

The Rise of Data Analytics: Part I

Mark Stamer
Steven D. Szymanski

mstamer@dopkins.com
sszymanski@dopkins.com

October 2018

The data at our fingertips holds greater power than ever before. Research from [International Data Corporation \(IDC\)](#) estimates that the volume of data in the world doubles every two years; an exponential rate that will most likely result in [160 zettabytes globally by 2025](#). It would be a missed opportunity to ignore what all of that data can tell us.

The best way to “listen” to your data is through data analytics. Data analytics is the process of gathering and examining data in order to gain insights for better decision making. Analyzing your data can tell you about trends, performance, and a variety of useful information for steering your business.

Types of Data Analytics

To be more specific, there are four types of data analytics: **descriptive**, **diagnostic**, **predictive**, and **prescriptive**. A company that wants to get the most out of its data will want to consider the benefits of each type.

- **Descriptive** analysis reports on past events, simply focusing on describing the facts of what happened in a set of transactions. This is the most commonly used type of analytics since it is also at the lowest level of sophistication. An example of descriptive analytics is reviewing a system-generated detail of aged receivables for amounts older than 90 days.
- **Diagnostic** analytics require more insight, since this type is used to explain the “why” of recorded events and trends. For example, breaking down a detail of aged receivables by customer could be used to reveal slow payers that might be inflating overall balances.
- **Predictive** analysis is even more sophisticated, as we begin to use our data of past events to make assumptions about the future and draw correlations to predict future outcomes and trends. A simple example would be using past sales trends to get a rough estimate of month-by-month operations.
- Lastly, the most strategic type is **prescriptive** analytics, which builds upon the information from predictive analytics in order to make workable plans to guide and make recommendations for the business in line with predictions. Such examples could be the use of streamlined data that would prompt one to increase production shortly before a month due to previous predictive indicators (e.g. past events whether a month has historically higher sales volume or increasing customer orders).

As straightforward as these examples may be, it can still be tough for any business to fully implement and automate a new approach with its data. In our next blog post, we’ll discuss reasons and uses for using data analytics to meet general business needs. A business’ data is a greater resource than ever before, and it can only tell us as much as we’re willing to hear.

Dopkins & Company has a team of professionals experienced in utilizing data to assist you in understanding the “numbers” so that you can make informed decisions in a timely and efficient manner. Our team consists of professionals that help facilitate the process to identify key data points and leading indicators for your business. Our experts routinely assist with building automated processes to extract data in a timely, accurate and efficient manner. Contact us if you’re interested in exploring opportunities to improve your company’s use of data!

For more information, please contact:

© 2018 Dopkins &



Mark B. Stamer, CPA

Senior Associate

mstamer@dopkins.com ▪ 716.634.8800

Mark is a member of Dopkins Assurance Services Group, where much of his practice involves forensic accounting services, fraud and embezzlement cases, litigation support services, and fraud prevention techniques. He also assists clients with performing risk assessments, evaluating and improving internal controls, and developing fraud prevention programs.

Company, LLP



Steven D. Szymanski, CPA

Associate

sszymanski@dopkins.com ▪ 716.634.8800

Steven is a member of the Assurance Services Department, and provides clients with financial information by researching and analyzing accounts and preparing financial statements. He began his career with Dopkins System Consultants, where he offered clients a range of IT assurance and consulting services.