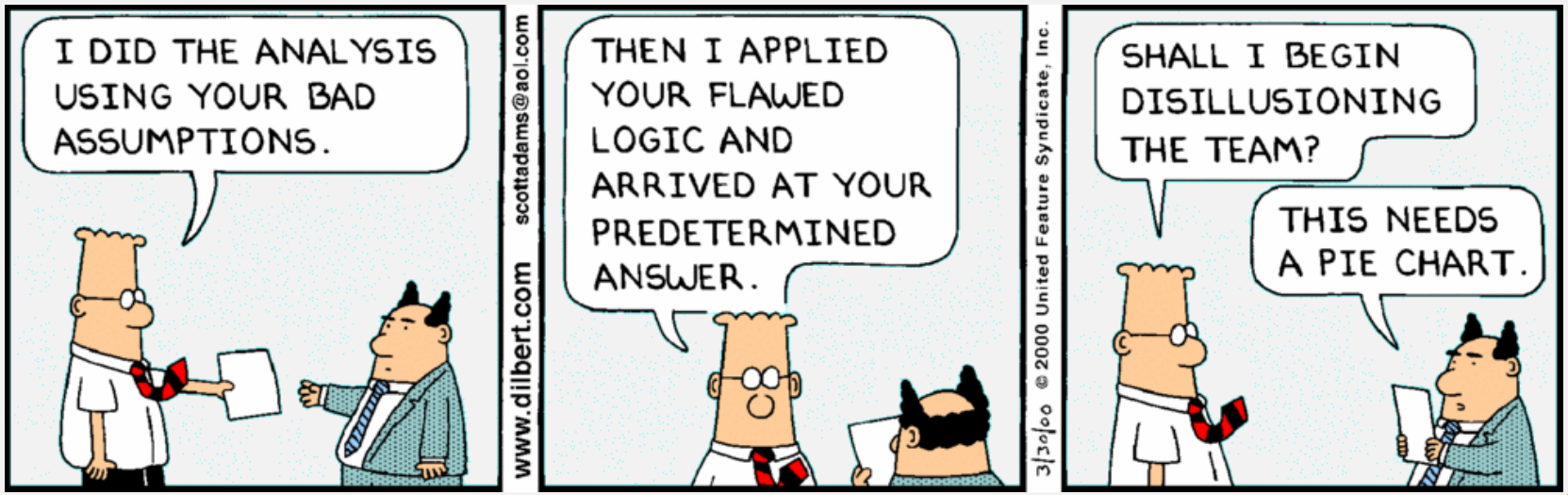
So.. how do I do marketing analytics?

Set measurable goals that includes metrics showing ROI and impact on profits:

- What does success look like?
- What metrics will tell us if we are on track?
- How do we know if we were successful?
- What will be the return on our investment?

So.. how do I do marketing analytics?

Track your metrics, pivot based on what the data tells you, and report the results:



Web Analytics

Analytics measuring the success of your site

Web analytics

Traffic sources: The sources from which people get to your site (direct, search, ads, etc.). Helps you know how to diversify sources and where to focus marketing efforts.

Calculation: Use a service such as Google Analytics

Source / Medium	Sessions ↓
	2,361 % of Total: 100.00% (2,361)
1. (direct) / (none)	**1,365** (57.81%)
2. google / organic	**677** (28.67%)
3. linkedin.com / referral	**68** (2.88%)
4. bing / organic	**49** (2.08%)
5. lnkd.in / referral	**32** (1.36%)

Web analytics

Time spent on site: The average amount of time a visitor spends on the site, each page, and each part of each page. Helps you refine content and layout.

Calculation: Use a service such as Google Analytics or Hotjar

Page	Pageviews	Avg. Time on Page
	3,664 % of Total: 100.00% (3,664)	00:01:28 Avg for View: 00:01:28 (0.00%)
1. /	**1,275** (34.80%)	00:01:35
2. /live-webinar/	**481** (13.13%)	00:02:01
3. /corporate/	**343** (9.36%)	00:02:07
4. /about/	**338** (9.22%)	00:01:07
5. /onsite-training/	**216** (5.90%)	00:01:17

Web analytics

Bounce (abandonment) rate: The rate at which a visitor visits only one page on your site. Helps you refine content and design. *Average bounce rate is 40%-55%*.*

Calculation: Use a service such as Google Analytic

Source / Medium	Sessions ↓	Bounce Rate
	2,361 % of Total: 100.00% (2,361)	61.63% Avg for View: 61.63% (0.00%)
1. (direct) / (none)	**1,365** (57.81%)	73.63%
2. google / organic	**677** (28.67%)	43.13%
3. linkedin.com / referral	**68** (2.88%)	22.06%
4. bing / organic	**49** (2.08%)	51.02%
5. lnkd.in / referral	**32** (1.36%)	37.50%

**www.gorocketfuel.com/the-rocket-blog/whats-the-average-bounce-rate-in-google-analytics/*

Web analytics

Key takeaways:

1. You want people to come to your site from a variety of sources. This indicates you are being active on many different channels (blogs, search, social media, etc.)
2. Once people come to your site, you want them to stay as long as possible. They will only stay if you have compelling content, intuitive design, and a good funnel.
3. If your site is slow, ugly, disorganized, etc., then people will land on your page and immediately abandon it. This results in lost sales.

Social Media Analytics

Analytics measuring the success of your social media

Social media analytics

 # Followers/Likes: The number of people who like or follow your social media account. Helps you track your audience and increases your marketing megaphone.

***Calculation*:** Look at your social page and see the #. It is a very complicated calculation.

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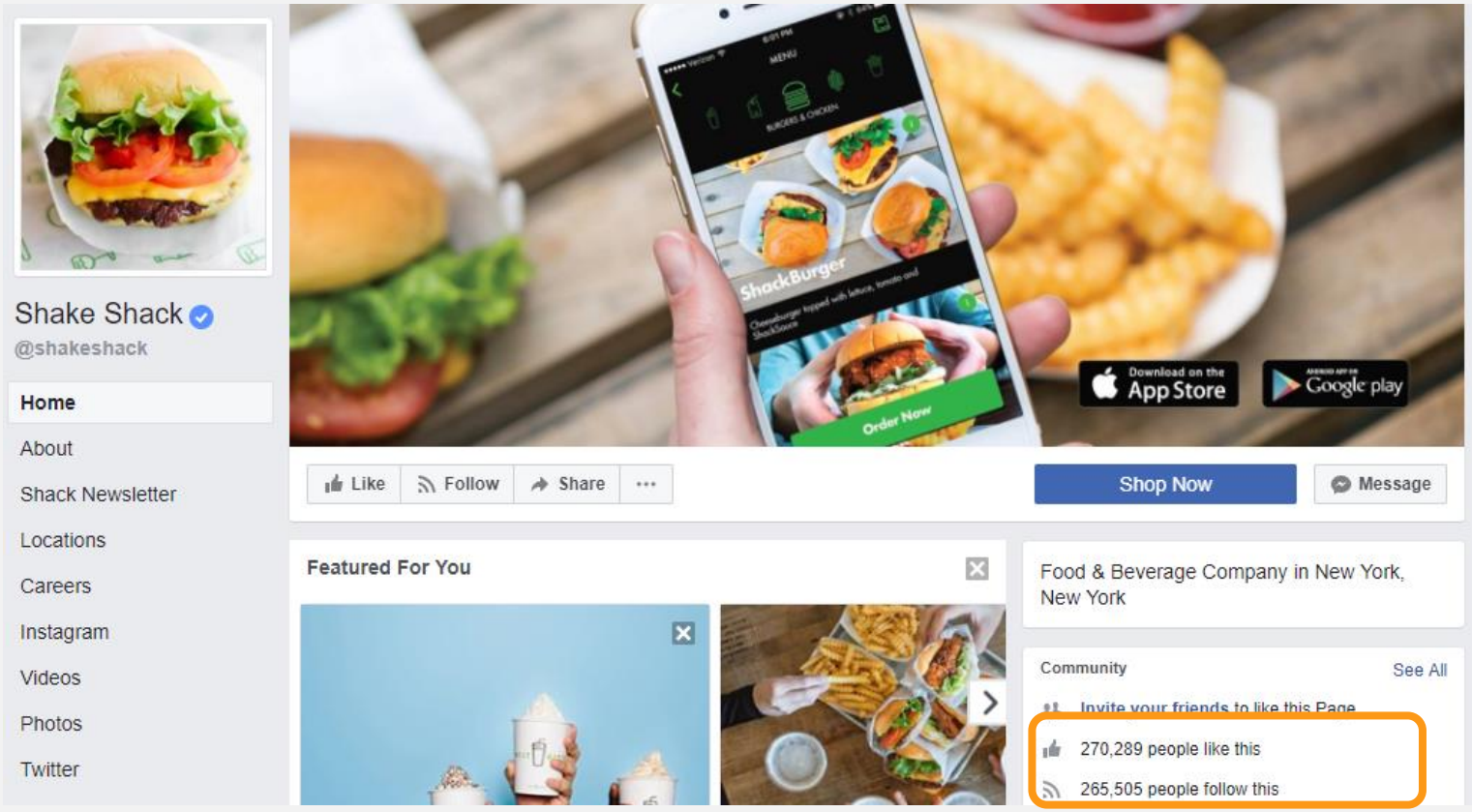
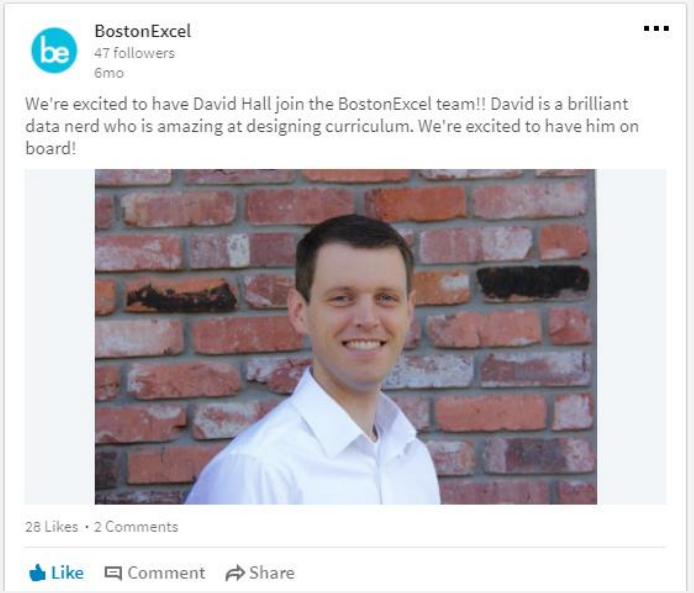


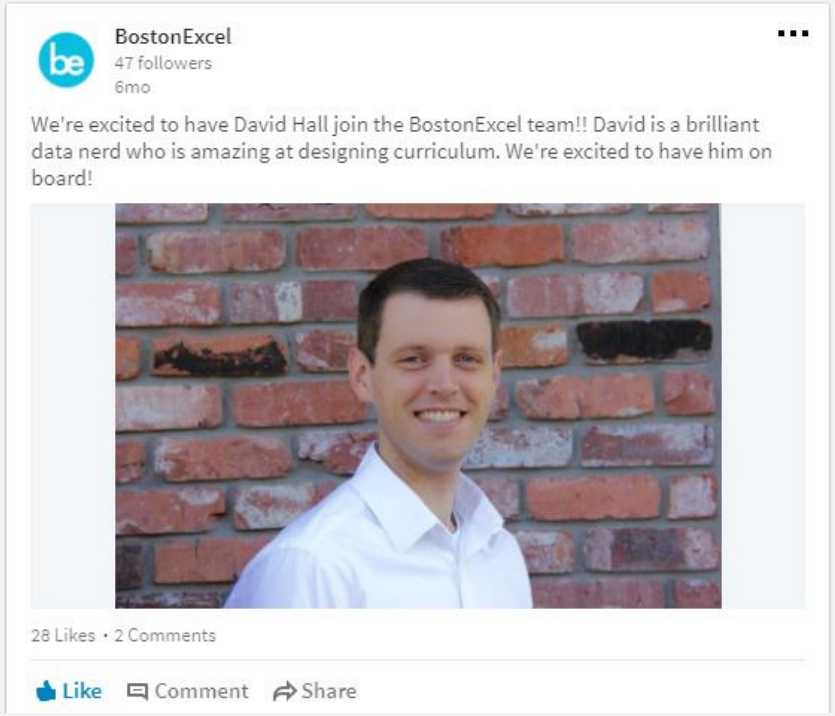
Social media analytics

Engagement: The number of people who liked, commented on, or shared a post compared to the # of impressions/reach. Helps you hone your social posts.

Calculation: Engagement $= \frac{Likes+Comments+Clicks}{Impressions}$



Engagement: The number of people who liked, commented on, or shared a post compared to the # of impressions/reach. *Anything above 1% is considered good.*



Update name	Date	Impressions	Clicks	CTR	Social Actions	Engagement
We're excited to have David Hall join the Bost...	1/17/2017	3,089	43	-	-	2.4%

$$\text{Engagement} = \frac{Likes + Comments + Clicks}{Impressions}$$

$$\text{Engagement} = \frac{28\ likes + 2\ Comments + 43\ Clicks}{3{,}089\ Impressions} = \mathbf{2.4\%}$$

Social media analytics

Key takeaways:

1. In order to have a strong following with lots of brand ambassadors, you need to constantly provide compelling posts and valuable content to your followers
2. The more compelling the posts and valuable the content, the higher the engagement. Higher engagement = your posts will reach a wider audience.
3. It's much cheaper and effective to advertise to your followers (i.e. brand ambassadors) than advertising to the universe through PPC advertising.

Digital Advertising Analytics

Analytics measuring the success of paid-per-click (PPC) advertising

Digital advertising analytics

Impressions or reach: The number of times your ad was displayed (impressions) or the number of unique people who saw your ad (reach). Helps you track your ability to get in front of your audience.

Calculation: AdWords, Facebook, LinkedIn, etc. automatically tracks this for you.

Campaign	Budget	Status	Impr.	Clicks	Cost	CTR	Avg. CPC	Converted clicks	Cost / converted click	Click conversion rate
Search - General	$150.00/day	Eligible	58,017	639	$1,737.99	1.10%	$2.72	72	$24.14	11.27%
Display - Placement/KW	$15.00/day	Eligible	74,163	292	$155.26	0.39%	$0.53	8	$19.41	2.74%

Photo cred: megalytic.com/blog

Digital advertising analytics

Click-through-rate (CTR): The number of times your ad was clicked compared to the number of impressions. Higher CTR = more effective campaign. Average AdWords CTR = 2.0%; average Facebook CTR = 0.9%*.

Calculation: # Clicks ÷ Impressions

Campaign	Budget	Status	Impr.	Clicks	Cost	CTR	Avg. CPC	Converted clicks	Cost / converted click	Click conversion rate
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*www.wordstream.com/blog

Digital advertising analytics

Cost-per-click (CPC): The price you pay for every click on your pay-per-click (PPC) marketing campaign. Lower doesn't necessarily mean better. Average AdWords CPC: $1-$2; average Facebook CPC = $1.72*.

Calculation: Total $$ spent on campaign ÷ # of clicks

Campaign	Budget	Status	Impr.	Clicks	Cost	CTR	Avg. CPC	Converted clicks	Cost / converted click	Click conversion rate
Search - General	$150.00/day	Eligible	58,017	639	$1,737.99	1.10%	$2.72	72	$24.14	11.27%
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*www.wordstream.com/blog

Digital advertising analytics

 # Leads generated: # of new leads from a campaign. A lead could be an email address, download, sign-up, etc. This number will be used to calculate other metrics.

Calculation: AdWords, create a landing page for each campaign, use a unique promo code, MailChimp, etc.

Campaign	Budget	Status	Impr.	Clicks	Cost	CTR	Avg. CPC	Converted clicks	Cost / converted click	Click conversion rate
Search - General	$150.00/day	Eligible	58,017	639	$1,737.99	1.10%	$2.72	72	$24.14	11.27%
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Digital advertising analytics

Click conversion: The % of clicks that turn into a lead. Helps you better understand the effectiveness of your landing page or sales funnel. The higher the conversion the better.

Calculation: # of leads ÷ # of clicks

Campaign	Budget	Status	Impr.	Clicks	Cost	CTR	Avg. CPC	Converted clicks	Cost / converted click	Click conversion rate
Search - General	$150.00/day	Eligible	58,017	639	$1,737.99	1.10%	$2.72	72	$24.14	11.27%
Display - Placement/KW	$15.00/day	Eligible	74,163	292	$155.26	0.39%	$0.53	8	$19.41	2.74%

Digital advertising analytics

Cost-per-lead: How much it costs to acquire one lead. This, combined with other metrics like customer lifetime value (CLV), helps you determine if the cost to acquire a lead is actually worth it.

Calculation: Total $$ on ad campaign ÷ # of leads

Campaign	Budget	Status	Impr.	Clicks	Cost	CTR	Avg. CPC	Converted clicks	Cost / converted click	Click conversion rate
Search - General	$150.00/day	Eligible	58,017	639	$1,737.99	1.10%	$2.72	72	$24.14	11.27%
Display - Placement/KW	$15.00/day	Eligible	74,163	292	$155.26	0.39%	$0.53	8	$19.41	2.74%

Digital advertising analytics

Key takeaways:

1. There is no one “silver-bullet” metric that you need to pay attention to. You need to take all the metrics learned in this section into consideration when analyzing your data.
2. The ultimate goal of *most* PPC campaigns is to either 1) acquire more leads or 2) acquire more customers.
3. You must utilize the data to adapt your campaigns and make them more effective! Otherwise, you might as well throw your money in the garbage (or donate it to me).

Customer Analytics

Analytics measuring the cost/benefit of an acquired customer

Customer analytics

Customer acquisition cost: The total cost it took to acquire one customer. This amount must be lower than the customer lifetime value (CLV) otherwise you're losing $$ on every new customer.

> ***Calculation*:** Total spend on marketing (software, ads, salaries, etc.) ÷ Total # of customers

Example: In one year, you acquired 100 new customers but spent the following on marketing:

- $5,000 in marketing software (CRM, design, etc.)
- $10,000 in PPC advertising (AdWords, Facebook, etc.)
- $25,000 in salaries

Customer acquisition cost = $400 ($40,000 ÷ 100)

Customer analytics

Customer lifetime value: The total $$ a customer will spend over their lifetime as a customer.

Calculation:

$$1\ year\ gross\ profit \times \frac{Yearly\ retention\ rate}{1 + Discounr\ rate\ - yearly\ retention\ rate}$$

Total revenue x Average profit margin

The weighted average cost of capital (WACC). Super complicated calc. Good rule of thumb = 10%

(# customers at end of period - new customers acquired) ÷ # customers at start of period

Customer lifetime value: The total $$ a customer will spend over their lifetime as a customer.

Calculation:

$$1\ year\ gross\ profit \times \frac{Yearly\ retention\ rate}{1 + Discounr\ rate\ - yearly\ retention\ rate}$$

Assumptions	
Total yearly sales	$1,000
Gross profit margin	75%
Gross profit	$750
Yearly retention rate	65%
Discount Rate	10%

$$\boldsymbol{CLV} = \$750 \times \frac{65\%}{1 + 10\% - 65\%} = \$\mathbf{1,083}$$

This $$ must be bigger than the customer acquisition cost otherwise you're losing $$ on every customer!

Customer analytics

Net promoter score: A score between -100% and 100% that measures a customer's willingness to recommend a company's products or services to others. These people are your true brand ambassadors.

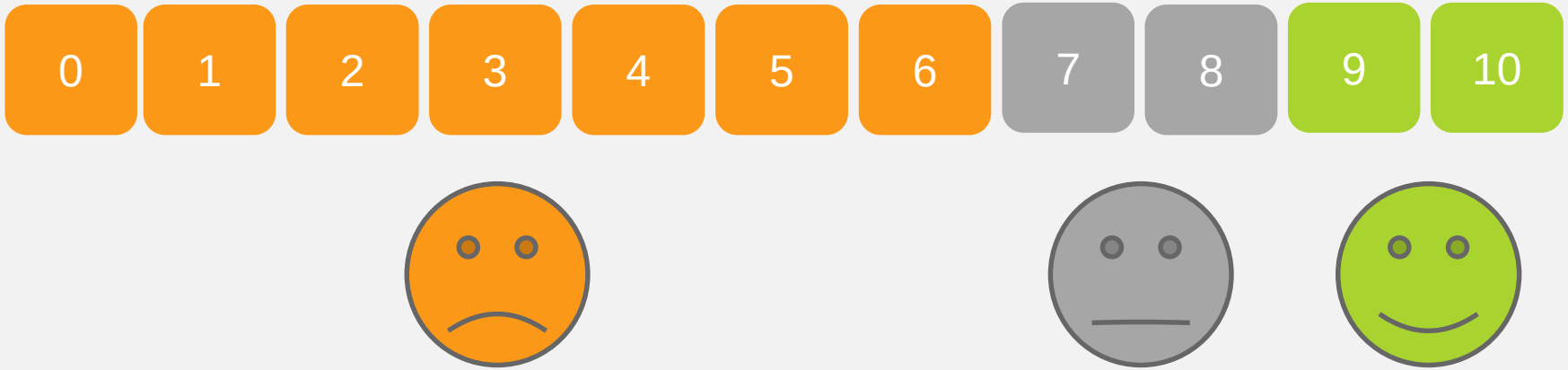
NPS® Leaders - N. America 2016	
Company	**NPS**
USAA	80
Costco	78
Nordstrom	75
Apple/iPhone	70
Amazon	69
Southwest	66

Calculation:

1. Send survey that asks "On a scale of 0 to 10, how likely is it you would recommend this company to a friend?"
2. Calculate the % of 10s and 9s (your promotors)
3. Calculate the % of 0s through 6s (your detractors)
4. Subtract the % detractors from promotors

Photo cred: www.promoter.io/blog

Net promoter score: A score between -100% and 100% that measures a customer's willingness to recommend your company's products or services to others. These people are your true brand ambassadors.



Customer analytics

Key takeaways:

1. Make sure to include all of the costs to acquire a customer (including salaries and overhead), not just the obvious costs (like PPC cost).
2. You MUST know how much it costs to acquire a customer and a customer's lifetime value. Otherwise, you'll never know if a campaign is worth it.
3. Your brand ambassadors are the cheapest way to acquire new customers (mainly because it's free!). Being customer-centric = Repeat transactions and greater loyalty = ↑ Customer lifetime value.

Revenue Analytics

Analytics measuring the cost/benefit of an acquired customer

Revenue analytics

Net profit: The actual profit your campaigns produced after excluding all expenses for the campaign.

Calculation: Revenue - Expenses

Example: As a result of a PPC campaign, 15 customers bought your “How to become a unicorn“ course for total revenue of $1,000. The PPC campaign cost you $600. The net profit would be $400 ($1,000 - $600)

Revenue analytics

Return on investment (ROI): Ultimately the most important metric. ROI measures the efficiency of an investment. Tells you which initiative is working and which is not. This lets you know how to allocate your budget. ROI should > 500%.

Calculation:

$$ROI = \frac{Revenue\ from\ initiative - Initiative\ expenses}{Initiative\ expenses}$$

Example: Using the last example, you had total revenue of $1,000 and expenses of $400.

ROI = ($1,000 - $400) ÷ $400 = 150%

Revenue analytics

Key takeaways:

1. ROI is the MOST important metric and should be calculated and presented whenever you pitch a new campaign or initiative.
2. ROI is pretty much the only marketing metric executives at your firm will care about.
3. ROI should be > 500% in order to cover the other costs at the company.