Data ethics considerations

In the previous video, you learned how to use knowledge to discern data and how signals help prioritize data. This reading will cover the importance of **data ethics** and two key principles: **data privacy** and **data bias**.

Data ethics

As a project manager, data collection and analysis will be a key part of your projects. As you've learned, you'll collect data from a variety of sources, including focus groups, interviews and questionnaires. The data you collect will usually hold **PII (personally identifiable information)**—information that could be used to directly identify, contact, or locate an individual. A lot of times, you will also need to report on the data you collect to stakeholders, customers, and your project team. Collecting, analyzing, and sharing this data in an ethical way is extremely important for maintaining the integrity of your organization, your projects, and your position.

Data ethics is the study and evaluation of moral challenges related to data collection and analysis. This includes generating, recording, curating, processing, sharing, and using data in order to come up with ethical solutions.

Businesses apply data ethics practices so they can:

Comply with regulations

Show that they are trustworthy

Ensure fair and reasonable data usage

Minimize biases

Develop a positive public perception

Data ethics is rooted in several principles. In this reading, we will focus on two of these principles: **data privacy** and **data bias**.

Data privacy

Data privacy is a key part of data ethics. Data privacy deals with the proper handling of data. This includes the purpose of data collection and processing, privacy preferences, the way organizations manage personal data, and the rights of individuals. It focuses on making sure the ways we collect, process, share, archive, and delete data are all in accordance with the law.

As a project manager, it is your responsibility to protect the data you collect. You can help ensure the privacy of data collected from users, stakeholders, and others for your projects by:

Increasing data privacy awareness. Make sure every member of your project team—plus the vendors, contractors, and other stakeholders from outside of your company—are made aware of your organization's data security and privacy protocols.

Using security tools. Free security tools, like encrypted storage solutions and password managers, can decrease your project's vulnerability to a data breach. In a lot of applications, like ones that are part of Google Workspace and Microsoft OneDrive, privacy settings can be adjusted to only give access to specific individuals.

Anonymizing data. Data anonymization refers to one or more techniques such as blanking, hashing, or masking personal and identifying information to protect the identities of people included in the data. This helps protect individuals' personal information by keeping them anonymous. Once the information has been anonymized, it can then be used and shared freely. Types of data that should be anonymized include names, telephone numbers, social security numbers, email addresses, photographs, and account numbers.

Data bias

Another important data ethics practice is making sure that the data you collect does not indicate any biases. **Data bias** is a type of error that tends to skew results in a certain direction. Maybe the questions on your survey had a particular slant to influence answers, or maybe your sample group was not fully representative of the population you want to study. Bias can also happen if a sample group lacks inclusivity. For example, if your sample does not include people with disabilities. The way you collect data can also bias a dataset. Say you give people only a short time to answer questions, this can lead to rushed responses. When people are rushed, they tend to make more mistakes, which can affect the quality of their data and create biased outcomes. As a project manager, you have to think about bias and fairness from the moment you start collecting data to the time you present your conclusions.

Types of biases

There are different types of biases to keep in mind when setting up your data collection processes. Here are four of the most common types of biases that could impact your data:

Sampling bias is when a sample is not representative of the population as a whole. For example, maybe your sample did not include people above the age of 65. Or maybe you excluded people from certain socioeconomic groups.

Observer bias is the tendency for different people to observe things differently. For example, stakeholders from different parts of the world might view the same data differently and draw different conclusions from it.

Interpretation bias is the tendency to always interpret situations that don't have obvious answers in a strictly positive or negative way, when, in fact there is more than one way to understand the data. Data that does not provide an obvious set of conclusions makes some people feel anxious, which can lead to interpretation bias. For example, a team member might interpret inconclusive survey results negatively, while other team members might be able to think more carefully and assess the data from different angles.

Confirmation bias is the tendency to search for or interpret information in a way that confirms pre-existing beliefs. For example, you might ask only specific stakeholders for feedback on parts of your project because you know they are the most likely to have the same perspective as you.

Each of these types of bias affect the way you collect and make sense of the data, so it is important to be aware of them when setting up your data collection processes.

Key takeaway

According to the Project Management Institute's Code of Ethics & Professional Conduct, "Ethics is about making the best possible decisions concerning people, resources, and the environment. Ethical choices diminish risk, advance positive results, increase trust, determine long term success, and build reputations. Leadership is absolutely dependent on ethical choices."

A key way you can show your leadership skills is by exercising sound judgment when it comes to data ethics. In order to tell a project's data-informed story to stakeholders, project team members, and others in an ethical way, you have to make sure you think about both privacy and bias-related concerns in how you conduct, analyze, and share that data.

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