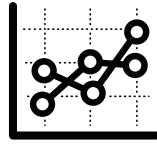


Chapter 16



SMALL DATA



What's the Trend?

As consumers increasingly collect their own data from online activities and the Internet of Things, brand-owned big data becomes less valuable than immediately actionable small data collected and owned by consumers themselves.

In early 2015 more than 160,000 attendees descended upon Las Vegas for their annual trek to the world's largest tradeshow: the Consumer Electronics Show.

Most years, the increasingly slim televisions and consumer gadgets like tablets, phones and laptops get most of the attention, but 2015 was different. While the media still featured beautiful curved new TV screen designs and innovative new phones, there were also many unexpected products being featured.

There was a hair brush that holds an iPhone to allow people to take a selfies, a Wi-Fi-connected tea kettle for boiling water from your mobile device, and a smart tennis racket to improve your game. When you put these together with the growing range of wearable fitness trackers and technology embedded into our clothes, all of them are examples of the Internet of Things, where everyday objects become connected and collect data.

What is even more interesting about all this data is who owns and benefits from it—and who doesn't.

For years the Internet has been filled with places to voluntarily contribute our personal information in exchange for making things work. Want to buy a ticket to an event or download a “free” report? Trade your email address. Need to register a product? Answer a short survey to activate your warranty.

The more time we spend browsing websites, adding products to our carts, or sharing and publishing opinions through social media, the more this data is becoming part of the big data set companies can collect and use to customize product offers and market to us.

Influenced by growing consumer concern about how this data was being used (or misused), many governments have now created new regulations requiring data to be portable. In 2010 Facebook implemented a system that would allow every user to have more control of their own data, what is collected, and how they can export it and take it with them if they choose to delete their account.

For the first time in the world of privacy, data is co-owned by consumers *and* brands—a fact that is about to explode with the Internet of Things.

The Internet of *Your* Things

The Internet of Things is widely described as the ability for physical objects to be connected with wireless networks in order to integrate software, use data or be controlled remotely.

While this may seem like a popular buzzword, the category of products it describes is exploding as everything from wearable fitness trackers to smart thermostats are becoming more widely available. The single biggest theme that emerged from CES in 2015 was the importance of this data feedback loop from our products back to ourselves.

We are moving from simply being the creators of data through our behavior to the real-time consumers and owners of our own data.

This has big implications for your business in 2015.

Most of the discussion about big data usually focuses on a single theme: how companies can analyze and use the vast amounts of data they are now able to collect in order to create better, more personalized experiences for customers.

What if consumers could choose to share the data they have collected in order to improve their experience?

Consumer-owned *small data* is starting to rival brand-owned big data, and the key will be finding ways to link them together to create more value.

As data is increasingly unbundled, vast new self-created data sets will belong to consumers, created by those seemingly silly products like Wi-Fi tea kettles and mood-tracking bracelets. They now also have the keys to unlock this data from the platforms where it is collected and can choose to share it in ways that can benefit them. It's just not that easy to do yet.

If consumers could be enticed to share this data more easily, businesses could also unlock its power to augment their own data collection and create unheard of new customized promotions and products. This is not about the products themselves, but rather the nuanced, personal, and granular detail they are letting consumers collect about themselves and their own habits.

In fact, collecting this type of small data may be becoming an art form in itself.

Data Only *You* Can Love

When Ian MacLeod became a father, he did what almost any proud new dad might, take photos of his new baby boy. Unlike most dads, though, MacLeod kept on taking them, one per day, for 21 years straight. In 2012 he published a six-minute YouTube video montage featuring more than 7500 pictures of his son Cory growing from a baby to a 21-year-old man.

The video quickly went viral and currently has more than 6 million views on YouTube at the time of publication for this book. It is a perfect example of the power of consumer-created content, and the high emotions often attached to it, and it is also an example of small data.

Small data is often so personal that it has little intrinsic value to anyone except the collector.

Rather than simply being content, though, these collections of data often allow each of us to derive timely useful insights about our lives to make meaningful changes to our behaviors in real time.

As IDC analyst and vice president Mike Fauscette recently shared, “big data is useless, or even more than useless because it can distract businesses and consume a lot of resources for no value return. Big data can be made smart data if it can be made smaller, by transforming it to become contextual, relevant, and delivered to the right person at the right time, in the right format.”

There are many dedicated to trying to solve this challenge.

One of the most well known is professor Deborah Estrin. Once described by *ComputerWorld* magazine as one of the “unsung women of technology,” in the past several years Dr. Estrin has been recognized on a global level on CNN’s “10 most powerful women in tech” list and *Wired* UK’s “Smart List” of 50 people who will change the world.

Accolades aside, her current work in the Small Data Lab at Cornell University focuses on the growing collection of personal data we are each creating in every moment as we navigate the Internet, use our web-enabled devices and explore the world physically and virtually. These activities are offering a unique glimpse how we behave and also how we each may be changing our behaviors in response to our own self collected data.

The Usefulness Of Small Data

It is this ability to immediately act that stands out as the greatest benefit of collecting small data. It may not be able to help you draw broad conclusions about an entire population or demographic, but it is dramatically good at helping solve a short-term challenge. There are some who believe this may be the only type of challenge actually worth solving with data.

Rufus Pollock is the founder and co-director of the Open Knowledge Foundation and a frequent critic of those who overstate the value of big data. Instead, he believes that small, linked data is far more valuable:

For many problems and questions, small data in itself is enough. The data on my household energy use, the times of local buses, government spending—these are all small data. Everything processed in Excel is small data. When Hans Rosling shows us how to understand our world through population change or literacy he's doing it with small data. This next decade belongs to distributed models not centralized ones, to collaboration not control, and to small data not big data.

In a recent opinion piece for the Huffington Post, Brian Kibby, who has a background in learning technology and publishing, wrote about a similar idea in the world of education.

His point centered on the fact that small data focused on how students actually learn and perform is far more valuable than big data about their macro spending habits, location information, or medical and dietary information. Small data, in other words, is immediately useful in a way that big data isn't.

Why It Matters

The explosion of devices connected to the Internet and social media platforms that allow people to capture every thought or memory instantly mean we are producing more data than ever. Most of this data is not solicited, or traditionally owned by brands, which creates a new model of data ownership.

Consumer-owned data rivals brand owned data, and the biggest question facing any business in the coming year is how consumers will or won't choose to share that data. Small data is the term that emerged over the past few years to describe the value of immediately actionable data versus broad, complex and historical big data.

As we move into the coming year, the ownership of data and how easily it can be shared and acted upon will become the ultimate economic metric for whether data ultimately provides new insights and real value or just remains collected on vast servers and databases as its value slowly expires.

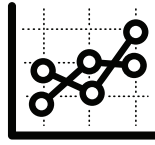
Who Should Use This Trend?

Though big data sometimes seems like the domain of large brands and governments, small data is accessible to any of us, whether you happen to be a blogger trying to optimize your own website, or a small business collecting customer feedback through surveys. The key will be to combine a smart approach to capturing and reviewing only the data that matters, then with finding new ways to act upon your customer's personal data if they choose to share it with you.

How to Use This Trend

- ✓ **Offer to use consumer-owned data** – Just because a consumer may be collecting their own data and you don't have an easy technological method to download it doesn't mean you can't benefit from it. For example, if you own a sports and fitness store, you could ask consumers to bring in a printout of some of their self-collected wellness data in order to help them select better products. The point is, there are many ways to use customer data, whether you can download it or not.
- ✓ **Watch for new popular products** – One of the lessons from CES that may offer interesting opportunities for you is to track what products are starting to take off and gain widespread adoption. As more people put a smart thermostat like Nest in their homes, it may open more opportunities to speak with them about energy conservation. If your business is in this space, the adoption of this type of product can open new doors. Similarly, there may be other products coming that could affect your industry, if you can make sure you are watching for them.

Chapter 31



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The 2016 Perspective

This chapter spotlighted the potential for small data to change the way consumers used their own data as leverage to entice brands to offer better experiences for them – and opportunities for brands to take advantage of new data sets that were previously either non-existent or at least not available. In late 2015, a small group of managers running digital commerce and contact centers for a range of brands came together for the second annual *Intelligent Assistants Conference*.

The event featured presentations from founders of technologies that focused on the intersection of artificial intelligence, machine learning, natural language processing and the customer experience. At the event, a small New Zealand based company called MyWave introduced their already popular Intelligent Assistant app to the US market with a bold prediction: “Ultimately, consumers will decide how and when to share their personal data with brands.”

This future, which MyWave Founder and CEO Geraldine McBride termed “Customer Managed Relationship” (CMR) had the potential to change the way that the entire field of Customer Relationship Management (CRM) is practiced.

Leveraging the power of this trend of Small Data, Intelligent Assistants like the one created by MyWave are already predictively help users to shop for the best price, navigate traffic situations, automatically handle mundane tasks like filling out the warranty form for new purchases, and even selectively share a user’s data (with permission) with retailers in order to get more personalized offers and savings.

Examples like this are taking the promise of “Small Data” that was introduced in this trend more than a year ago and making it into reality for everyday consumers. Yet this is only one sign of the growing focus on the idea of leveraging smaller and more personal consumer created data versus sifting through bigger impersonal data collected en masse.

A slightly different definition of Small Data will emerge in February of 2016 when best selling business author and consumer researcher Martin Lindstrom releases a book called *Small Data* all about his insights gathered through direct observation and conversations with consumers gleaned from years of direct research with consumers. According to Lindstrom, the term “small data” is the perfect way to describe these clues and insights into people’s lives that he gathers through direct observation.

“No matter how insignificant consumer observations may appear to be,” he says “I’ve learned the every single thing we do in life consciously or unconsciously reveals incredible insights about who we really are. While big data spews out constant terabytes of impersonal data in an attempt to predict future directions of businesses that brands it is the uniquely human small data right in front of us that reveals all the real truths and insights.”

In the coming year this “uniquely human” *Small Data*, whether collected by popular consumer researchers or by consumers themselves, will continue to shift how personalization works and the opportunities any brand will have to better tailor their products and services to empowered consumers.

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