

What is Data Analytics?

by *Preston Gilbert, Data Analyst*

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Data Analytics is a term that gets thrown around a lot these days. Why is that? What value does it really provide? How can it be used by auditors? Analytics has been used for many years. Before computers even existed, companies would make decisions all of the time. Those decisions were not just a gut feeling; rather, they were based on past experiences, reactions, studies, etc. As technology grew, so did the access to information. This information is where the term data analytics really comes from – the ability to sift through lots of data to provide the evidence that helps support the decision.

“In the current business climate, almost every industry is being driven by Big Data.”^[i] Today we have access to data and tools that were not available before. Baseball became famous for using these tools, and now it is used widely across sports and businesses alike. They even made a movie about it. “*Moneyball* changed the game in countless ways, from the scouting department to the actual on-field play. Prioritizing on-base and slugging percentages led to more technology that led to enhanced statistics.”^[ii] These advanced metrics allowed small market teams to thrive and are the key to the WHY and VALUE of data analytics. Baseball is one of oldest statistical sports around, yet it has been changed forever with the access to information and technology, aka data analytics.

Auditors have benefits from the increased speed and accuracy of testwork, testing entire data sets, and accessing data from multiple sources, including access to the client’s raw data. Currently, certain audit tests are based on a random sampling process in order to reduce the cost and time needed to complete the audit. However, with new technology, this concept is changing. Using data analytics, audit procedures can be performed on full data sets helping to provide a more complete picture of the financial activities and transactions.

To be able to look at the full data set, technology is needed to decipher different types of data and the formats. Organizations provide data in multiple different files to the auditors, such as PDF, CSV, Text, Excel and more. “Data analytics software makes it easy to integrate data from multiple sources so auditors can run analyses quickly and efficiently, providing higher quality insights and more value to their clients.”^[iii]

The goal behind data analytics is to bring higher accuracy while reducing the time it takes to obtain these results. With current technology, there is usually upfront work to build macros and allow time and data to process in-machine learning applications. Once completed and tested, auditors can use these approaches for a more accurate insight, while reducing the time it takes to look through the data.

Data analytics is being widely used across all areas of business operations. As the concepts and technology continues to grow, so will its uses. From an auditor’s standpoint, data analytics is still very much in its infancy stages. As the growth continues, it’s only fair to have high expectations. Features such as reduced manual labor, more acute reporting, and increased fraud detection are just a few of the very valuable benefits in the future.

[i] “Data Analytics in Accounting: 5 Comprehensive Aspects.” *HEVO*. 27 Jul. 2021, hevodata.com/learn/data-analytics-in-accounting/

[ii] “How Billy Beane’s ‘Moneyball’ Concept Changed Baseball”. *Baseball Spotlight*. 21 Jul. 2021, <https://www.baseballspotlight.com/how-billy-beanes-moneyball-concept-changed-baseball/>

[iii] “5 Benefits of Adopting Data Analytics in Internal Audit.” *CaseWare IDEA*, idea.caseware.com/blog/5-benefits-data-analytics-internal-audit. Accessed 7 Feb. 2023.

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