

# **Big Data**

#### November 2019

IBM did research a few years ago proclaiming that 90% of the world's data is being created every two years. That is an amazing statistic. More data has been created since October 2017 than all the prior years combined? More data will be created in the next two years than all prior years?

The intuitive observation is that with all this information we should be making smarter decisions. More data equals better decisions. However, that isn't necessarily true. The important part is the insights from the data, not the data itself. Knowing the context around the information can change an answer drastically.

## **Parking Lots**

A great example is parking lot data. For years, investment management has written about data being pulled from satellites and used to predict sales at stores. The theory has been that they should not wait until the company earnings numbers are released to make a buy or sell investment decision. Rather, they should make decisions from data that could be obtained earlier in the process. Let's walk through an example and how this could go wrong.

Pretend you are instructed to compare satellite images from a Milwaukee shopping mall parking lot taken each Sunday around noon. You are told to notify the investment team if you see an unusual number of cars in the parking lot. Easy enough. You begin looking at the weekly data.

Meanwhile, the investment team, based in Miami, FL thinks it could be a difficult fall season for the economy. The anticipation is that you will see a dip in parking lot cars beginning in September. They are looking for the first clue to verify their intuition.

Everything seems normal until the beginning of September. Suddenly the parking lot is empty. You alert the investment team. They wait for the following week to confirm this was not a one-off event. Same thing happens again the following week. They trade on the news in order to get in front of the perceived drop in sales figure.

Being based in Miami, the investment team might not see the problem in the question. They have never been to Wisconsin in the fall. All they see is the confirmation of an upcoming recession. Is the data true? Yes. Can the conclusion be false? Yes. Then what could be wrong?

Being a Wisconsin resident, I can see the problem right away. The problem isn't the data, but rather the question and context. Wisconsin parking lots are empty in the fall not because no one wants to spend money. The parking lots are empty because the Packers game is on!

### **Investment returns**

Investment returns and big data are no different. Every day someone is trying to manipulate streams of data to support their economic or stock market story. You know this if you view market news on your phone, computer, or TV. We know this because investment management professionals are constantly calling our office to educate us on their latest and greatest product.



As in the parking lot example, our job is not just to look at the satellite images (i.e. data) they provide. We must be able to know enough about the topic to ask the right questions, therefore understanding the context in which the information is presented.

The world is full of data and it's being created at faster speeds. For innovation, this is a great thing. However, the risk is no one can possibly interpret it all. We take shortcuts and selectively pick out parts we like and ignore the rest. Before we act with 100% certainty, let's at least acknowledge our bias and know where our risks lie.

#### **Thanks**

November is a time to give thanks and yesterday I was reminded of that. A former client, who taught me many things through interactions early on in my career, passed away last week. All too often people assume this is a transactional business or that clients (because they are the ones paying for service) are the only ones learning in the relationship. This is simply not true. We, as advisors, are continually learning and growing.

To the client who passed away this week and who showed twenty-something year old Matt respect and allowed me to learn through our interactions, I say thank you. To our current clients, who allow our McCarthy Grittinger team to grow personally and professionally every day, we say thank you.

All the best for a Happy Thanksgiving!

Matt Miler, CPA, CFP®