



Big Data, Policy Options, and the (Almost)
Unrecognizable World of Communications
Food for Marketers' Thought

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The “Big Data” buzzword has flourished since late 2012. While it seems to be in every other headline, there is still considerable confusion behind the hype. The term might be relatively new for most of us, but the concept and the capability are the logical manifestation of the digital evolution of the past decade. While many herald Big Data’s present and future possibilities as a holy grail, implications of this new paradigm are catching the attention of consumers and lawmakers, and may trigger regulatory actions that could alter the trajectory of the online world as we have come to know it. This paper looks at a few possibilities on where the convergence or collision of Big Data and policy may occur.

Definitions of Big Data vary depending on one’s level of technical and statistical savvy, but essentially it refers to the massive amounts of data kept in traditional structured IT sources (think databases) as well as data from non-traditional sources, like cell phones, security cameras, tweets, videos, sensors and other mobile and connected devices. IBM estimates that every day, 2.5 quintillion bytes of new data is created, so 90% of data that exists today has been created in the last two years¹ – and that is accelerating. The four Vs – volume, variety, velocity, and veracity – characterize what’s new and different with Big Data capabilities over traditional analytics.

Technologies have now advanced to where very large sets of structured and unstructured data can be cross-analyzed, combining information and insights about a given subject in ways not previously seen. Using such analysis to predict future behaviors is Big Data’s brass ring. There is tremendous opportunity for benefit in areas like scientific or health research, weather pattern analysis, population trends, fraud detection—the possibilities are vast and cross all sectors. While we are just at the beginning and it is still an imperfect science, Big Data can already greatly facilitate human judgment calls about where trends are headed.

Big Data is also of Big Interest to marketers. Increasingly referred to as “web 3.0,” in hindsight it’s easy to see where we’ve been heading with the preponderance of web sites and digital social tools that have become integral to marketing, advertising and public relations in just the last few years. Dan Horowitz of Fleishman-Hillard in Washington DC recently summed it up: “For everything we do in Communications, there is now an app.”

DON DRAPER ON STEROIDS

Advertising is way ahead in the Big Data game. Leveraging behavioral tracking technologies like cookies, Google Analytics, or Radian 6, and combining them with other data sources [physical addresses, in-store purchases, even voting records], advertisers can now correlate massive amounts of data to micro-target specific groups.

Major e-tailers are taking traditional shopper recommendation practices to new levels. Amazon doesn’t sell customer browsing history to 3rd parties – through advanced analytics, it knows what customers want to purchase so it sells more specific information. eBay has a new data-driven home page called the

¹ IBM.com Big Data at the Speed of Business 2013

Feed, where users follow item categories and eBay employs its analytics to optimize marketing efforts. The @WalmartLabs has a Social Genome Project that analyzes millions of tweets, posts, YouTube videos and other social media data to assess eCommerce purchase intent.

Netflix has used Big Data in developing its very successful “House of Cards” series, analyzing the viewing habits of its 33 million users to come up with a program they knew would be a hit. That confidence emboldened them to bypass traditional TV and cable networks and stream the program from the Netflix site, presenting a radical but inevitable shift in the traditional broadcast environment.

Political campaigns are also learning to take full advantage. Both the 2008 and 2012 Obama campaigns pushed the envelope by fully exploiting social media and traditional data correlation to laser-target voter messaging across a range of issues, and to great success. Campaigns now use social media listening and sentiment analysis, planting words or phrases in ads then watching for increases in social media mentions, to assess a topic’s stickiness for further amplification with mainstream news outlets. Resulting ad adjustments can be made in a few days instead of the weeks it used to take.

Those marketing on a large scale will tell you they see the most benefit in correlating blocks of data, and in ways not previously done. Perhaps. Targeting individuals more precisely than ever before is a clear objective of e-tailers. There are massive amounts of data about individuals being tracked – yes, that means YOU – but clusters statistically enable better large scale predictive modeling than individual information. There are limits. For instance, will the same messaging resonate across a large block of consumers who may have displayed a certain behavior but for very different motivations? What impact might the behavior of statistical outliers have on a predicted outcome?

Cultivating a culture that embraces data and analytics will help marketers use Big Data most effectively. However, this kind of culture may be unfamiliar to traditionally right brain, soft-skills PR practitioners and professional communicators, who need to think increasingly about trending search terms before developing content. There’s no doubt that PR is harder to measure than selling a product, but success now means knowing what you want to measure then implementing accordingly.

A FEW POLICY CONSIDERATIONS

Having the capability to do something doesn’t necessarily mean it should be done. While Big Data may be a marketer’s dream, the counter position of individual privacy is coming more into focus. While people regularly and willingly give up personal information for ‘free stuff,’ the last two years have shown increasing pushback from online users about how their data is used. Think about the considerable negative press Facebook garnered with its stealth conversion of user email accounts to @facebook.com, or Instagram’s faux pas in trying to grab users’ photos for its own advertising purposes. The story of Target advertising to a pregnant teen based on her shopping habits, before her own family knew of her pregnancy and much to her father’s dismay, has already become Big Data legend. While researching this paper, I happened to receive an email from OneSource Information

Sources, a self described leader in providing business information products. It included a comment that “We obtained your email address through our ongoing data integration processes. Please understand that your privacy is of the utmost concern to us.” Really? That seemed a little contradictory.

The Center for Democracy and Technology, a leading Internet freedom advocacy organization in Washington DC, claims that “Privacy is the number one concern of Internet users, and it is also the top reason why non-users still avoid the Internet.” I suspect this is largely generational, with the implications for more trusting, continually connected Millennials yet to play out.

For now, marketers are charging ahead. I recently heard one advertising executive casually say that “boundaries will need to be legislated,” but he didn’t seem too concerned about it today. The dizzying pace at which technology is moving creates a serious gap between marketers’ enthusiasm and laws to keep it in reasonable check.

The winds may be starting to change. At a recent Big Data conference, a few Washington-insider speakers suggested that “rumors are floating” about the White House and/or the Congress introducing new legislation in 2013. Until that happens, here are a few policy insights:

Do Not Track. Given growing concerns around behavioral advertising, in 2010 the Federal Trade Commission recommended the development of Do Not Track, a setting to enable browser technologies to turn off behavior tracking tools. While browser developers have since complied to varying degrees, the advertising industry has been very slow to adopt the capability. In early 2012, the Digital Advertising Alliance (DAA), a self-regulatory group for the online advertising industry, said they would begin work to allow user opt-out within an approximate 9-month timeframe. As of this writing (May 2013), virtually no progress has been made. Consequently, Senator Jay Rockefeller has started a major push for legislation that would create a universal Do Not Track option for consumers and penalize companies who don’t comply. Critics warn that enforcing Do Not Track will hurt the online economy, but proponents argue that some balance is in marketers’ best long term interest, so that people will stay engaged in the Internet economy rather than withdraw out of privacy concerns. While some web sites do technically offer opt-out capabilities, the links are generally very hard to locate on web pages and even take users to unfamiliar, hard to navigate 3rd party sites to register. User adoption of these options is consequently low.

Cyber Security. Cyber threats compound the Big Data picture. While thankfully threat patterns can be more readily analyzed, there is a huge ongoing debate about what personal information the government should have access to in what circumstances.

The redux Cyber Intelligence Sharing and Protection Act of 2013 was permanently put to rest after the Senate refused to even take it up once it passed the House with a sizeable margin in early April. CISPA had originally been introduced in 2012 along with several other cyber security bills, none of which passed because of privacy concerns around industry and government access to personal data.

In January 2013, President Obama issued an Executive Order that creates a framework for information-sharing between the private sector and the government, without many of the [objectionable] CISPA-like provisions. However, complying with the Executive Order isn't the law, it's voluntary. It is hard to say when today's polarized Congress will act, but everyone acknowledges that cyber security is growing in urgency and requires action soon. We should expect more Congressional bills in 2013. For an eye-opening read, check out [Verizon's 2013 Data Breach Investigations Report](#).

Electronic Communications Privacy Act [ECPA]. There is currently a push to reform this 1986 law which was originally intended to protect then-emerging wireless and Internet services. While the biggest recent headlines have been around protecting server-stored email from government access, location privacy is also being examined. This primarily concerns terms for law enforcement to access location information (via cell phone or GPS data), but it could set precedents that would later carry over to emerging marketing tools like proximity networks or location-based advertising.

The FTC and the Fair Credit Reporting Act. In May 2013, the Federal Trade Commission announced it has been conducting an investigation of data brokers and their degree of compliance with the Fair Credit Reporting Act. The sting operation focused on companies trying to obtain consumer information for various purposes. Ten out of 45 companies the FTC contacted apparently have violated the Act by allegedly functioning as Consumer Reporting Agencies when they are not, and bypassing laws governing such Agencies' treatment of personal information. Consequently, enforcement of the Act is being stepped up. Given marketers' reliance on data brokerages, this begs bigger issues – what is becoming the cost of participating in society? Who gets to see others' data? Who can afford it? What happens to those who can't?

People in High Places. Nicole Wong, a known free speech advocate who was deputy general counsel at Google before moving to Twitter in 2012, is apparently a strong contender for being named a top Obama administration advisor on digital privacy. One can imagine she would bring a strong pro-innovation / pro-IT industry point of view to her presidential counsel. It was also recently announced that Caitlin O'Neill, a top aide to House Minority Leader Nancy Pelosi, will be joining Facebook's Government Affairs team in DC to lobby House Democrats on the company's behalf.

IMPLICATIONS FOR PROFESSIONAL COMMUNICATORS

What is all of this going to mean for professional communicators, who by my unscientific estimate and anecdotal evidence, may see the term “Big Data” bandied about, but by and large have never heard of CISPA, ECPA, the Cyber Executive Order or any other pending policies? What would such legislation mean for the online world as we know it? What about implications for digital PR and marketing staples Twitter and Facebook? Will innovation of new channels be dampened? How will customer trust be affected? How might definitions and perceptions of intellectual property, free speech or cyber-threat change? Where will the line be between an employee's professional blog posts, media quotes and other

communications written for a client and their standing as a private citizen? There are a lot of issues in motion, but no clear answers.

Having floated these thoughts past a variety of Silicon Valley types over several months, my concerns were largely dismissed as alarmist (ok, maybe a little) or irrelevant. Among innovator circles, DC is regarded as far behind and out of sync with the pace of technology. True. But that doesn't mean they won't pass something anyway, which will then be the law. Given our global economy, international implications also need to be considered. For instance, the EU are fierce privacy advocates. And China's aggressive corporate espionage and intellectual property violations mandate extra caution. Government affairs groups and trade associations are taking note of the increased policy rumblings, but those actually developing the technologies would be well served to start paying more attention as well.

Whether this year or next, some level of legislative change is inevitable. The savvy communicator will keep an eye on policy developments, appreciating the reality that some balance will need to evolve. Tim Keller, a law partner with [Lindquist and Vennum's](#) IT, Internet and eCommerce practice, and author of the blog [Big Data and The Law](#), offered a sage piece of advice: "To prepare for radical shifts in data management policy, have as much knowledge about your data as you can, so when a legislator says you can't have it, you throw away as little as possible."

Technological innovation should not be stifled by government policy. Nor should marketers and professional communicators have to function in a McCarthyist environment where messages are punctuated by fear. With the head-spinning pace of change, he or she who harnesses Big Data with enthusiasm *and* prudence will hopefully prosper in the modern economy while respecting customer sovereignty and anticipating laws yet to come.

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