

## **Analytics Advantage: Data Analysis Helps Small Businesses in Everyday Operations (September 2020)**

Small businesses today have a singular advantage to businesses from even 10 years ago. That advantage is big data and data analysis. Data is more accessible than ever and can help small-business owners make more informed decisions on business strategy.

### **What is data analytics?**

First, big data is the use of large amounts of information that is automatically collected from electronic data. And, data analytics is the study and the use of that data to make decisions. Big data is no longer something reserved for the largest companies in the world. As technology has advanced and become more accessible, it has become easier for small-business owners to use big data for their own needs.

### **Data analytics in action**

One powerful example of businesses learning customer behavior is the use of point-of-sale systems in restaurants. Companies like Bareburger, Jeni's Ice Cream, and Harpoon Brewing use a system called [Toast](#). Employees use a POS system to take customers' orders, which are then logged in a computer system. This tracking of orders can be used a few ways:

- Restaurant owners can look at any item that was ordered at any time and organize information.
- Owners could look at a POS system like Toast to learn how frequently a menu item is ordered and make decisions to keep menus up to date.
- Managers could track how many food orders come in at certain points of time during the day and schedule more workers during the busiest times of the day.

Another common tool is the use of web tracking systems like [Google Analytics](#) to track product marketing or website use throughout the day. Web analytics tools are useful when owners of small businesses want to know the following:

- How often people are visiting their business's website, and how long they are staying there.
- What exactly people are using to reach their website: through search engines, through social media, or by typing in the Web address in a browser.
- The location of the IP addresses that people are using to access the websites—useful information for target marketing.

Data analytics techniques can be used in other ways, too. Through predictive analytics—the use of analytics to plan for future events with statistical projections—operations and supply chain management can be influenced by data.

For example, a manager at an independent grocery store could be notified through an alert that a type of produce [needs to be ordered based on a week's sales information](#). Or, a manufacturing company could plan to have maintenance scheduled on equipment if [there is anticipated downtime based on work orders, past sales, and sales forecasts](#). And, according to Purdue University, big data is making its way into agriculture. [Farmers](#) are beginning to use analytics to make decisions on what fertilizer is used on what plant, seed distance, and harvest estimates.

### **Classroom implications**

How do you think data analytics will grow in the next five years?

What do you think could change? Think about examples of data analysis you may experience in a normal school day. If it isn't present, can you think of ways data analysis could be implemented in your school?

### **Links for further learning**

<https://www.business.com/articles/the-state-of-data-analytics-in-2019/>

<https://www.investopedia.com/terms/d/data-analytics.asp>

<https://www.allbusiness.com/small-business-data-analytics-105554-1.html>

<https://smallbiztrends.com/2020/03/data-analytics-trends.html>

<https://www.inc.com/magazine/201407/kevin-kelleher/how-small-businesses-can-mine-big-data.html>