Intro
Questions – Who knows what it is? Who's doing it? (QA speak up)
Old methods of conversion analysis falling apart – Attribution getting more popular
Previously reserved for enterprises – making its way to SMB
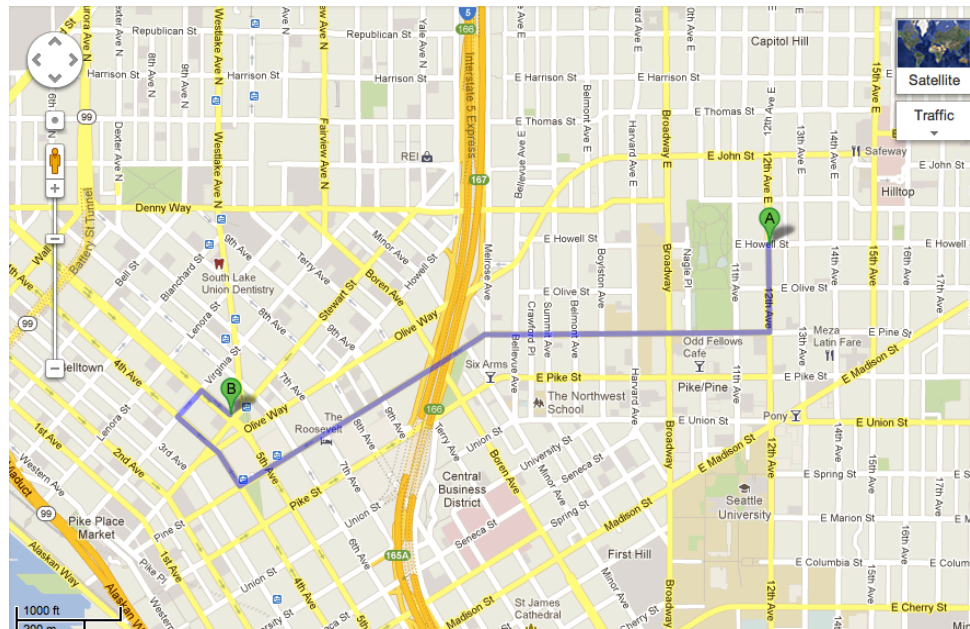
Cast Of Characters

http://bit.ly/excel-ninja

GA
Microsoft Excel (I wrote it)
Lead SEO – Do traditional SEO like link building and keyword research, but most interested in measurability, and using data to back business and strategy decisions

Came down the hill for this presentation
Moving soon, don't care that I'm broadcasting my home
I do live near Rand, and have a similar commute, which means that I get to see
Rand pop up as foursquare mayor everywhere along the way

And Introducing…

@SpaceTheShiba
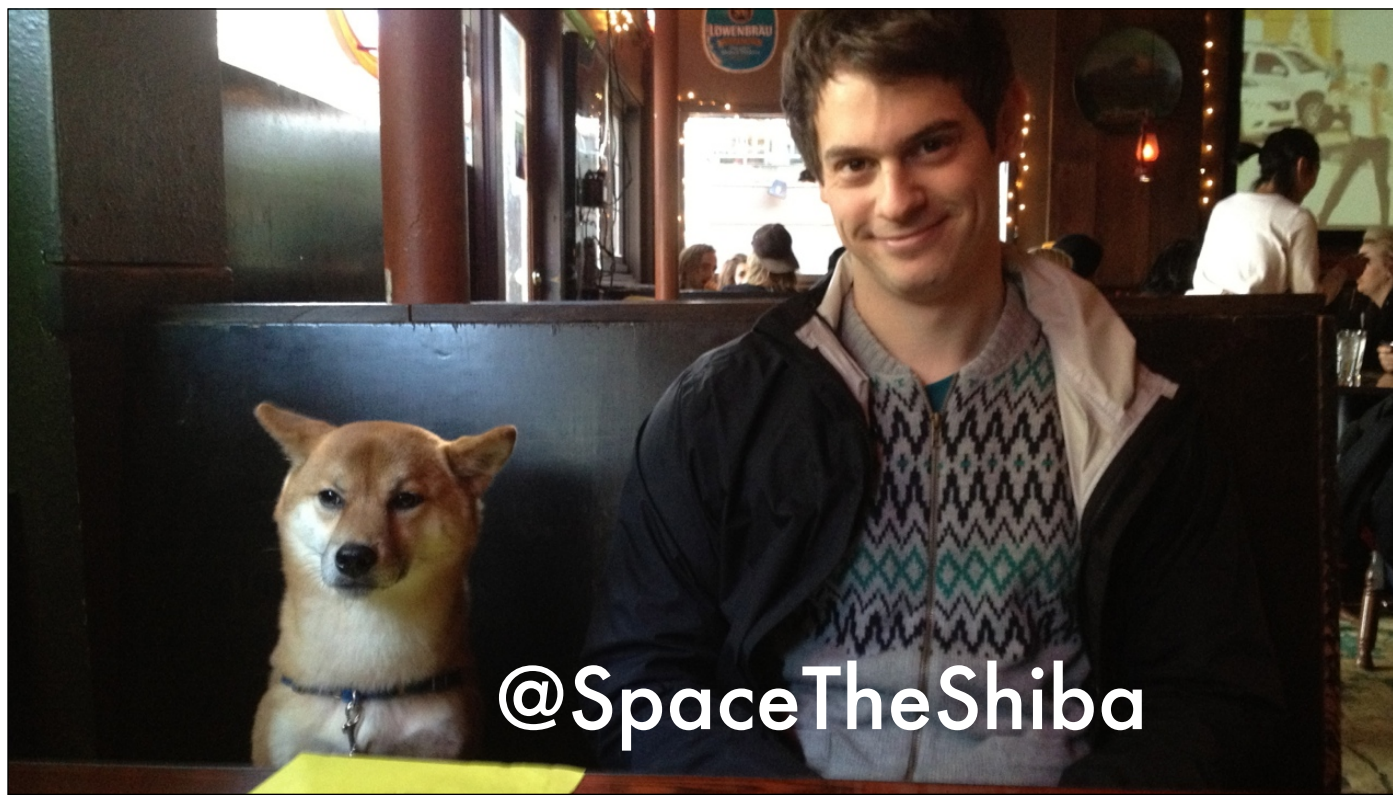
My dog Space.
I'm pretty much allergic to stock photography and feel like kittens are a bit overused. So instead of board room hand shakes and LoLCats, Space will pop up here and there.
Space is a Shiba Inu, a Japanese breed. He's three years old, and he's been doing SEO his whole life.
Yes, he looks like a fox.

Space works at Distilled too. If you can call this working. This couch has a fine layer of Space hair all over it.

@geoffkenyon

Every once in a while we wake him up to get some work done. Looks a little groggy here no?

He is good at what he does, though. Very driven. When clients come to us with seemingly unreasonable demands like ranking #1 for shoes, we put space on the job.

Space says, "just pump the swedish techno and keep my coffee cup full". 4 hours later, he's done.

He cannot be poached from Distilled. We offered him a lucrative treat-based set of bonuses in order to keep him from entertaining offers from other agencies.

Let's get into it.

We have to define AM, but to do so I'm not going to read off the definition from Wikipedia or Google.

Let's follow a conversion path

Instead let's follow a conversion path.

We'll take a specific conversion here, too. A $1500 SEOmoz conference ticket.

1

Referral from searchengineland.com

Search Engine Land.

First exposure to the SEOmoz site comes through a referral

Organic Search - "SEO conference"

Google™

Referral from Twitter

Direct

fire of 1,000 suns

(not provided)

Branded Organic Search - "seomoz conference"

Google™

Direct

SEOmoz

Purchase

Who Gets the Credit?

1 Referral from searchengineland.com
2 Organic Search - "SEO conference"
3 Referral from Twitter
4 Direct
5 Paid Advertisement
6 (not provided)
7 Branded Organic Search - "seomoz conference"
8 Direct

You can make the case for many of these.
Maybe you're a startup, and that first exposure is key
Maybe you're investing in SEO, and ranking for the nonbranded is a goal
Maybe you've got a company wide initiative to improve social presence

distilled

Who Gets the Credit?

1 Referral from searchengineland.com
2 Organic Search - "SEO conference"
3 Referral from Twitter
4 Direct
5 Paid Advertisement
6 (not provided)
7 **Branded Organic Search - "seomoz conference"**
8 Direct

That kinda sucks
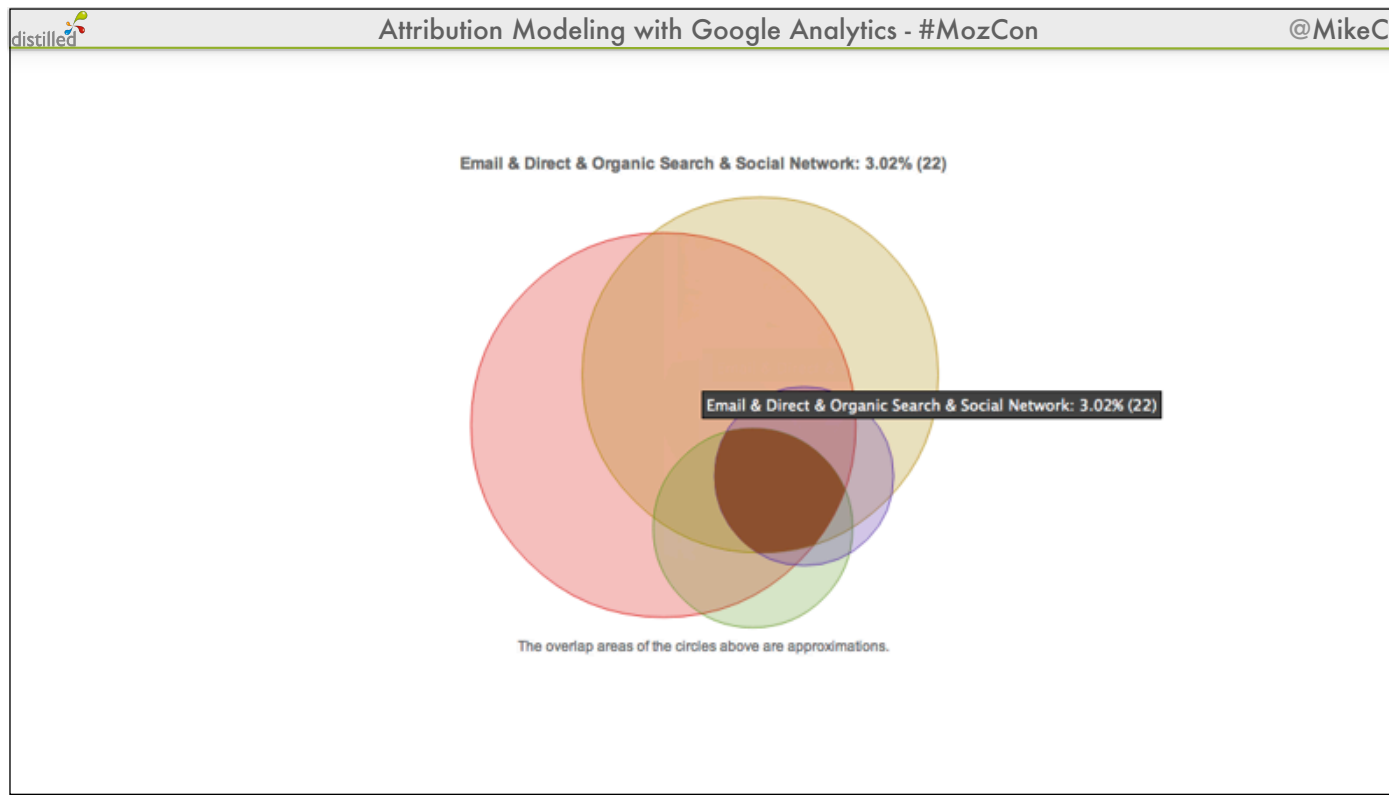
Screenshot from GA's MCF reports, but it demonstrates the significant overlap that takes place

It's a lot like this. Layers.

Attribution Modeling is about trying to solve this problem

Because, take that one conversion path, and multiply it by a lot. The customer journey is not linear. It basically never was, but we're just getting to a point where we can actually account for those touchpoints.
Only 14% of respondents to a recent survey by GA feel as though last-click is very effective, yet over 50% still use it. It's increasingly common at large organizations, but is trickling down into SMBs.

And it's not just confined to web analytics.

Even offline decisions.

True(r) ROI

The holy grail is the truest ROI. We're looking at a simplistic ROI measurement now with last click.
I want you to be the person responsible for out-strategizing and out-measuring your competition. I think this is how it's done.

Notice, trueR. Absolute perfection may be impossible. Why? Cause this shit is complex.

Why It's Hard

Cookies are serving as the primary key. The linker throughout the conversion path.
But cookies crumble.
clear them, Switch devices, Switch browsers, friends computer.
Not to mention: offline and non-clicking interactions:
WOM, brick & mortar, radio, TV, print, email impressions, RSS

Certainly not an excuse to give up!

We may never link these all together to model things perfectly. We'd need a new primary key. Something linked to our identity, and tracking all of our interactions throughout the day.

Primary Key
Sergey Brin

Brand impressions in last 30 days
1,301

Brand mentions in last 30 days
24

Purchases
1

This is a BIT tongue in cheek, but MAYBE its a reality in the future.
Imagine Google Glass providing all of this data as a paid service to businesses.
Tinfoil hat stuff, if you ask me, but I think it's worth thinking about.

Let's do some modeling

Tinfoil hat off, let's get into how measurement can be improved with AM.
This is Space's modeling pic.

$1,000

1. Organic
2. Direct
3. Social
4. Referral
5. Direct

Simple conversion path, selling a $1,000 item.

Last Non-Direct
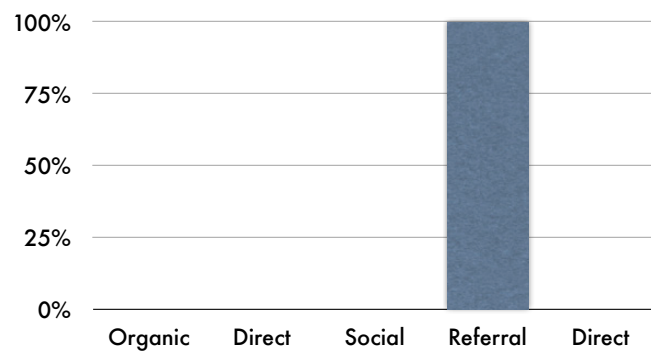
Last Non-Direct
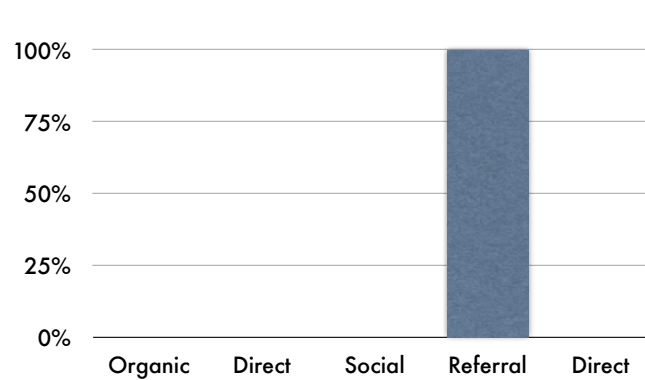
Organic $0

Direct $0

Social $0

Referral $1,000

Last Touch - The Closer
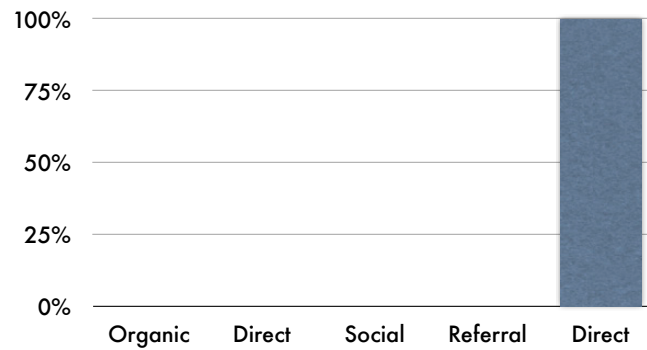
Last Touch - The Closer

Organic $0
Direct $1,000
Social $0
Referral $0
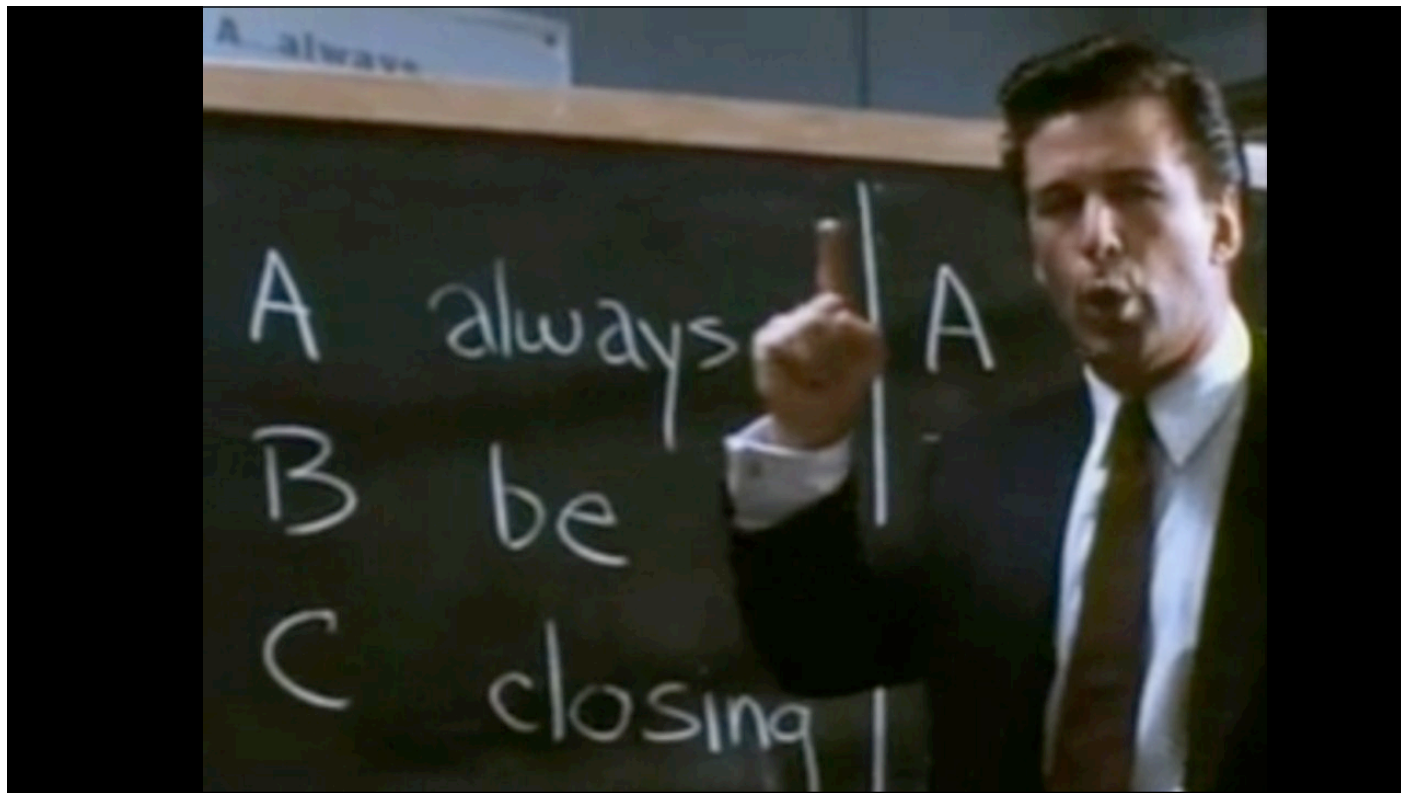
always be closing

First Touch - Like A Virgin

the opposite – Madonna

Organic gets $1,000. What does everyone else get?

set of steak knives
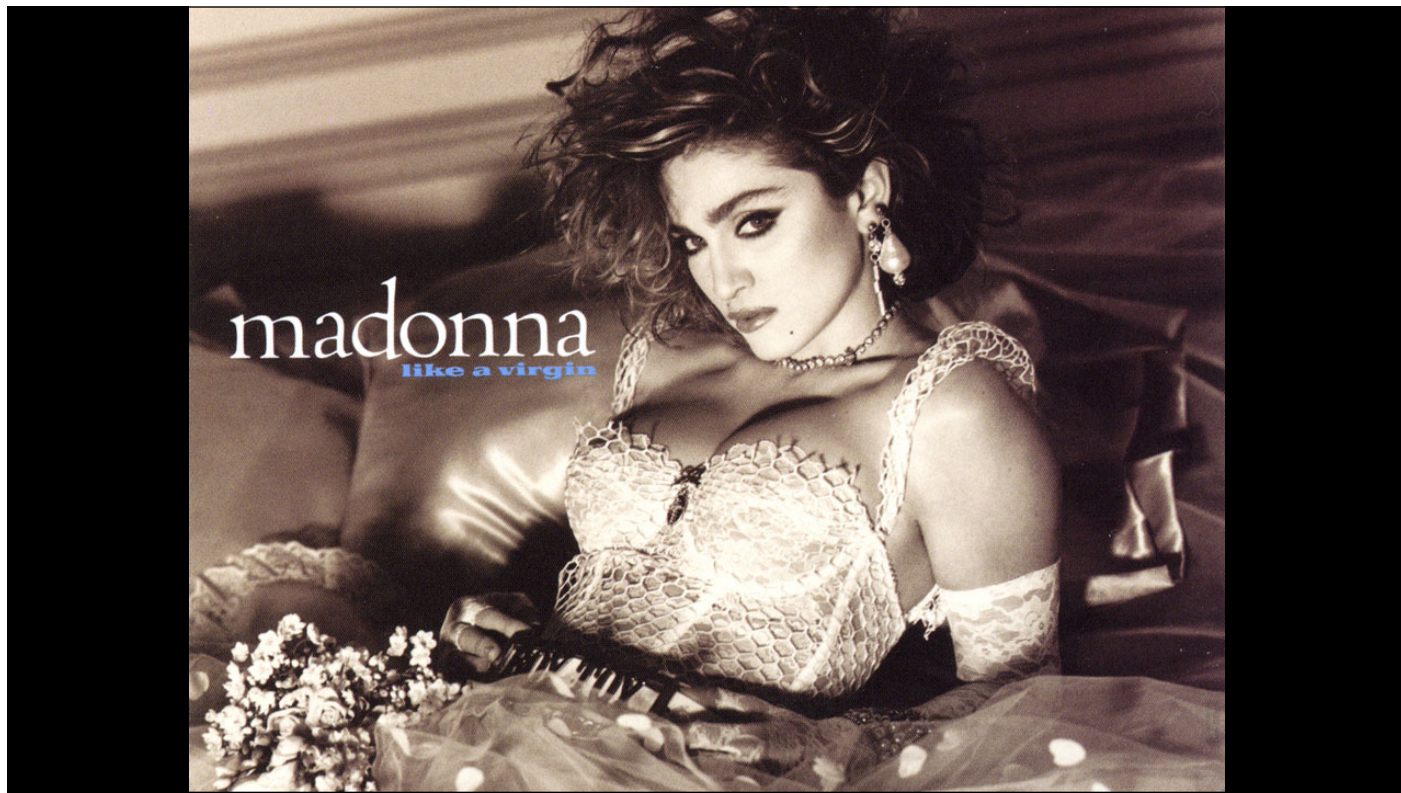
just kidding, here's madonna
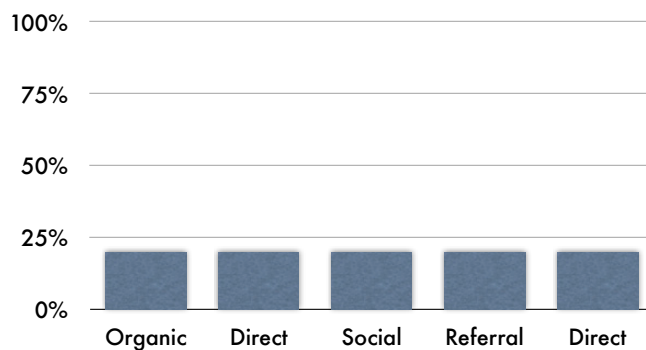
Distribution of revenue across all touchpoints evenly
Alternate name: socialist. I'm leaving politics out though.

Linear - The Oprah
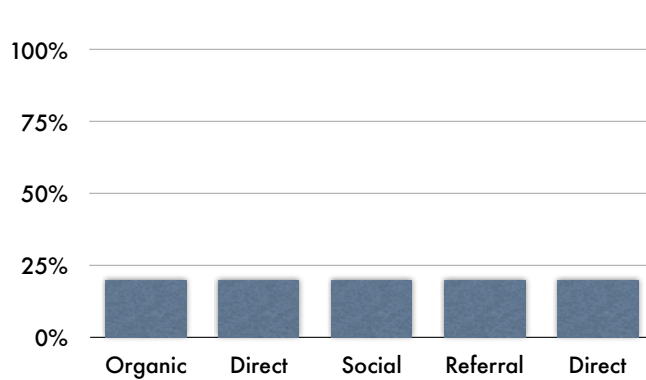
Organic $200
Direct $400
Social $200
Referral $200

Bees!

U-Curve - The Beavis and Butthead
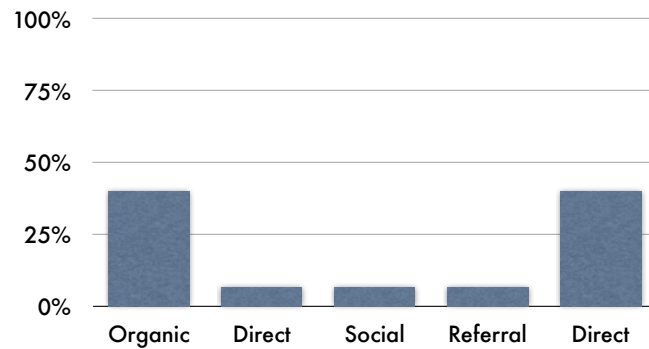
U-Curve or Position Based. Alternate name – the longhorn (for kate morris)

U-Curve - The Beavis and Butthead
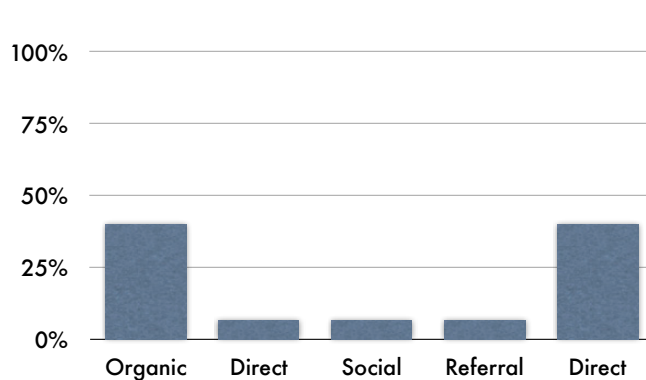
Organic $400
Direct $467
Social $67
Referral $67
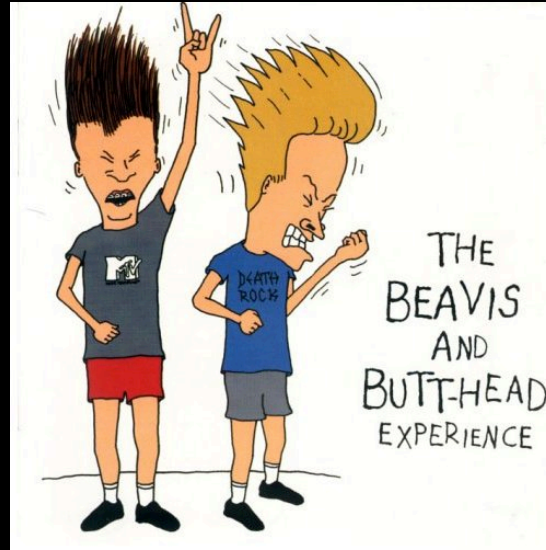
Butthead doing the internal sign for position based AM

Time Decay - Cell Phone Bars
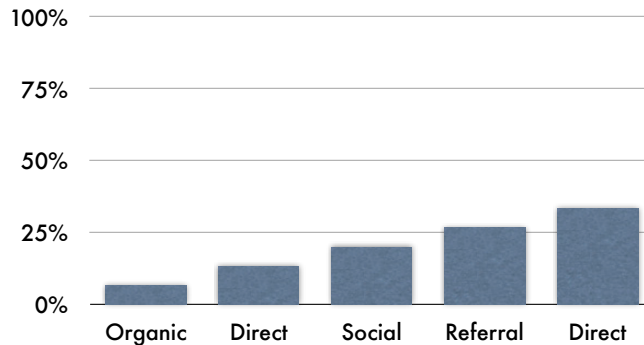
Call this the cell phone bars

In a time decay model, the events that occur close to the sale are given more credit according to a general rule (e.g., events within the last 7 days get +10pts) or formula (e.g., -10pts for each day before 24 hours prior to the sales event).
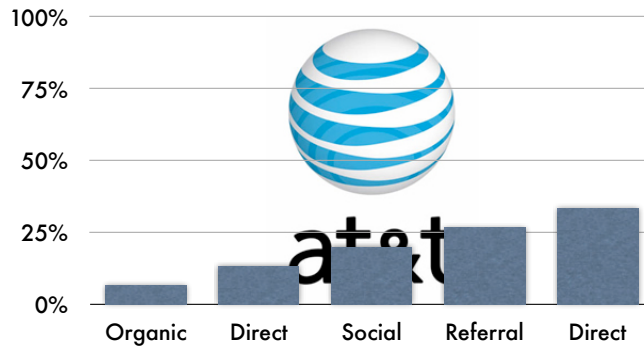
	Last Non-Direct	Last Touch	First Touch	Linear	U-Curve	Time Decay
Organic	$0	$0	$1,000	$200	$400	$67
Direct	$0	$1,000	$0	$400	$467	$467
Social	$0	$0	$0	$200	$67	$200
Referral	$1,000	$0	$0	$200	$67	$267

Sorry for the table, so I put a picture of sleepy space at the top

Take a look at how different this all breaks down according to our different models

Basic Channel Grouping	Value			% Change from Last Non-Direct Click	
	Last Non-Direct Click ↓	Time Decay	Position Based	Time Decay	Position Based
1. Direct	€3,459,962.15	€4,831,951.05	€4,757,171.67	39.65%	37.49%
2. Organic Search	€2,314,030.79	€1,357,980.24	€1,412,617.45	-41.32%	-38.95%
3. Email	€580,589.79	€395,867.30	€406,361.09	-31.82%	-30.01%
4. Referral	€294,339.83	€166,646.65	€176,413.58	-43.38%	-40.06%
5. Paid Search	€277,145.37	€242,174.28	€238,861.56	-12.62%	-13.81%
6. (Other)	€73,656.70	€34,240.25	€29,761.41	-53.51%	-59.59%
7. Social Network	€43,582.92	€18,936.34	€23,600.38	-56.55%	-45.85%
8. Display	€18,889.57	€14,400.94	€17,409.93	-23.76%	-7.83%

Screenshot from GA premium. Real numbers here. Look at how different our old method of attribution (last click) is to these more complex and more holistic models. See some 50%s!

Custom
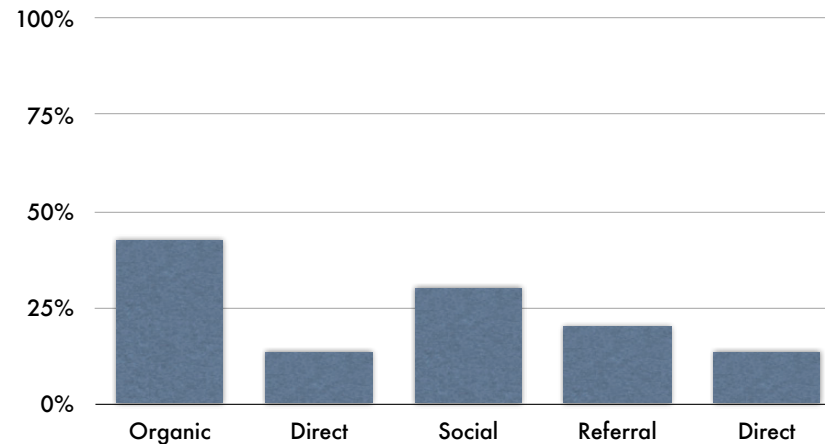
Lastly, many large organizations go custom on this. Maybe you want to take a baseline model that we mentioned before and discredit direct visits. Or there's a company-wide social push and we want to grant all social interactions 1.5x. Further, we could discredit channels that send a bounce visit. Lots to do here if you have the technology.

Theory over. Let's get to the DOING.

The First Step to Recovery

@rebeccabridge

First step to knowing you have an attribution modeling problem is this report:

Path Length Report

	Conversions			Conversion Value
	728			**$32,755.00**
	% of Total: 8.20% (8,873)			% of Total: 55.24% ($59,298.00)

Primary Dimension: Path Length in Interactions

Path Length in Interactions	Conversions	Conversion Value	Percentage of total — Conversions / Conversion Value
1	244	$16,248.50	33.52% / 49.61%
2	138	$6,923.00	18.96% / 21.14%
3	83	$1,622.50	11.40% / 4.95%
4	65	$2,727.00	8.93% / 8.33%
5	34	$60.00	4.67% / 0.18%
6	28	$2,407.00	3.85% / 7.35%
7	33	$1,209.00	4.53% / 3.69%
8	22	$100.00	3.02% / 0.31%
9	13	$40.00	1.79% / 0.12%
10	16	$20.00	2.20% / 0.06%
11	11	$1,109.00	1.51% / 3.39%
12+	41	$289.00	5.63% / 0.88%

If a massive amount of your conversions take place with only 1 interaction, you might not really have an attribution problem. That's cause your conversion paths aren't getting very complex. This is likely very rare, but could happen.
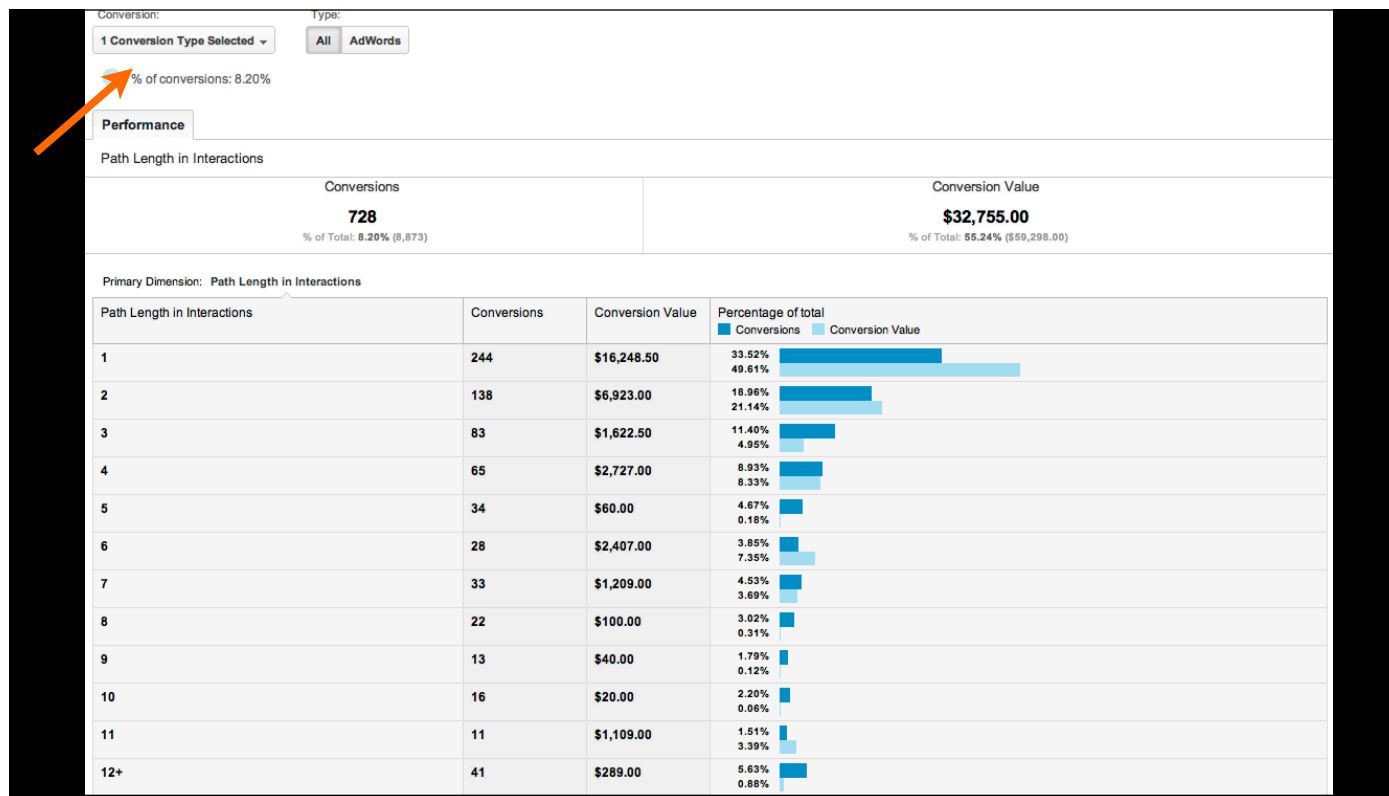
One caveat: If you're looking at this report, which you must do, make sure you've selected a conversion with monetary value. Non-value conversions will muck up our data. eComm transactions are the obvious best choice, but contact forms with goal values are fine.

Like Advanced Segments - But Awesomer

Perhaps you want to segment the conversions. This tool is like advanced segments, only conversion focused. So we can look at conversions that are more than $500 and learn quite a bit from our reports

This ratio is pretty awesome once you have an understanding of what it means.

A ratio of 0 is at the bottom of the funnel – These are strictly closers and aren't assisting at all. Alec Baldwin would like them.
A ratio of 1 means that channel acted as equal parts assister and closer
And the further you get from 1 the more it was in the assist role. Social obviously with a high number there. Strictly assisting, basically.

Top Conversion Paths

	Basic Channel Grouping Path	Conversions ↓	Conversion Value
1.	Direct Direct	263	$596.00
2.	Email Email	213	$108.00
3.	Direct Direct Direct	117	$568.00
4.	Referral Direct	111	$562.00
5.	Organic Search Direct	109	$626.00
6.	Referral Referral	86	$508.00
7.	Direct Email	84	$1,203.00
8.	Organic Search Organic Search	83	$508.00
9.	Social Network Direct	83	$76.00

This is a pretty report, but it's not actionable. You might be able to impress people with it, but you're not changing anyhting.

I get yelled at by Space if I spend too much time looking at this report

Go ~~Costume~~ Custom!

I must encourage you to go custom

Set up custom channel groupings. The basic ones are okay, but you'll get so much more out of these reports and the tool I'll be releasing later if you familiarize yourself with this.

Here's what we do at Distilled. You'll notice we've broken out referrals from SEOmoz since there's a lot of back and forth between our sites. Affiliate links are being properly tracked. And I want to highlight the next three.
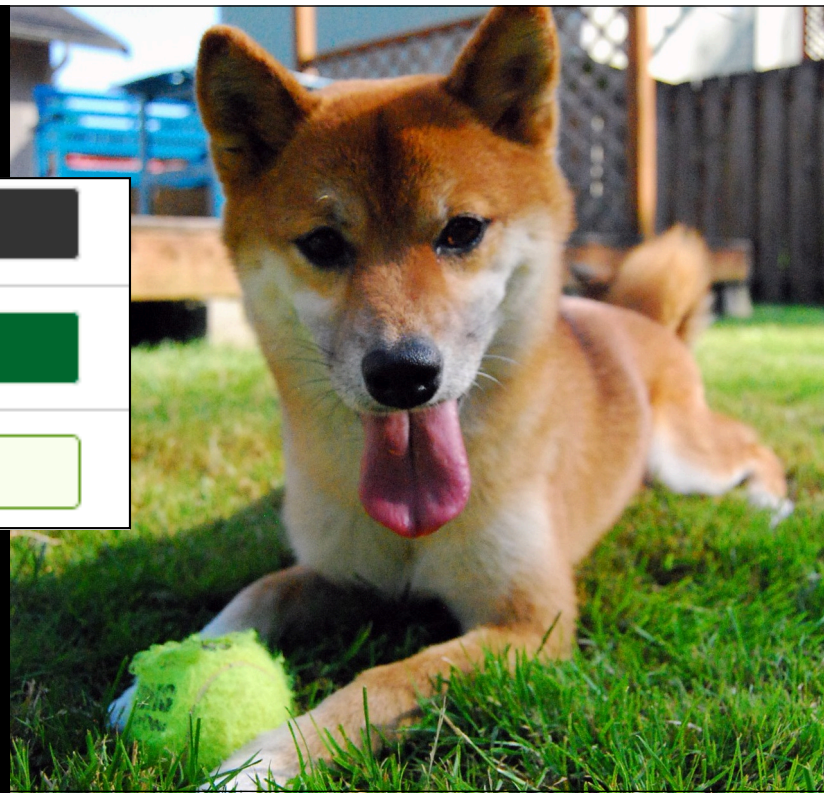
they make space happy. DO THIS! Should be doing it in your regular reports too, but it's awesome in MCF as well.

Primary reason: You may find that your non-branded organic search terms are performing even better than you had thought, warranting more time and money investment in the channel.

Briefly about GA Premium. GA Premium has a built in AM tool, which is nice.
It's the logical next step on top of MCF.
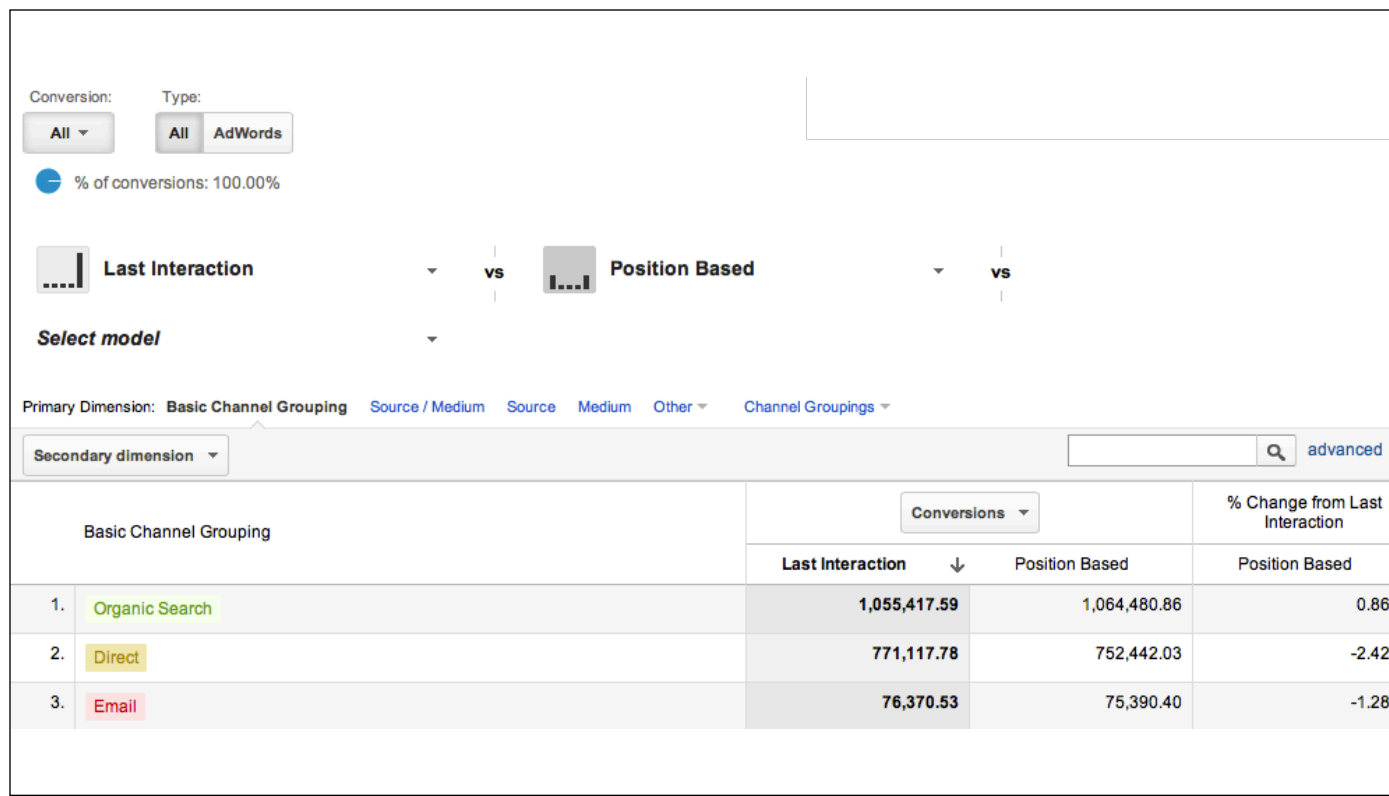
It looks like this, and it allows for on-the-fly modeling switches, as well as some nice custom model options. If you have GA Premium, mess around with this tool, you'll learn a lot.
If not...

Tool Time!

TOOLTIME!

I must say that I originally intended for this slide to have a transition much akin to home improvement's transitions. I was gonna have a hammer knocking the slide down to reveal the next. Then when I realized 2 hours had passed, I gave up.

Anyway.

When Space wasn't looking I started doing something that he would've yelled at me about.

Basic Channel Grouping Path	Conversions ↓	Conversion Value
1. Direct > Direct	263	$596.00
2. Email > Email	213	$108.00
3. Direct > Direct > Direct	117	$568.00
4. Referral > Direct	111	$562.00
5. Organic Search > Direct	109	$626.00
6. Referral > Referral	86	$508.00
7. Direct > Email	84	$1,203.00
8. Organic Search > Organic Search	83	$508.00
9. Social Network > Direct	83	$76.00

I got to thinking about this conversion path report that we previously deemed a bit shit. If we can make it list out every path to a conversion, couldn't we then export and do our own attribution calculations in Excel?
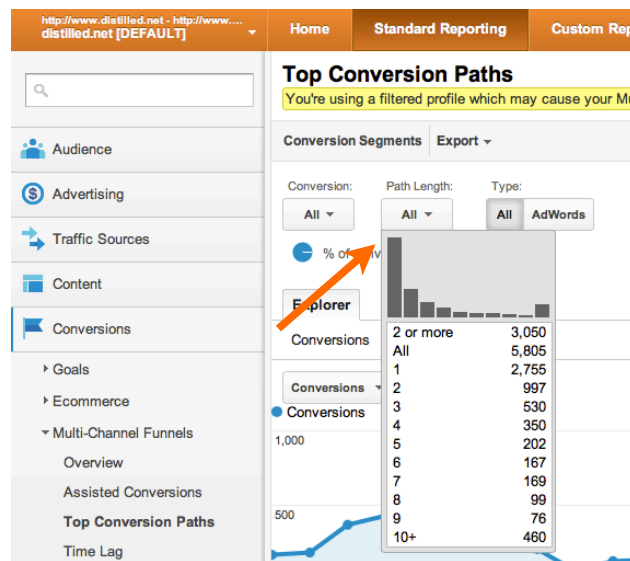
The answer is yes.

bit.ly/mozmodeling

So here's the Excel tool. I'll briefly walk through how it works, but the instructions are also in the file.

Step 1

bit.ly/mozmodeling

Step 2 & 3

Step 4

Primary Dimension: **Basic Channel Grouping Path**   Source/Medium Path   Source Path   Medium Path   Other ▾   Channel Groupings ▲

Secondary dimension ▾

| Distilled Channels edit copy |
| Long-Tail Measurement edit copy |
| Create a custom Channel Grouping... |
| Copy Basic Channel Grouping template... |

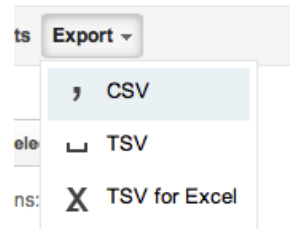Basic Channel Grouping Path

1.   Email

Optional, But Highly Recommended!!

bit.ly/mozmodeling

Step 5 & 6

bit.ly/mozmodeling

Voila!

A54		f_x			
A	B	C	D	E	F
	Linear	Last Touch	First Touch	Time Decay	Position Based
TOTALS	317,576.90	317,576.90	317,576.90	317,576.90	317,576.90
Direct	138,889.97	152,421.50	120,359.50	142,272.57	137,495.79
Stupid (not provided)	43,801.28	37,312.00	49,635.50	42,025.07	43,581.18
Branded Organic Search	44,717.40	47,230.90	45,869.90	44,354.08	45,860.70
Email	33,852.48	30,930.00	33,621.00	34,294.34	32,683.39
SEOmoz	23,954.20	37,114.00	16,787.00	27,505.39	25,767.14
Referral	11,584.61	4,152.00	19,863.50	9,762.91	11,940.56
Social Network	16,093.77	5,827.00	24,773.50	13,378.45	15,630.12
Non-Branded Organic	3,037.55	1,491.50	4,091.00	2,317.12	2,738.32
Affiliates	649.66	0.00	1,897.00	435.90	978.40

bit.ly/mozmodeling

largely dummy data to protect the innocent but somethings are obvious:
non-branded organic is hurting (need to create more conversion-focused content?)
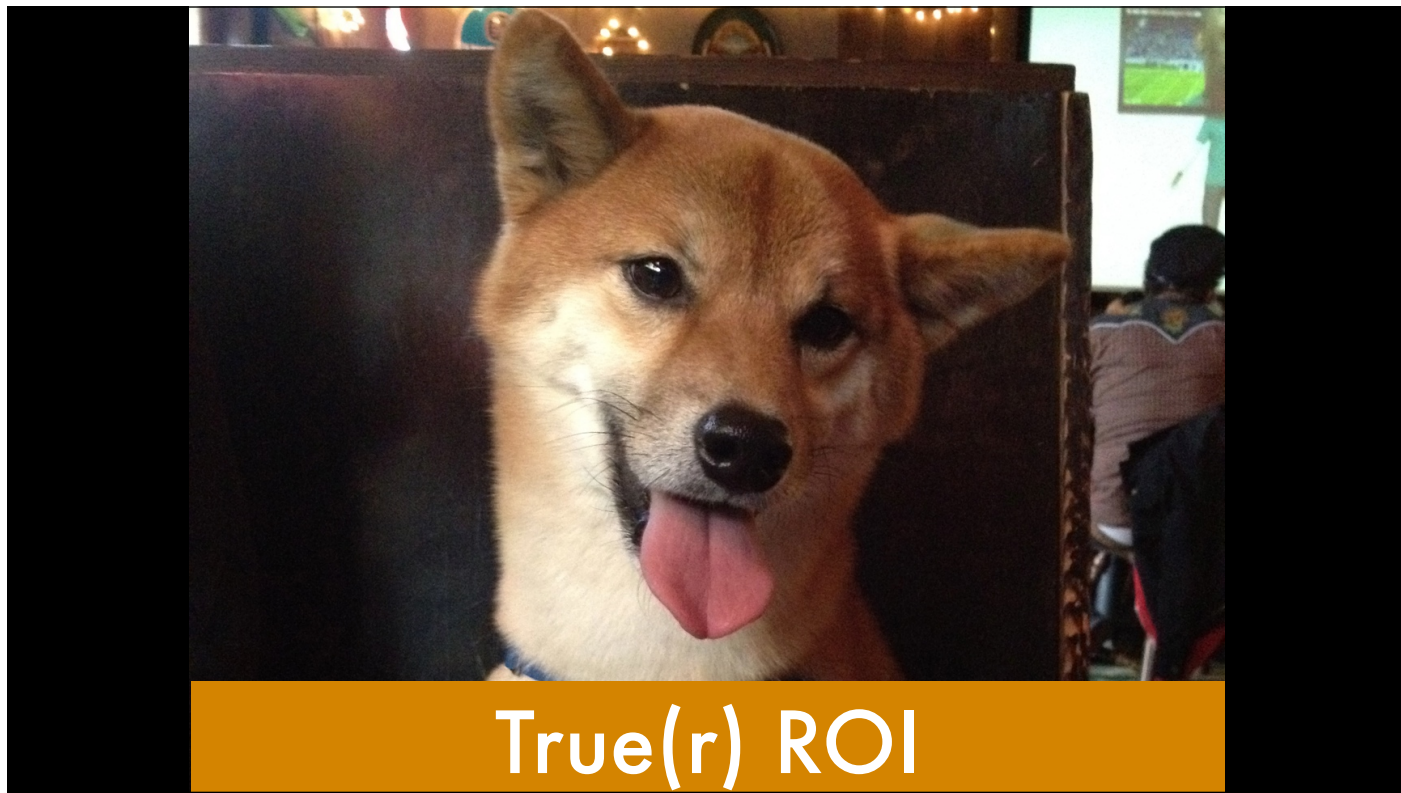social perhaps deserves more credit
Email is performing
and not provided can still go burn in hell

Shortcomings

30 days
political
untracked impressions
offline

but

True(r) ROI

Benefit is a truer sense of ROI. Way better than what we've been using.

Take things a step further:

Do Some Mini-Modeling

channel specific deep dives

Let's look at the interplay between your high and low funnel campaigns. Yeah, your generic keywords are often the most expensive, and the ROI can be hard to justify. But what if it deserves more credit as the exposer? Or the user is clicking a generic ad, then clicking a deeper page ad and converting.

Do something like this and you'll get a nice view like this (again maybe not so actionable)

	Linear	Last Touch	First Touch	Time Decay	Position Based	Last Non-Direct
TOTALS	357,621.98	357,621.98	357,621.98	357,621.98	357,621.98	357,621.98
Product Category	96,556.05	77,310.49	124,706.85	87,195.77	99,176.70	77,310.49
Mini-Store	19,915.00	17,064.75	23,094.34	18,920.18	19,968.58	17,064.75
Brand	73,865.38	79,112.03	69,370.36	77,369.48	74,553.74	79,112.03
Manufacturer Brand Names	60,371.53	43,002.90	72,832.94	55,093.61	59,239.98	43,002.90
(none)	71,811.22	109,955.65	23,675.20	86,527.58	68,387.77	109,955.65
organic	29,180.07	27,492.16	35,507.20	27,040.59	30,327.58	27,492.16
General High Funnel	3,922.56	1,653.92	7,153.91	2,830.51	4,269.30	1,653.92
referral	2,000.17	2,030.08	1,281.18	2,644.27	1,698.32	2,030.08

But drop it into the tool, and things can change quite a bit. Look at "general high funnel"'s first-touch vs last-touch numbers. Very revealing.

Perhaps you have keywords you've been targeting with SEO efforts, but are disappointed to see conversions from those keywords aren't flowing in. Perhaps they're operating in an assist role, primarily, and deserve more credit.

Or how about the interplay between keyword length. Some regex and we'll have data on that.

Or perhaps you do more detailed referral analysis. Maybe you're adjusting the way you approach partnerships.

Smarter Budget Allocation

I'll start to wrap up, but AM allows for smarter budget allocation. Truer ROI will help you justify spending. And most often it's about confidence, too.

Figure 6: Primary Impact of Attribution on Digital Spending

Source: http://bit.ly/O0I7gd
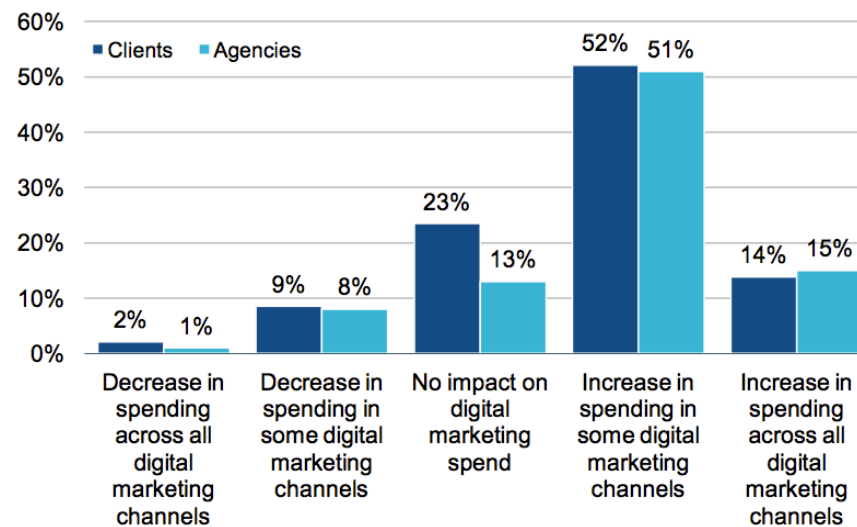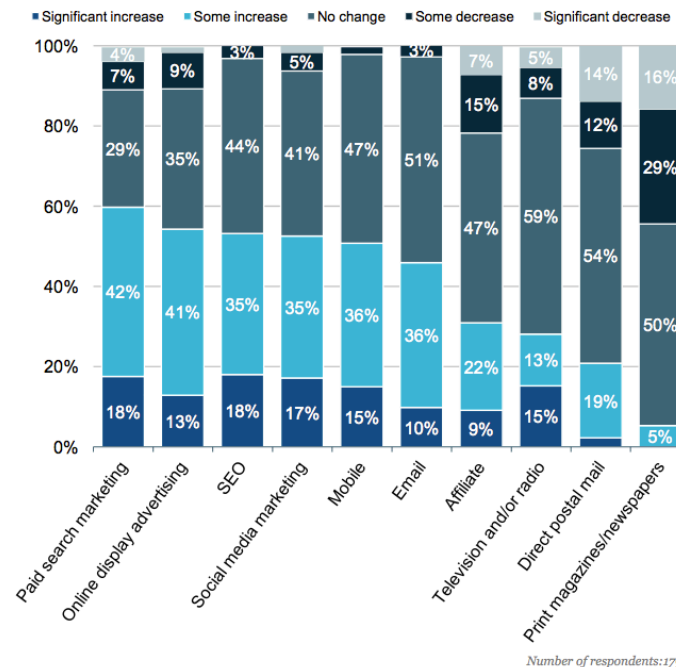
This study shows by eConsultancy and GA showed respondents largely increasing spends as a result of AM. They can more accurately detect, have the confidence to invest, and do so.

Smarter Decision Making

With AM we can make smarter decisions.

Figure 7: Changes to Channel Investments Resulting from Attribution

I don't think anyone here will disagree that this is a smarter decision: Companies investing more in SEO, Paid Search, Social, and less in old media, print, direct mail.

Smarter Online Marketing

With AM, you can't discount what an understanding of the whole picture will grant you. Even if you're just an SEO. Or just social. Knowing how the whole business makes money can help you internally significantly. Whether you want to move up to management, make more money, increase budget in your channel, etc.

Now Go Play!

@aaron_wheeler

Now please, go play. My tool's not perfect, but I think just getting a primer in this sort of thing will open some eyes. Take the next step to understanding conversions even better. Develop your own models and opinions on this. I'd love to hear your findings.

Photo Credits: Jacob Henry (@kleinja) and Rebecca Bridge (@rebeccabridge)

HAVE FUN!