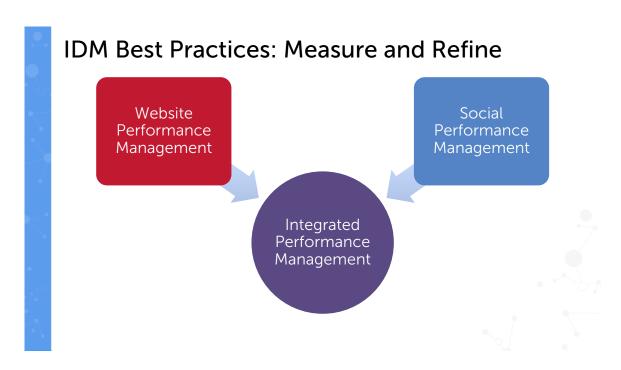


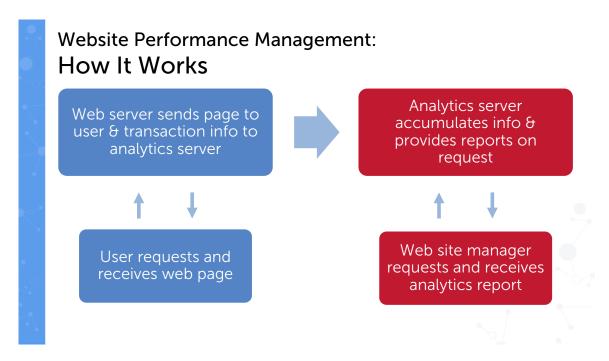
# Data Science and Strategic Decision-Making

Lesson 11 Introduction
Strategy: Measure and Refine



Welcome to week 11. This week we're focusing on chapter 10, Measure and Refine. And measure and refine, of course, we mean that we need to measure performance and then use those measurements, depending on what they are, to refine our actions.

Focus is on two areas, website performance management and social performance management. And both of those need to be working, need to be hitting on all cylinders for the integrated performance management, which is simply the mixture of the two to be where we need it to be.



All right. So let's start out by taking a look at website performance management, and actually, take a look at how it works, to get started. What happens is if a user, somebody out on the internet, requests a web page. In other words, they enter the address, click on a link, something of that nature, and they end up on one of your website's pages.

Then the web server, your web server, actually sends the page back out to the user. But at the same time, if you're set up for analytics of course, the transaction information is also sent to an analytic server. So it's quite often a server that's run by a service that you're subscribing to but it could be a server that you operate yourself, depending on the type of analytics software you're using.

But your web server does send a page-- or does send information over to the analytic server on each of these requests from users. So the user requests, an analytic bit of information gets sent to the analytic server, and the page gets sent back to the user. Now over on the server side, the analytic server side, you've got this information that's been accumulated by the software so that you can later pull reports from this. So you're creating a database basically is what's happening.

And then on that side, the website manager or somebody else who has access to it can simply request and receive analytics reports that come down from the analytic server and the software that's being run on that server. So the input there is the request for some sort of report or information. And what comes back is basically all the data reformatted, tabulated into a usable format for decision making.

#### Website Performance Management

## Popular Benchmarks

- Unique Visitor Traffic
- Repeat Visitors
- Direct Traffic
- Inbound Links
- Organic Traffic
- Landing Page Conversion
- Bounce Rate
- Keyword Performance
- Organic Search Conversion Rates



OK. Well let's take a look at some popular benchmarks in terms of website performance. The first is unique visitor traffic, and that's simply the number of visitors your website receives during a particular period of time without double counting. So if a person visits five times in a month that's one unique visitor. Repeat visitors, you're counting people who have come back more than once, and that was an indicator that your website has something interesting enough for them to return to.

Direct traffic are visitors who have most likely typed in your address and gone to your website directly. It's possible they might have come from a bookmark on their computer or something like that as well. Inbound links have come from another website where somebody has clicked on a link to your site that that other site has provided. And that's an indication, if you've got a healthy amount of inbound links, is that your content is providing the bait that the other sites, or blogs, or whoever it is, to provide to their users. In their judgement, you're providing good information that they want to pass along to your users. That's a good sign as far as what your content is.

Organic traffic was-- it's traffic that was generated by people doing a search and then clicking on the search results, not the paid results but the organic search results. So that's a good sign that you're showing up under the appropriate keywords in search engines. And the listing that's shown on the search engine is high enough and interesting enough that it's actually attracting traffic. So that's a fairly good indicator that you're doing a good job if you've got healthy organic traffic.

Landing page conversion. It means that how many times have somebody come in on a landing page and then actually converted. By converted I mean, do whatever it is was intended for that web page, whether it was to put something in a shopping cart, or whether it was to request a free copy of a white paper, or whatever the goal of your landing page was.

Bounce rate measures how many people just come into your site and then pretty much immediately leave. They don't go explore other pages. They go in, the first page they see, it turns out it's not particularly interesting to them and they leave.

So the bounce rate is something that you'd want to watch out for. Means either you're not providing the kind of content that the inbound traffic is looking for. Or it could be that your inbound traffic is coming maybe from an inappropriate place and it's not really useful traffic. It could mean a number of things. But you'd definitely want to explore if your bounce rate gets higher than would be normal for your type of site in your industry.

In terms of keyword performance, it is simply analyzing what sort of keywords that are working for you. And all of that of course, allows you to adjust your keyboard strategy. Organic search conversion rates. That's simply taking a look at the people that have come in from clicking on the organic search results and seeing what kind of conversion rate those folks have.

So that's a good indicator of the overall success really of your website because that's really what you want it to do is to convert once people get there. So you're getting people that have searched for it. They didn't necessarily know you even existed. And then once they land there you've managed-- your website has managed to convert them to get them to buy or to request information, or whatever it is your site is intended to do.

# Management

## Website Performance Other Benchmarks

#### **Useful Metrics**

- Page Views (Hits)
- Visits
- Visitors
- Time on Page
- Entry
- Exit

#### Calculated Metrics

- Average Page Depth
- Average Visit Duration
- Site Bounce Rate
- Page Bounce rate
- Exit Rate
- Unique Page Views
- Unique Visitors

Analytics packages can also be set up to calculate customized metrics

Now there are other benchmarks, and these aren't covered in the book. You may be familiar with many or even all of them. Some other things that get used quite a bit of course, are page views or hits, as they're typically referred to, just the total number of visits or the total number of visitors. And then, how long people stay on a particular page can be quite useful, whether they're just glancing at it and moving on or whether they're sitting there and using a lot of information can tell you a lot about the information you're providing there and whether it's being useful to people.

And then also, how many people enter on a particular page and how many people exit your site on a particular page can help you out as well. There's also calculated metrics. There's a list here of ones that would typically be provided in a analytics package but a lot of the packages would also allow you to set up customized metrics. So you can calculate metrics based on the data that's been collected.



# Website Performance Measuring Services Management

#### Free Measuring Services

Can measure website traffic, conversion rates, bounce rates, visitor demographics, etc.

- Google Analytics
- Bing Webmaster Tools
- Free versions of some paid services for low volume sites

#### **Paid Measuring Services**

Offer further insight into website data. Examples:

- Clicky
- Piwik
- KISSmetrics
- MixPanel
- Woopra
- TrueSocial Metrics
- FoxMetrics
- GoSquared

Now in terms of tools that can help you out with all of this, the book divides them, basically categorizes them as either free measuring services or paid measuring services. That's not completely -- it's not a completely clear cut division between the two because a lot of the paid measuring services offer free versions for sites that have lower volumes and things of that nature. Sort of getting you hooked on them when you're a small site so that you'll continue with them on a large site is their marketing strategy.

So, it's hard to say completely that you've got free and paid. But over on the free side, of course, Google Analytics is the 900-pound gorilla of this particular market segment, something in the range of about 50% market share. You've also got Bing Webmaster Tools. And then the free versions of some of these paid things that I just referred to.

There are a number of these sorts of services that are mentioned in the book that since the book was published have been bought or merged and those sorts of things. The ones on the slides are a little more recent.

Over on the paid side, the ones that are still up and running as of when this slide was built, you can see the list there. You got to give them credit for some pretty creative names. But they're all worth a look if you're in the position of trying to decide which analytics tool to go. A lot of them have certain areas where they're particularly useful and areas where they're weak. So it's one of those things where you've got to find one that's the right fit for whatever kind of project you're working on.

# Social Performance Popular Metrics Management

- Channel Reports
- Customer Response Rates
- Customer Service Savings
- Audience Growth Rate
- Average Engagement rate
  - Social Search
  - EdgeRank



All right now, on the social media side, where we're talking about social performance management, there are also some popular metrics. And the book talks about the channel reports so you know which channels or which social media are doing well for you. Customer response rates, in other words, what percentage of people who've posted or taken whatever action is in a particular channel that your staff have gotten back to.

Customer service savings is something that in the text that appears to be simply incorrect in the text. What they're illustrating, if you take a look, is really the cost of providing the customer service via the social channels. And if you wanted to calculate customer service savings then you'd need to know what the cost to serve that number of people would have been in a typical customer service setting. And frankly, a better measure probably would be the ROI of your social customer service efforts.

And then, others that they talk about are audience growth rate. It's important to know how big your audience is but it's also important to know how fast it's growing. And that's what the growth rate, of course, would tell you.

And then lastly, they talk about average engagement rate. And this is where basically you're comparing the engagement generated by your activity with your overall followers is probably the best way to describe it. And they note that there's some good things that happen when you're able to keep this high.

First of all, in terms of search engines, a higher rate can actually boost your performance in search engines. And then it also notes, under the EdgeRank title there, that what happens in Facebook. And really the game there is to keep your posts or your information active so it doesn't fall off quickly. And that's something that the engagement rate can certainly help you with.

# Social Performance Monitoring

Find out how and where people are saying about your brand.

- Track keywords and phrases used to find your website/landing pages
- Monitor keywords and phrases used by others in online discussions and social venues
- Aggregate social data and analyze it based on sentiment, tone and response required

Now a big part of social performance is monitoring what's going on out there in the social media world. And first, you really need to find out how and where people are talking about your brand and what they're saying about your brand. So that would involve tracking keywords and phrases that people use to find your website, your landing pages.

It also involves monitoring keywords and phrases used by others out there in social media. So you're actually scanning, or you're software scanning various social media sites and looking in the discussions and the posts or whatever it is in a particular channel, looking for keywords and phrases. And then you would also need a way to aggregate all this social data and analyze it. And particularly if, as the third point here discusses, talk about can you determine the sentiment, the tone, what kind of response you might need, that sort of thing.

And that's where some of the software can come in handy, where it can actually analyze the context of how a particular keyword or something is used and determine what kind of comments are being made. That's important simply because, of course, the volume of information that's out there.

#### Social Performance Management

## **Monitoring Services**

- Alerts
- Social Mentions
  - SocialMention
  - Mention
- Multifunctional Dashboards
  - Hootsuite
  - Buffer



So the book talks about three types of monitoring services that can look at all this information and be your eyes and ears out in social media. And the first are alerts. So they basically would give you, real quickly, information on web pages or other social media venues, I guess, where there's the keywords and things of that nature are popping up.

Then you've also got social mentions. So this adds another dimension really to your monitoring of online and social. And what's happening there is they're going to take a look at the various platforms and actually do a little bit of sentiment analysis, and provide some sort of alert service based on that.

Now a couple of services, actual services that are out there, one is called SocialMention, the other is Mention. And it might be worth a look at those if you want to get a little further information on this particular facet of monitoring.

And then there's also the multifunctional dashboards. Hootsuite's probably the best known. Another one out there is Buffer. But these tend to combine a lot of different things into a dashboard. And I think we all know what dashboards are. So you've got a control center for you for your efforts.

#### Social Performance Management

## Insights and Social Media Management

- Social Insights
  - Simply Measured
- Social Media Management
  - Listening/monitoring
  - · Sentiment analysis
  - Customer support
  - Publishing/engagement
  - Campaigns/content
  - Promotions (sweepstakes/contests)
  - Curation

#### Tools include:

- Social Studio
- Sprinklr
- Sprout Social
- Spredfast

Now in terms of tools available for social performance management, the book has a couple that are—a couple of categories, I guess, that are listed here. One is social insights. And this can come from the individual tools that each of the social media platforms, or most of the social media platforms provide. And the book also notes that a tool called Social Insights is one way, one popular way where you can combine the monitoring and the gaining of these insights into multiple social media platforms.

Then the other tool category they talk about is social media management. And this is—basically, it allows people to manage all their social media activities. Really, for companies to do this.

So there's a bunch of these that might provide a lot of functions across a lot of the social media platforms. But I think at this point, there's some companies that haven't found the right tool. It's one of those things that I guess the best way to put it is it's sort of evolving.

But regardless of the particular services a tool provides across different platforms or in certain platforms where it's applicable, the book provides a nice shopping list there at the bottom of page 192. So listening and monitoring, sentiment analysis, the customer support functions that end up making things much more efficient if you've got a team of customer service people monitoring and then responding and so forth.

And then also being able to actually publish yourself in the various social media and increase engagement. And then also to be able to create and track campaigns and the content that's in those campaigns. And then if you want to pull off different promotions, and they suggest sweepstakes and contests as an example.

And then finally, curation, social media curation. So being able to separate the wheat from the chaff as you're monitoring and analyzing things. Now there's some tools out there that can do this sort of stuff, Social Studio, Sprinklr, Sprout Social, Spredfast. Fast. And there has been a slight change in those tools since the book was published.

### **Integrated Performance Systems**

- aka Marketing Automation Software
- Required for IDM Strategy
- Offer in-depth marketing analytics through a single platform
- Popular brands include:
  - HubSpot
  - Marketo
  - Oracle Eloqua
  - Lyris

And then finally, the last topic is integrated performance management. So if you remember, at the beginning we talked about website performance and social performance coming together and being known as integrated performance or integrated performance management. Now sometimes this is also known as marketing automation software, the tools that are used to provide integrated performance management.

And you really do need something like this if you're going to pull off a successful IDM strategy. Because you need them to really get the in-depth analysis that— the in-depth analysis you need across all the platforms to be able to pull off your strategy. Now, there's, again, there's been some name changes and purchases and mergers, and so forth, since the book was published.

But as of the date of this presentation the popular brands out there are HubSpot, and then what I call a Marketo. I don't know, logically it would be Marketo but I've heard it both ways. Eloqua, I think since the book was published, has come into the Oracle fold. And then Lyris, who's been purchased. But there seems to be a little bit of ambiguity as to exactly what the brand means and all that sort of thing nowadays. But the Lyris brand seems to still be out there.

But these are ever changing, of course. But if you're serious about integrated performance management these are the kinds of products that you're going to probably need to take a look at to get where you need to go. And with that,

that's the end of the chapter. And we'll come back next week with chapter 11 as we move on to a whole new section of the book.