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## THE ADVANTAGES OF DATA-DRIVEN DECISION-MAKING

**26 AUG 2019**

**Tim Stobierski** | Contributors

Analytics, Business Analytics, Decision-Making



Society has imbued the concept of “intuition”—of simply *knowing* when something is right or wrong—with a tremendous amount of prestige, importance, and influence.

In fact, according to some studies, more than half of Americans rely on their “gut” in order to decide what to believe, even when they are confronted with evidence that speaks to the contrary.

The concept of intuition has become so romanticized in modern life that it's now a part of how many people talk about and understand the “geniuses” of our generation. In science, for example, Albert Einstein is often quoted as saying, “The intuitive mind is a sacred gift," and in business, Steve Jobs is quoted as saying, “Have the courage to follow your heart and intuition; they somehow already know what you want to become.”

Though intuition can be a helpful tool, it would be a mistake to base all decisions around a mere gut feeling.

While intuition can provide a hunch or spark that starts you down a particular path, it's through *data* that you verify, understand, and quantify. According to a survey of more than 1,000 senior executives conducted by PwC, highly data-driven organizations are three times more likely to report significant improvements in decision-making compared to those who rely less on data.

Are you interested in learning how data-driven decision-making can enable you to be a more effective entrepreneur or member of your organization? Below is information about the benefits of becoming more data-driven, as well as a number of steps you can take to become more analytical in your processes.



## WHAT IS DATA-DRIVEN DECISION-MAKING?

**Data-driven decision-making** (sometimes abbreviated as DDDM) is the process of using data to inform your decision-making process and validate a course of action before committing to it.

In business, this is seen in many forms. For example, a company might:

- **Collect survey responses** to identify products, services, and features their customers would like
- **Conduct user testing** to observe how customers are inclined to use their product or services and to identify potential issues that should be resolved prior to a full release
- **Launch a new product or service in a test market** in order to test the waters and understand how a product might perform in the market
- **Analyze shifts in demographic data** to determine business opportunities or threats

How exactly data can be incorporated into the decision-making process will depend on a number of factors, such as your business goals and the types and quality of data you have access to.

The collection and analysis of data have long played an important role in enterprise-level corporations and organizations. But as humanity generates more than 2.5 quintillion bytes of data each day, it's never been easier for businesses of all sizes to collect, analyze, and interpret data into real, actionable insights. Though data-driven decision-making has existed in business in one form or another for centuries, it's a truly modern phenomenon.

## EXAMPLES OF DATA-DRIVEN DECISION-MAKING

Today's largest and most successful organizations use data to their advantage when making high-impact business decisions. To better understand how your organization can incorporate data analytics into its decision-making process, consider the success stories of these well-known businesses.

**1. Leadership Development at Google**

Google maintains a heavy focus on what it refers to as "people analytics." As part of one of its well-known people analytics initiatives, Project Oxygen, Google mined data from more than 10,000 performance reviews and compared the data with employee retention rates. Google used the information to identify common behaviors of high-performing managers and created training programs to develop these competencies. These efforts boosted median favorability scores for managers from 83 percent to 88 percent.

**2. Real Estate Decisions at Starbucks**

After hundreds of Starbucks locations were closed in 2008, then-CEO Howard Schultz promised that the company would take a more analytical approach to identifying future store locations.

Starbucks now partners with a location-analytics company to pinpoint ideal store locations using data like demographics and traffic patterns. The organization also considers input from its regional teams before making decisions. Starbucks uses this data to determine the likelihood of success for a particular location before taking on a new investment.

**3. Driving Sales at Amazon**

Amazon uses data to decide which products they should recommend to customers based on their prior purchases and patterns in search behavior. Rather than blindly suggesting a product, Amazon uses data analytics and machine learning to drive its recommendation engine. McKinsey estimated that, in 2017, 35 percent of Amazon's consumer purchases could be tied back to the company's recommendation system.

## BENEFITS OF DATA-DRIVEN DECISION-MAKING

**1. You'll Make More Confident Decisions**

Once you begin collecting and analyzing data, you're likely to find that it's easier to reach a confident decision about virtually any business challenge, whether you're deciding to launch or discontinue a product, adjust your marketing message, branch into a new market, or something else entirely.

Data performs multiple roles. On the one hand, it serves to benchmark what currently exists, which allows you to better understand the impact that any decision you make will have on your business.

Beyond this, data is logical and concrete in a way that gut instinct and intuition simply aren't. By removing the subjective elements from your business decisions, you can instill confidence in yourself and your company as a whole. This confidence allows your organization to commit fully to a particular vision or strategy without being overly concerned that the wrong decision has been made.

Just because a decision is based on data doesn't mean it will always be correct. While the data might show a particular pattern or suggest a certain outcome, if the data collection process or interpretation is flawed, then any decision based on the data would be inaccurate. This is why the impact of every business decision should be regularly measured and monitored.

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**2. You'll Become More Proactive**

When you first implement a data-driven decision-making process, it's likely to be reactionary in nature. The data tells a story, which you and your organization must then react to.

While this is valuable in its own right, it's not the only role that data and analysis can play within your business. Given enough practice and the right types and quantities of data, it's possible to leverage it in a more proactive way—for example, by identifying business opportunities before your competition does, or by detecting threats before they grow too serious.

**3. You Can Realize Cost Savings**

There are many reasons a business might choose to invest in a big data initiative and aim to become more data-driven in its processes. According to a recent survey of Fortune 1,000 executives conducted by NewVantage Partners for the *Harvard Business Review*, these initiatives vary in their rates of success.

One of the most impactful initiatives, according to the survey, is using data to decrease expenses. Of the organizations which began projects designed to decrease expenses, more than 49 percent have seen value from their projects. Other initiatives have shown more mixed results.

"Big data is already being used to improve operational efficiency," said Randy Bean, CEO and managing partner of consultancy firm NewVantage Partners, when announcing the results of the survey. "And the ability to make informed decisions based on the very latest up-to-the-moment information is rapidly becoming the mainstream norm."

## HOW TO BECOME MORE DATA-DRIVEN

If you have a goal of becoming more data-driven in your approach to business, there are many steps you can take to reach that goal. Here's a look at some of the ways you can approach your daily tasks with an analytical mindset.

**1. Look for Patterns Everywhere**

Data analysis is, at its heart, an attempt to find a pattern within, or correlation between, different data points. It's from these patterns and correlations that insights and conclusions can be drawn.

The first step in becoming more data-driven is making a conscious decision to be more analytical—both in business as well as in your personal life. While this might seem simple, it's something that takes practice.

Whether you're in the office pouring over financial statements, standing in line at the grocery store, or commuting on the train, look for patterns in the data around you. Once you have noticed those patterns, practice extrapolating insights and try to draw conclusions as to why they exist. This simple exercise can help you train yourself to become more data-driven in other areas of your life.

**2. Tie Every Decision Back to the Data**

Whenever you're presented with a decision, whether business-related or personal in nature, do your best to avoid relying on gut instinct or past behavior when determining a course of action. Instead, make a conscious effort to apply an analytical mindset.

Identify what data you have available that can be used to inform your decision. If no data exists, consider ways in which you could collect it on your own. Once you have the data, analyze it, and use any insights to help you make your decision. As with the pattern-spotting exercise, the idea is to give yourself enough practice that analysis becomes a natural part of your decision-making process.

**3. Visualize the Meaning Behind the Data**

Data visualization is a huge part of the data analysis process. It's nearly impossible to derive meaning from a table of numbers. By creating engaging visuals in the form of charts and graphs, you'll be able to quickly identify trends and make conclusions about the data.

Familiarize yourself with popular data visualization techniques and tools, and practice creating visualizations with any form of data you have readily available. This can be as simple as creating a graph to visualize your monthly spending habits and drawing conclusions from the visualization. You can then use these insights to make a personal budget for the next month. After completing that exercise, you'll have successfully made a data-driven decision.

**4. Consider Furthering Your Education**

If you're uncomfortable with the idea of learning how to incorporate data into your decision-making process on your own, there are a number of educational options you can pursue to develop the data science skills needed to succeed.

Which option makes the most sense will depend on your personal and professional goals. For example, individuals considering a serious career change might decide to pursue a master's degree with an emphasis on data analytics or data science. But for everyone else, simply taking an online business analytics or data science course could be enough to lay the foundation necessary for success.


## USING DATA TO ANSWER CRITICAL QUESTIONS

While there are many benefits to data-driven decision-making, it's important to note that you don't need to take an all-or-nothing approach to get there. By starting small, benchmarking your performance, documenting everything, and adjusting as you go, you can become more data-driven and thrive at your organization.

***Do you want to learn more about how to use data to inform business decisions at your organization? Download our Beginner's Guide to Data & Analytics to learn how you can leverage the power of data for professional and organizational success.***

*This post was updated on February 19, 2021. It was originally published on August 26, 2019.*

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**About the Author**

*Tim Stobierski is a marketing specialist and contributing writer for Harvard Business School Online.*