Case Study: New data perspectives

As you have been learning, you can find data pretty much everywhere. Any time you observe and evaluate something in the world, you're collecting and analyzing data. Your analysis helps you find easier ways of doing things, identify patterns to save you time, and discover surprising new perspectives that can completely change the way you experience things.

Here is a real-life example of how one group of data analysts used the six steps of the data analysis process to improve their workplace and its business processes. Their story involves something called people analytics — also known as human resources analytics or workforce analytics. People analytics is the practice of collecting and analyzing data on the people who make up a company's workforce in order to gain insights that improve the way that company operates.

Being a people analyst involves using research, experiments, and data analysis to gain insights about employees and how they experience their work lives. The insights are used to define and create a more productive and empowering workplace. This can unlock employee potential, motivate people to perform at their best, and ensure a fair and inclusive company culture.

The six steps of the data analysis process that we've been learning in this program are: ask, prepare, process, analyze, share, and act. These six steps apply to any data analysis. Here, you will read more about how a team of people analysts used these six steps to answer a business question about employees, but you will use these same six steps to answer any data analysis question. Let's break down what this team did, step-by-step.

Ask

First up, the analysts in our example needed to define what the project would look like and what would equal a successful result. So, to determine these things, they asked effective questions and collaborated with leaders and managers who were interested in the outcome of their people analysis.

Prepare

It all started with a solid plan. The group built a timeline and decided how they wanted to relay their progress to interested parties. Also during this step, the analysts identified what data they needed to reach the successful result they identified in the previous step - in this case, the analysts chose to gather the data from an employee survey and identified what kinds of questions the survey would include. Rules were established for who would have access to the data collected, what specific information would be gathered, and how best to present the data visually. The end of this step included a brainstorm session of all the possible project- and data-related issues and how to avoid them.
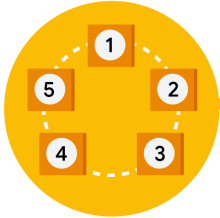
Process

The group sent the survey out. Great analysts know how to respect both their data and the people who provide it. The employee survey provided the data, so it was important to make sure all employees gave their consent to participate. The data analysts also made sure employees understood how their data would be collected, stored, managed, and protected. In order to maintain confidentiality and protect and store the data effectively, access was restricted to a limited number of analysts. Collecting and using data ethically is one of the responsibilities of a data analyst. You'll learn more about this later in this course, but for the people analysts in this example, ethical data collection and use means three things: getting consent from the participants; ensuring confidentiality in how the data is analyzed and reported; and carefully storing and protecting the data. Then the data was cleaned up to make sure it was complete, correct, and relevant, and uploaded to an internal data warehouse for an additional layer of security.

Analyze

Now it is time for the analysts to do what they do best: Analyze! From the completed surveys, the data analysts discovered that the employee experience ranged from extremely positive to extremely negative. While the natural impulse is to sugarcoat bad news, the group knew it was important to document exactly what they found, no matter what the results said. To do otherwise would hurt trust in the survey process and reduce their ability to collect truthful data from employees.

Share

Time to report their findings. The team showed how their results stacked up against the organizational average, as well as how this year's results compared to results from the previous year. This helped identify team-specific as well as organization-wide successes and challenges. Just as they made sure the data was carefully protected, they did the same with sharing their reports. For example, in order for a manager to receive their team's survey report, a minimum number of team members had to participate. This ensured confidentiality of the respondents. The group presented the results to leaders first to make sure they had the full picture, then asked them to deliver the results to their teams. This gave leaders the opportunity to put the results into context and have productive team conversations about the results and next steps.

Act

The last stage of this process for the team of analysts was to work with leaders within their company and decide how best to implement changes and take action based on the findings. As a result, the organization made a plan and worked hard to improve key focus areas. A year later, the same survey was distributed to employees with the hopes that a comparison between the two sets of results would indicate the success or failure of their action plans. Turns out, the changes improved the employee experience and the action plans were successful!

One of the many things that makes data analytics so exciting is that the problems are always different, the solutions need creativity, and the impact on those around us can be great — even life-changing or life-saving. As a data analyst, you can be part of these efforts. Maybe you are even inspired to learn more about the field of people analytics. If so, consider researching more about this field online and adding that research to your data analytics journal. You never know: One day soon, you could be helping a company create an amazing work environment for you and your colleagues!