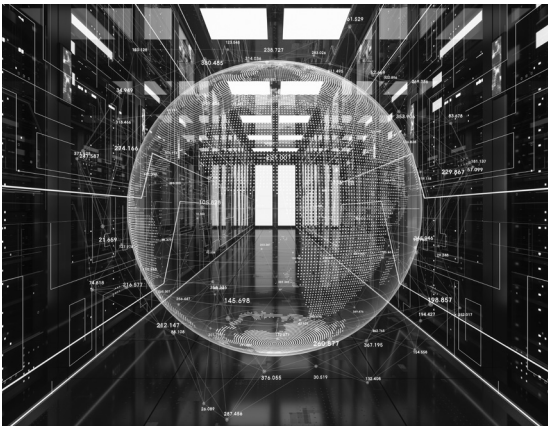
A BIBLICAL VIEW ON

Big Data

Kerby Anderson



Big Data



We live in the world of "Big Data." That is the new way people are trying to describe this sea of digital facts, figures, products, books, music, video, and much more. All of this is at our fingertips through computers and smartphones. And there is a lot of data. The global data volume is expected to grow exponentially from 44 zettabytes (a zettabyte

is one trillion gigabytes) in 2020 to 163 zettabytes by 2025. No wonder people say we live in the world of "Big Data."

This remarkable change in our world has happened quickly and seamlessly. Today we take for granted that we can create data and access data instantaneously. Pick up the book *The Human Face of Big Data* and look at the pictures and stories that describe the powerful impact the tsunami of data is having on our lives and our world. Look at how this vast amount of data is being used by individuals, universities, and companies to answer questions, pull together information, and persuade us to purchase various goods and services.

"Big Data" will transform our lives and lifestyles. Retailers can target you with online purchasing appeals because of the data they already collect from you when you are online. They can suggest books, videos, and various products you would be interested in based upon previous searches or purchases.

Twenty years ago, the Target Corpo-

ration was able to conclude that a shopper was pregnant and even estimate her due date. The story was written up in the New York Times and has become a classic example of targeted marketing. The article had the arresting title, "How Companies Learn Your Secrets."

The data researchers found that pregnant women were more likely to buy unscented lotion, and that they start doing this at the beginning of their second trimester. This correlation between pregnancy and changes in shopping behavior was one of about two-dozen data points the analysts were able to identify.

When they combined all these correlations together, they were able to establish a "pregnancy prediction" score. This score told them two things. First, that the female consumer was pregnant. Second, it also gave them a good estimate of her due date.

An Ocean of Data

Nearly a century ago, a dystopian novel imagined a world where every

building was made of glass so that various authorities could monitor what citizens are doing every minute of the day. The world of Big Data already makes that possible.

Dan Gardner says we are awash in an ocean of information. "Every time someone clicks on something at Amazon, it's recorded and another drop is added to the ocean." He adds, "Every time a home electricity meter reports a reading. Every time a parcel passes a FedEx checkpoint. Every time a customs officer checks a passport, every time someone posts to Facebook, every time someone does a Google search - the ocean swells."

Anyone who has access to that data can begin to use powerful computer algorithms to sift through texts, purchases, posts, photos, and videos to extract more data and trends. Gardner says it will be able to extract meaning and "sort through masses of numbers and find the hidden pattern, the unexpected correlation, the surprising connection. That ability is growing at astonishing speed."

We welcome some aspects of Big Data. When I buy a book online from Amazon, it recommends other books I might want to know about and purchase. When I buy a book at Barnes and Noble, the register receipt instantaneously prints out a list of other books like the one I just purchased.

Big data can also accentuate class differences. Already insurance companies treat the healthy differently than the sick. People who are rich, well educated, and influential receive better treatment from companies than those who are poor and underprivileged. Credit card companies already treat people with a good credit history better than those who don't have one. Now we are learning that they are using information about the payment history of other customers to assess the credit-worthiness of a potential customer.

It is easy to disregard such assessments if you have a good credit score. But what if there are erroneous records in all the big data that is collected? Anyone who has worked to clear up

inaccurate records can see the potential danger of big data. Often it takes time and tenacity to get back your good name.

This ocean of Big Data is also intrusive. The government knows more about you than you might want them to know. The Internal Revenue Service is collecting more than your taxes these days. They are collecting a massive amount of personal information on your digital activities: credit card payments, e-pay transactions, eBay auctions, and Facebook posts.

Why is the Internal Revenue Service using Big Data to invade your privacy? Government leaders are putting pressure on the IRS because the federal government needs more money, and it is estimated that billions in revenue are lost to evasion and errors each year. Collecting and analyzing this data might be one way to close the so-called "tax gap."

The amount of data the government and private industry collect on us each day is overwhelming. Like the

fictional novel, we seem to live in a world where all the buildings are made of glass.

Keeping Up With the Data

Juan Enriquez believes that we are going to have trouble keeping up with all the data coming our way. He explains the data explosion in his essay, "Reflection in a Digital Mirror." He says, "Most modern humans are now attempting to cram more data into their heads in a single day than most of our ancestors did during entire lifetimes." He goes on to say that in the time it takes to read his essay, "the amount of information generated by the human race will have expanded by about 20 petabytes." That is equivalent to about three times the amount of information currently in the Library of Congress.

We are trying to keep up. He estimates that we "try to cram in, read, understand, and remember at least 5 percent more words than the year before." That essentially means that five years ago we were trying to cope with

100,000 words per day. Now we are trying to cope with 130,000 words per day.

The good news is that we don't have to collect, catalog, and analyze all the data. Computers with powerful algorithms can do much of it. We will benefit greatly from this tsunami of data. We will go from sampling the available data to having a collection of enormous data sets. We will know the world around us in unprecedented ways.

The explosion of digital data is also unprecedented. Juan Enriquez estimates that in 1986, only 6 percent of the world's data was digital. The worldwide web was still three years away. There was no Google or any of the services that we take for granted today. Now more than 99 percent of the world's written words, images, music, and data are in digital form.

On the one hand, we are drowning in a sea of data. On the other hand, we have access to this data because we live in a digital world. The real question we will have to ask in the 21st century is

what to do with all this data.

We will need discernment. Proverbs 3:21 admonishes us to "preserve sound judgment and discernment." Proverbs 15:14 reminds us that a "discerning heart seeks knowledge." Paul prayed that believers would "be able to discern what is best" (Philippians 1:9-11). We will need discernment in this age of Big Data.

Big Data and Surveillance

Years ago, there was a TV program that began with these words: "You are being watched. The government has a secret system: a machine that spies on you every hour of every day. I know because I built it. I designed the machine to detect acts of terror, but it sees everything."

The program was the CBS series Person of Interest. The creator of the program, Jonathan Nolan, hit a cultural nerve about our increasing lack of privacy. He got some of his ideas from books like *The Watchers: The Rise of America's Surveillance State* and from the

government's defunct Total Information Awareness Office.

This isn't the first time Jonathan Nolan has raised the question of surveillance in the scripts he has written. When he co-wrote the script for the movie The Dark Knight, he inserted a scene where Batman turns all the Gotham City cell phones into tracking devices so he can find the location of The Joker.

As Christians, we should be concerned about the rise of the surveillance state. Romans 13:1-7 teaches that civil government is divinely ordained by God. Government bears the sword, and that means it is responsible to protect citizens from foreign invaders and from terrorists.

On the one hand, we should support efforts by our government to make our society safer. On the other hand, we should also work to prevent unwarranted intrusions into our privacy and any violation of our constitutional liberties. In the past, drawing lines was easier when a person came to your door

to conduct an unconstitutional search. Today we live in a cyber age where our privacy can be violated by a computer keystroke and a video camera.

The concern about big data reminds us that we must live our lives above reproach. Philippians 2:14-15 says, "Do all things without grumbling or disputing, that you may prove yourselves to be blameless and innocent, children of God above reproach during a crooked and perverse generation, among whom you appear as lights in the world." 1 Timothy 3:2 says that an elder must be "above reproach," which is an attribute that should describe all of us. Live a life of integrity and you won't have to be so concerned about what may be made public in an age where we are losing our privacy.

Additional Resources

Kerby Anderson, *Biblical View on Privacy and Surveillance*, POV booklet, 2018.

Juan Enriquez, "Reflection in a Digital Mirror," in *The Human Face of Big Data*, 2012.

Dan Gardner, "Big Data and Big Brother," https://www.dangardner.ca/article/big-data-and-big-brother.

Neil Richards, *Why Privacy Matters*, Oxford University Press, 2021.

Rick Smolen and Jennifer Erwitt, *The Human Face of Big Data*, Against All Odds, 2012.



Point of View

Point of View Ministries · PO Box 30 · Dallas, TX 75221
pointofview.net · 800-347-5151
May 2022 · A Biblical View on Big Data
© Point of View Ministries 2022