Big Data Provides Marketers with a Goldmine of Information.

By [Tyler White](#) on August 2016

Data is being collected in amounts never before conceived by anyone, and enough time has passed that making decisions about what to do with all that information is starting to come into focus. Marketers in most organizations are sitting on mountains of data, but often wonder how to put it to the best use.

Here at Adobe, we are in a unique position to accumulate data, since $7.50 of every $10.00 spent online with the top 500 U.S. retailers goes through the Adobe Marketing Cloud. That means we have access to billions of website visits and the resulting product sales data. It's truly Big Data, in a big way.

Thanks to all this data, marketers have a powerful new tool at their disposal for watching trends and developing strategies. The Adobe Digital Price Index (DPI) uses anonymous data from more than 15 billion website visits and 2.2 million online product sales, tracking digital transactions more accurately than any other current source. By comparison, the Consumer Price Index (CPI) relies on consumer surveys to approximate the actual sales in each product category, and tracks only 87,000 products. The DPI uses data from actual transactions to acquire an accurate count of the quantities purchased and captures the data in real-time.

This is an unprecedented use of Big Data, and it's starting to show some interesting results.

Deflation, Not Inflation.

For example, although the Federal Reserve has been looking for inflation, it seems that most of the categories tracked by the DPI – especially in non-discretionary categories – have presented deflation year after year. Even for Pokémon-branded merchandise, which has recently seen a significant increase in demand, prices declined in July.

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Sales of Pokemon-branded items like apparel, electronics, and toys increased by 86%, 210%, and 170% respectively in July, but prices showed an overall decrease. A possible cause for this decrease in prices is that retailers are competing heavily for online business in a world where comparison shopping has become the norm.

This could be a clue for marketers as they plan their holiday season campaigns. Even when demand is increasing, there may be just too much competition in some areas and prices may have to fall.

Huge Growth in Online Grocery Sales.
The online sale of groceries showed huge growth for July, and prices are coming down as well. The significant growth in the volume of groceries being bought online is being fueled by the increasingly popular option of buying online and picking up at the store.

(Note: This grocery case study could apply to automotive dealers)

This is a particularly interesting trend and could be a good example of how a brick-and-mortar store could collaborate with their online counterpart. A shopper who comes into the store to pick up products ordered online might see other things they need. This trend for in-store pickup also shows the need to integrate your online, offline, and mobile platforms so they can share information with each other, enabling orders to be placed across multiple channels.

The online grocery data is a great example of the scale of the datasets we are talking about here. It is based on an analysis of 300 million visits to grocery-selling websites from January 2014 through July 2016, covering an estimated 30 – 40% percent of all online grocery purchases for about 195,000 products.

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Not all prices, however, declined in July. In the United States, year-over-year hotel prices have increased, with Nevada showing the largest increases (likely due to new hotel parking fees in Las Vegas).

(The Application of the DPI Price Index to Automotive Shopping)

The DPI allows marketers to see their data from a very different point of view, and it can easily confirm, reinforce, or identify new trends that could influence marketing strategies. The increase in online grocery shopping and in-store pickup, for example, could be a clue that competing on the basis of convenience is becoming as important as price. Identifying and reacting to trends like these in real time could become the hallmark of a successful marketing campaign.

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Tyler White is a manager & principal analyst working on Adobe Digital Index. He's focused on mining aggregate data from across Adobe's Digital Marketing Cloud to understand emerging trends and provide excellent and correct advice to data driven companies. Follow Tyler @tyrwhite.