THE

# SCIENCE

OF

# MARKETING



WHEN TO TWEET, WHAT TO POST,
HOW TO BLOG, AND OTHER
PROVEN STRATEGIES

## DAN ZARRELLA

WILEY

THE

## SCIENCE

OF

## MARKETING

WHEN TO TWEET, WHAT TO POST,
HOW TO BLOG, AND OTHER
PROVEN STRATEGIES

DAN ZARRELLA

WILEY



# HUBSPOT'S ALL-IN-ONE MARKETING SOFTWARE

HubSpot brings your whole marketing world together in one, powerful, integrated system.

- √ Get Found: Help prospects find you online
- ✓ Convert: Nurture your leads and drive conversions
- ✓ Analyze: Measure and improve your marketing.
- / More: See marketplace for apps and integrations













Request A Demo

Video Overview



## **Contents**

Acknowledg	ix	
	Introduction	1
Part I	Content	7
Chapter 1	E-Books	9
Chapter 2	Webinars	25
Part II	Channels	35
Chapter 3	SEO	37
Chapter 4	Twitter	53
Chapter 5	Facebook	75
Chapter 6	Pinterest	101
Chapter 7	Blogging	109

#### viii Contents

Part III	Middle of the Funnel (MOFU)	127
Chapter 8	E-Mail Marketing	129
Chapter 9	Lead Generation	153
Part IV	Analytics	171
Chapter 10	Analytics	173
Index		185

# 



## **Twitter**

TWITTER IS MY favorite social site. I love the simplicity, the flexibility, and the vast audience. I remember a time before the word retweet existed, when it took only 30 or so tweets from about as many people for a phrase to become a trending topic worldwide. It is the perfect platform for the distribution of marketing content. Describe a link, paste it in the box, and hit Tweet. Your followers can then click and read, and if they're so motivated, they can share that link with their followers. It's the most elegant viral mechanism yet invented.

I hold some controversial points of view about Twitter, but none without data backing them up. And that's what this chapter is—my most important Twitter data (and the best collection of it anywhere).

I've long been interested in the idea that "engaging in the conversation" is the single most important function of social media marketing, so I've applied my analysis to test that statement in a variety of places. One of those places has been Twitter.

I looked at millions of Twitter accounts and separated them into two groups: those with more than 1,000 followers (the first orange bar in Figure 4.1) and those with fewer than 1,000 followers (the first black bar in Figure 4.1). I then compared those two groups by the percentage of their tweets that started with an "@" sign to arrive at a reply percentage. I repeated this analysis with accounts having more than 1 million followers (the second orange bar in Figure 4.1) and accounts with fewer than 1 million followers (the second black bar in Figure 4.1) and found similar results.

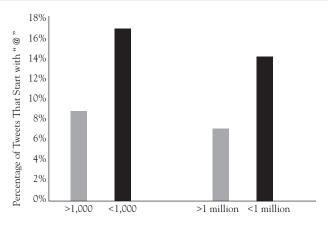


Figure 4.1 Reply Percentage and Follower Count

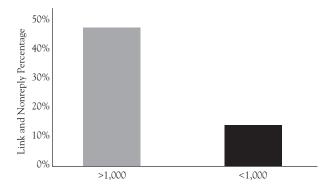


Figure 4.2 Highly Followed Accounts Tweet Lots of Links

Highly followed accounts tend to spend a lower percentage of their tweets replying to other accounts—they are less conversational—than less followed accounts.

The first question I thought when I uncovered the data in Figure 4.1 was, "If they're not engaging in the conversation, what are they doing?" So I did the same breakdown of more than 1,000 versus fewer 1,000 followers—but this time I analyzed the percentage of tweets that did not start with an "@" sign and that contained a link (Figure 4.2). I measured how much content was being broadcast by these accounts.

I found that highly followed accounts tweet more links than their lesser followed counterparts. These accounts did not build their reach by being in conversations; they built it by sharing interesting content in a broadcast fashion. In fact, there are not many examples of well-known Twitter accounts that are built on lots of replies, whereas there are countless accounts with more than 1 million followers that do nothing more than share interesting facts, quotes, links, and news.

Do not think of "engaging in the conversation" on Twitter as a way of building your reach. Instead, focus on gathering and sharing as much interesting, relevant content as you can.

If you should tweet lots of links to get followers, how many links is too much? Is it possible to overtweet?

Using data from HubSpot's free Twitter Grader tool, I analyzed just over 5 million Twitter accounts and compared the number of times per day they tweeted on average and their number of followers (Figure 4.3). I found that followers peaked with accounts that

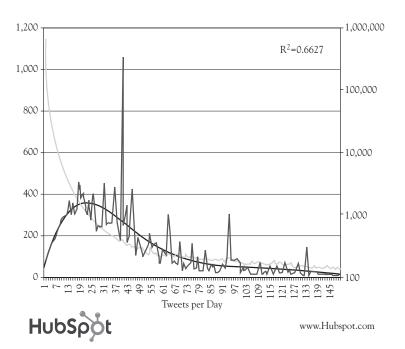


Figure 4.3 Tweets-per-Day versus Followers

tweeted around 22 times per day and there was no steep drop off beyond that.

Twenty-two tweets per day, on average, is a pretty breakneck pace for most accounts to keep up, especially if they're tweeting interesting content and not just anything they find. The takeaway of this graph is not that 22 times a day is a magical number, just that it's pretty hard to overtweet. And if you're wondering how often you should tweet, the answer is generally "more than you currently are."

During my research into Twitter, I translated two linguistic analysis systems to the microblogging platform: Linguistic Inquiry and Word Count (LIWC) and Regressive Imagery Dictionary (RID). I did not invent these two systems; they were created by academics at universities. I simply applied them to social media.

One of the traits that these systems allowed me to analyze was self-referential language—how often accounts refer to themselves, either as individuals or as an organization. This includes use of words such as *I*, *me*, *us*, and *we*.

When I compared the percentage of tweets that used self-referential language to the number of followers those accounts had—looking at millions of accounts—I found a striking pattern (Figure 4.4). As self-reference increases, follower count decreases.

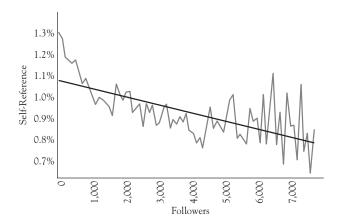


Figure 4.4 Effect of Self-Reference on Followers

For most noncelebrity individuals and brands, Twitter users do not follow them to hear them talk about themselves constantly.

Those same linguistic analysis systems also allowed me to look into the relationship between negative sentiment and followers. Here also, I found a similar, striking pattern. As negative remarks increase, follower counts decrease (Figure 4.5).

People don't go to social media to get bummed out about the world around them; they can just turn on the TV news if that's what they want. They go to social media to talk to their friends and generally feel good.

This sounds like unicorns-and-rainbows superstition, but in this case, the data support it. Negativity doesn't sell on social media as well as positivity does.

When you sign up to Twitter, you're given the ability to provide three bits of personal information: a profile picture, a 160-character bio, and a link to your home page. Over the years I've tracked the number of accounts that fail to fill these fields out, and although the numbers have gotten better with time, I'm still surprised by how many accounts don't take the few moments required to do this.

When I analyze the relationship between providing this information and follower counts, the results are unsurprising. In all three cases, accounts that provide a picture, bio, and home page

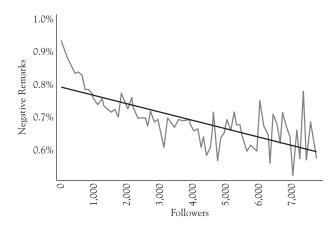


Figure 4.5 Effect of Negative Remarks on Followers

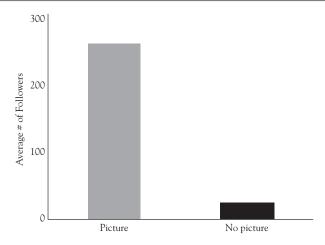


Figure 4.6 Effect of Profile Picture on Followers

link all have more followers than accounts that do not. Figure 4.6 shows the number of followers versus having or not having a profile picture, but the effect is the same with the other two fields as well.

Take the time to fill out your Twitter bio. Users want to know who you are before they'll follow you.

Going a step further, I dug into actual language used by Twitter account holders in their bios. One common unicorns-and-rainbows myth is that you should not call yourself a guru or use any other word to label yourself an expert.

But the data contradict this superstition. I found that Twitter accounts that used the word *guru* in their bios had about 100 more followers than the average account (Figure 4.7). These data do not mean that if you go over onto Twitter right now and add that word to your profile that you'll instantly get more followers. But if you look at the rest of the graph, it does indicate that you should not be afraid to identify yourself authoritatively. Tell potential followers why they should listen to you. If you've written a book, founded a company, or are an expert on something, tell us.

But remember the data about self-reference in tweets. The bio is the only place you should be talking about yourself.

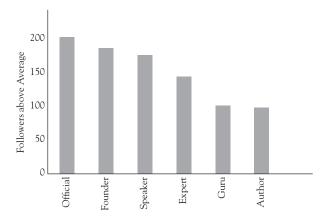


Figure 4.7 Effect of Bio Words on Followers

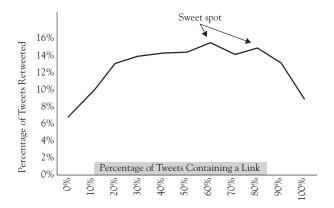


Figure 4.8 Sweet Spot for Retweets: Links

So far, I've presented data only about follower counts, but I've also spent a great deal of time analyzing retweets as well. In Figure 4.8, I compared the percentage of accounts' tweets that contain a link and their average number of retweets per tweet.

I found that here is a sweet spot of linking for maximum retweets. Accounts that posted 60 to 80 percent links tended to get the most retweets. Ninety percent or more links can look spammy, so retweet performance tends to drop off there.

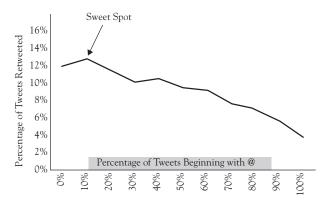


Figure 4.9 Sweet Spot for Retweets: Replies

Then I looked at a similar comparison of reply percentage and retweets and found a much different sweet spot (Figure 4.9). Basically, the more replying done by the Twitter accounts in my data set, the lower their average retweets per tweet.

As these data and the data about follower counts show, constantly replying and being chatty on Twitter does not benefit a marketer in terms of reach or content spread. If you're using Twitter as a marketing channel, with the goal of building a large audience of engaged followers who often share your content, you'll be best served by focusing on sharing a lot of interesting content, rather than replying to every message you get.

When I first began my retweet research, the easiest way I found to get more retweets was to simply ask for them (Figure 4.10). In fact I conducted an experiment before the word *retweet* had been invented where I simply asked people to tweet a certain link, and the title of the experiment ended up trending worldwide.

Over the years since then, I've had many discussions and debates about the power of asking for retweets. More recently, I decided to update and solidify my data about it to put an end to the doubt.

I looked at 20,000 randomly selected tweets and broke them into three groups: those that contained the phrase *please retweet*, those that contained *please RT*, and those that contained neither call to action. I found that whereas only 12 percent of the "neither"

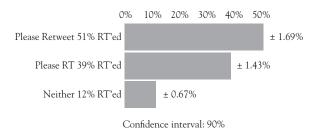


Figure 4.10 Phrase Please Retweet Gets Four Times More Retweets

group's tweets were retweeted, more than 50 percent of the "please retweet" group's tweets were.

Calls to action work in all forms of marketing, and social media is no different. If you want more retweets, ask for them.

Thanks to the great people over at Buffer (an awesome app you should check out), I was able to study millions of tweets and their retweet performance. First, I looked at the relationship between the time of day the tweets were sent and how many retweets they got (Figure 4.11). The data confirmed my earlier analysis on a different data set and showed that retweets were highest for tweets posted between 3 pm and 5 pm Eastern time.

I know from personal experience that as the business day wears on, I often lose the motivation and wit to come up with worthwhile original tweets. It's around 4 PM that my retweeting activity increases because of this.

Experiment with tweeting those updates you want to spread during this time period and see if it works for you.

The first large-scale retweet data set I compiled was more than 100 million retweets gathered over the course of more than a year. It was this database that formed the basis of much of my earliest work on Twitter.

Using this data set, I was able to analyze the volume of retweeting activity that occurred on the different days of the week. I found that although overall Twitter activity tends to be highest early in the business week, retweeting peaks on Fridays (Figure 4.12).

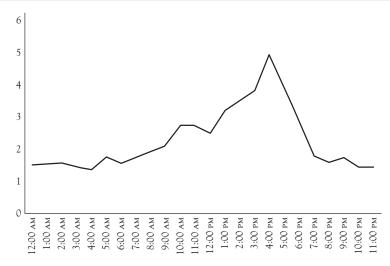


Figure 4.11 Time of Day versus Retweets

I think the reasons for this might be similar to the reasons that the end of the business day is the best for getting retweets. And the tactical takeaway is much the same as well. On Friday afternoons, look over the content you've posted during the week and share the best stuff again. After a few weeks, you'll learn if Friday afternoon as a highly retweetable time works for your business and your audience.

Earlier in this chapter, I included data that showed that self-reference was correlated with lowered follower counts. I also analyzed the relationship between self-reference and retweets and found a similar pattern (Figure 4.13).

Looking at millions of retweets and millions of non-retweeted "normal" tweets, I found that non-retweets tended to contain more self-referential language than retweets. Not only does self-reference not lead to more followers, it also doesn't lead to more retweets.

When I share one of your tweets with my audience through a retweet, I need to believe that it will be relevant and interesting to my followers. The minutia of your life—what you had for lunch and how many times your cat farted—is very unlikely to make that cut. If you're on Twitter to communicate with friends you know in real

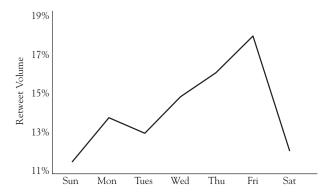


Figure 4.12 Retweet Activity by Day

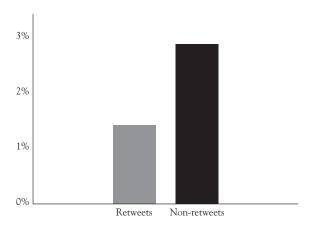


Figure 4.13 Amount of Self-Reference in Tweets and Retweets

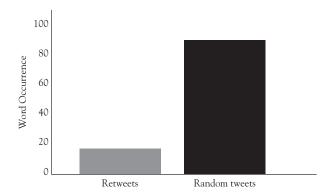


Figure 4.14 Word Novelty in Retweets

life, feel free to talk about yourself all day long, but if you're there for marketing and business reasons, stop talking about yourself.

Whenever I've asked people, in surveys or focus groups, why they retweet some tweets but not others, the idea of novelty comes up frequently. People tell me that they want to retweet new information. They want to be the first, not the last, to inform their followers of some breaking news. Scarce and new information is valuable information. Things that everyone else knows aren't particularly worthwhile.

In an effort to quantify this idea, I looked at word occurrence in retweets and non-retweeted normal tweets. I measured how common the words in each tweet were (*the* is a very common word and thus had a high word occurrence score, whereas *sesquipedalian* is much less common and has a very low word occurrence score).

I found that retweets tended to contain rarer words than non-retweeted tweets. Nobody wants to retweet you if you're simply saying the same things everyone else is saying. If you want me to share your content, you need to say something new, something I (and my followers) haven't heard—or read—before.

Perhaps the simplest bit of retweet analysis I've conducted is about the occurrence of links in tweets and the likelihood that those tweets are retweeted. In my data set, I found that only 18.96 percent of tweets contained a link, but 56.69 percent of retweeted tweets contained a link. People are more likely to retweet a link rather than just a simple tweet (Figure 4.15).

These data should serve to reinforce the importance of sharing as many interesting, relevant links on Twitter as you can. Share your content—and don't be afraid to share it a few times—and find content from other sources that will also interest your audience and share those links. Establishing yourself as a source of useful, novel content is the most data-supported strategy to more followers and retweets.

I then analyzed the most common words and phrases that occurred in retweets more than they're expected to, based on how often they occur in non-retweeted normal tweets (Figure 4.16). I found a number of interesting things, but we should remember to

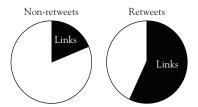


Figure 4.15 Effect of Links on Retweets

1.	you	11.	please retweet
2.	twitter	12.	great
3.	please	13.	social media
4.	retweet	14.	10
5.	post	15.	follow
6.	blog	16.	how to
7.	social	17.	top
8.	free	18.	blog post
9.	media	19.	check out
10.	help	20.	new blog post

Figure 4.16 Most Retweetable Words and Phrases

think about the reasons why these words are on this list, rather than blindly using them and expecting more retweets.

The most retweetable word in my data set was the word you. Twitter users want to hear you talk about them, not yourself. The words twitter and social indicate that talking about social media in general and Twitter in specific works on Twitter. Also on the list are please retweet and new blog post, which corroborate earlier points about asking for retweets and the importance of novelty. Free is always a powerful word in marketing, and on Twitter it is no different. And we find how to, top, and 10 on this list, showing that utility content and chunked, list-based content performs well on Twitter, as it does on other forms of social media.

On the flip side of the coin, we find the least retweetable words, those words that occur far less in retweets than their commonality

1.	game	11.	well
2.	going	12.	sleep
3.	haha	13.	gonna
4.	lol	14.	hey
5.	but	15.	tomorrow
6.	watching	16.	tired
7.	work	17.	some
8.	home	18.	back
9.	night	19.	bored
10.	bed	20.	listening

Figure 4.17 Least Retweetable Words

in normal tweets would seem to predict (Figure 4.17). This list of words is far less interesting than the list of most retweetable words, and that's the point: they're boring.

Most of these words indicate that the person using them is talking about himself or herself and personal activities, such as watching the game, listening to something, or going to bed. Even worse is the occurrence of the word *bored* here. If you're tweeting that you're bored, don't expect it to get retweets, as you're being quite boring yourself.

An analysis I did of 2.7 million link-containing tweets revealed an interesting pattern that has implications for all kinds of communications professionals working with Twitter. I looked at each tweet in my data set and identified those that were clicked on 0 times but were retweeted at least once. I also identified those tweets that were clicked on but were retweeted more times than they were clicked.

I found that 14.64 percent of the tweets in my study were never clicked on but were retweeted and 16.12 percent of the tweets in my database had more retweets than clicks (Figure 4.18). This tells me that many people who will retweet an article will do so without reading it first.

Although the sociological implications of these data could certainly be quite interesting, I'm mostly interested in what this means for marketers. And what it means for marketers is that your headline is the most important piece of your content when it comes to

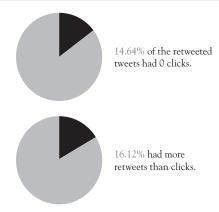


Figure 4.18 Retweets versus Clicks

Twitter success. If your headline doesn't entice and motivate the retweet, the body of your content might not ever get the chance to succeed.

Even if much retweeting happens in the absence of clicks, I'm still interested in getting people to click on the links I post to Twitter. When it comes time to leverage the huge reach and retweet counts we've built on Twitter into actual dollars-and-cents return on investment, it's all about how much traffic we can send to our website and then convert into leads or customers.

When analyzing clicks on Twitter, I use a metric called clickthrough rate (CTR). Marketers will be familiar with this from e-mail marketing or pay per click (PPC), but it functions a little differently on Twitter. I divide the number of clicks on a link by the number of followers the user had when they sent the tweet in question.

The first thing I looked at when I began to study Twitter CTRs was the length of the tweet, in characters. I found that longer tweets (up to about 130 characters) tend to get more clicks than shorter tweets (Figure 4.19).

Then I looked at the actual position within the tweets occupied by links and its relationship to CTR. Most Twitter users, myself included, typically put the link at the end of the tweet. The format is generally: "Title of the content: http://linktothecontent.com."

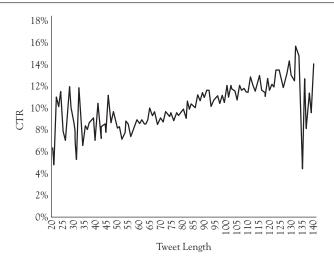


Figure 4.19 Longer Tweets Get More Clicks

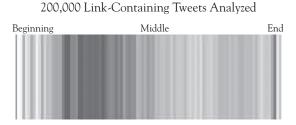


Figure 4.20 Twitter CTR Heat Map

To visualize this data, I created the heat map you see in Figure 4.20. Each vertical bar represents a position of a link inside of a tweet. Bars to the left represent links placed at the beginning of the tweet; bars to the right indicate links placed at the end. The darkness of the bar represents the average CTR of the links at each position: the darker the bar, the higher the CTR.

My findings were surprising. Although there is a single dark bar at the end of the heat map, there is a much larger sweet spot of clicks about a quarter of the way into the tweet. After I first published

these data, several people have told me that they've experimented with a format like "new post: http://linktopost.com title of the post" and it's worked for them.

I'm not sure why this format works so well; perhaps it's because most Twitter accounts are still putting links at the end of tweets, so tweets like this stand out. Experiment with it and see if it works with your audience.

I also analyzed the CTRs of 20 highly followed Twitter accounts, including mainstream news sources, such as the Washington Post and the New York Times; geekier sources, such as Mashable and Gizmodo; and celebrity accounts, such as the Kardashians and Alyssa Milano. I found that there is no standard CTR, as they vary widely across these accounts. The New York Times has a very low CTR, whereas Alyssa Milano has a very high CTR.

However, I did find one pattern that held true across all of the accounts I looked at. When one of them tweet a link and didn't tweet another link for an hour, they had a certain CTR (Figure 4.21). When they tweeted two links in an hour, the CTR dropped. When it was three links in an hour, the CTR was even lower. As the pace of link-tweeting increased, the CTR for each link decreased.

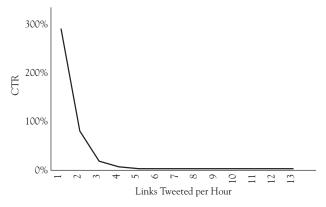


Figure 4.21 CTR by Links Tweeted per Hour

If you're sharing content you've found from other sources across the Web, tweet it as fast as you want. But when you're tweeting your own content to send traffic to your site, slow down and tweet it at a more deliberate pace.

Another CTR analysis I did was on parts of speech. I analyzed the four major parts of speech (adverbs, adjectives, nouns, and verbs) and their relationship to the CTR of the tweets they were found in. I compared the CTR of the individual tweets to the average for the Twitter user to account for the wild differences in CTRs.

I found that tweets heavy with adverbs and verbs performed better than tweets with more nouns and adjectives (Figure 4.22). Action-based words got more clicks than entity-based words. Action-based words include calls to action, which is likely the cause of some of this effect.

Don't forget to experiment with action-based calls to action on Twitter. If you want more clicks, ask for them. But be creative; don't just try "Click here," but instead try "Check this out" or "Tell me what you think."

## Use action words: more verbs, fewer nouns.

After analyzing 200,000 link containing tweets, I found taht tweets that contained more adverbs and verbs had higher CTRs than noun- and adjective-heavy tweets.

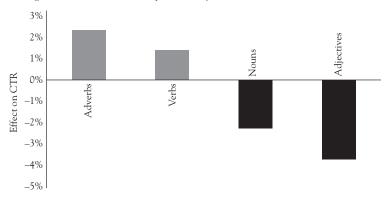


Figure 4.22 Relationship between Various Parts of Speech and CTR

#### Tweet later in the day.

I found that tweets posted in the afternoon hours had higher CTRs than twees posted in the morning.

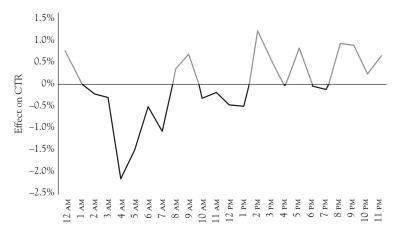


Figure 4.23 Relationship between Time of Tweet and CTR

I also looked at the hour of data and its relationship to CTRs and found a pattern familiar if you think back to my data on retweeting and time of day.

Tweets posted later in the day—afternoon Eastern time—tended to have higher CTRs than tweets posted early in the morning (Figure 4.23). As with all timing data, be careful to test and experiment with these findings, as your audience may behave differently than the average of a very large data set.

And when I looked at day of the week and its relationship to CTR, I found something surprising. Tweets that were posted toward the end of the week got more clicks than those posted on Monday through Wednesday (Figure 4.24). But it wasn't just Thursday and Friday that performed well; Saturday and Sunday also both have high CTRs.

I follow thousands of accounts on Twitter. My Twitter stream is very active during the business day Monday through Friday. On the weekends, it moves much slower, and what content does come

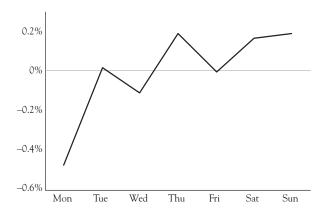


Figure 4.24 Effect of Day of the Week on CTR

through is often about sports and other non-work-related topics. The few times something interesting about marketing does show up on a Saturday or Sunday, it gets more of my attention because there are fewer other things fighting for it. I call this contra-competitive timing, and we'll see examples of it throughout this book.

Don't take these data to mean that you should tweet links only on the weekends. Instead, take it as an invitation to experiment with the weekends if you hadn't already been using them.



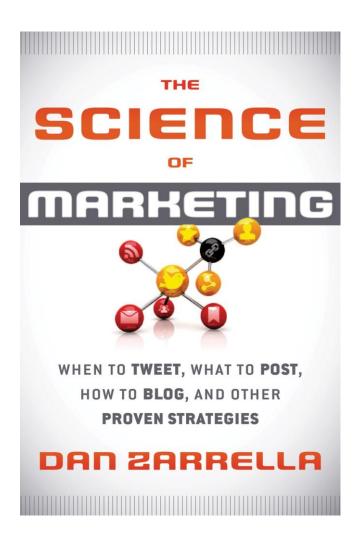
# MEASURE THE ROI OF TWITTER

Find out whether your investment in Twitter is paying off. Sign up for HubSpot's 30-day trial to start tracking some insightful marketing analytics.



http://offers.hubspot.com/free-trial





Available April 2013 wherever books and eBooks are sold.

Pre-Order today from your favorite retailer! <a href="http://www.wiley.com/buy/9781118138274">http://www.wiley.com/buy/9781118138274</a>

PRAISE FOR

#### THE SCIENCE OF MARKETING

"Dan delivers nitty-gritty facts, not theories. Loaded with charts, surveys, and actual data (!) about what's working right now online."

-SETH GODIN, author of Purple Cow

"For decades, marketing has been about so-called 'creative work,' with success measured by ad industry self-congratulatory awards. It's time to finally get serious about the science of marketing, and Dan Zarrella is the right person to set us straight. Dan holds no opinions of success that he doesn't back up with hard measurements. In this book, he lays out the facts so your marketing will be more successful than the typical award winners."

—DAVID MEERMAN SCOTT, bestselling author of The New Rules of Marketing and PR

"This book equips you with the actionable real-world data you need to make your communications more scientific and successful."

-NANCY DUARTE, author of slide:ology

"Dan Zarrella has bagged a most rare bird: a book that's actually useful to real, working social media pros."

-HUGH MacLEOD, cartoonist, gapingvoid.com

"Dan's Science of Marketing is the toolbox of actionable data you need to vastly improve your online and offline marketing. Along with a wide range of critical datasets on Facebook, Twitter, and other social media platforms, you'll also find the pages brimming with useful stats and survey results on email marketing, blogging, and other web channels. Keep this book close and read it often!"

—MARI SMITH, top social media influencer, speaker, author of *The New*Relationship Marketing, and coauthor of Facebook Marketing: An Hour a Day

"Zarrella's *Science of Marketing* is the essential handbook for every business to thrive in our newly data-driven world."

**—ERIK QUALMAN,** international bestselling author of *Socialnomics* 

COVER IMAGES: ATOM © PAVLEN/ISTOCKPHOTO, ICONS © LOGORILLA/ISTOCKPHOTO

Subscribe to our free Business eNewsletter at wiley.com/enewsletters

Visit wiley.com/business





\$24.95 USA / \$29.95 CAN

