Activity Overview

So far, you have examined data analytics from a wide vantage point and learned how organizations create teams to take advantage of their collected data. You've also gained some valuable career tips and resources that can help you develop your career. In this activity, you will learn more about how data teams share tasks and responsibilities through the RACI matrix by completing one yourself.

Throughout the duration of a data project, there are many tasks that are critical to its overall success. In large companies with global workforces, or if you're simply new to a team, it is not always easy to determine who has specific responsibilities or manages certain tasks. To help clarify roles, many organizations implement the RACI matrix.

Be sure to complete this activity before moving on. The next course item will provide you with a completed exemplar to compare to your own work. You will not be able to access the exemplar until you have completed this activity.

Scenario

Review the following scenario. Then complete the step-by-step instructions.

RACI is an acronym that comes from four classifications of involvement: Responsible, Accountable, Consulted, and Informed. The RACI matrix is one of many ways that companies organize roles and responsibilities. Although you may encounter other structural models, the RACI matrix offers you a lot of information on workplace responsibilities in a simple way. When companies employ the RACI matrix, stakeholders and cross-functional team members have a clearer understanding of involvement throughout the entire project. It is a model that helps to define roles and responsibilities for individuals or teams to ensure work gets done efficiently by listing who is "responsible," "accountable," "consulted," and "informed" for project tasks.

The matrix identifies and assigns project tasks to one of the following levels of engagement:

Responsible: The cross-functional team members in this role are directly responsible for performing the work necessary or make decisions that are directly related to completing a task within a project. There can be several roles or groups responsible for the task, meaning that the responsibilities are held jointly by more than one classification.

Accountable: Those assigned the accountable role within a task are given the job of approving the work performed by those who are "responsible." As a general rule there is usually a single person in this role, often a manager or a project lead.

Consulted: This role applies to those assigned to offer input on a task. There should be a clear and open line of 2-way communication between those assigned to "responsible" and "consulted." There can be several people in this role. In many situations, they are referred to as subject matter experts, or SMEs for short.

Informed: Those in this role need to be kept aware of progress and concerns of those working on a project. These responsibilities tend to be assigned to higher levels of senior leadership. They need to understand the insights from projects rather than the details of how specific tasks are performed.

By labeling someone to one of these four categories, the RACI matrix helps categorize their level of involvement and proximity to each task. When you know who is involved, and at what level, it's easier to determine who to contact if any concerns arise.

Step-By-Step Instructions

Follow the instructions and answer the questions to complete the activity. Then, go to the next course item to compare your work to a completed exemplar.

Part 1 - Explore an example matrix

Step 1: Review four common data professional roles

Consider the four common data professional roles and how they might perform different functions and tasks within the same project:

Data scientist: Data scientists are professionals who work closely with analytics to provide meaningful insights that help improve current business operations.

Data engineer: Data engineers are professionals concerned with infrastructure and are responsible for developing and managing databases. They often work alongside data scientists to build custom pipelines to manage the analysis and organization of raw data.

Analytics team Manager: Analytics team managers are data professionals who build and support a team of data scientists and analysts. Often they will lead a company's analytics department. In this role, they supervise different projects to develop and implement strategies that convert raw data into business insights.

Business intelligence (BI) engineer: Business intelligence engineers are data professionals who use their knowledge of business trends and databases to organize information and make it accessible. This role is also known as a business intelligence analyst.

⟩ Step 2: Example RACI matrix for a single task

One of the tasks essential to any analytics project is providing access to data. This means that when you assume this role, you will help others use the available data. The RACI matrix is a way to communicate the level of accountability for this task by assigning cross-functional team members to one of the four categories: R: Responsible, A: Accountable, C: Consulted, or I: Informed

Task	Business Intelligence Engineer	Data Scientist	Analytics Team Manager	Data Engineer
Access to data	R	C	R	R

On the sample RACI chart, not every letter has been assigned. Not all tasks will include every letter! Three of the data roles have been marked as "responsible" for facilitating data accessibility.

BI engineers organize existing data and provide reports to help understand what type of data is available.

Analytics team managers develop and prioritize work streams based on business questions that can be addressed with the data.
Data engineers build custom pipelines to manage organization of and access to the raw data the team needs.

All three of these roles have been assigned tasks that will provide *access to data* for other team members.

Notice that data scientists are "consulted" in this example. Although they are instrumental in analyzing data and providing insights, they might not take the lead in initially acquiring the data. However, the data scientists will want to work closely with those leading the process to make sure they have data that is aligned to the business objectives and modeling approach.

Part 2 - Complete your own matrix

⟩ Step 1: Access the template

To use the template for this course item, click the following link and select *Use Template*.

Link to template: ⬀RACI Matrix Template⬀

OR

If you don't have a Google account, you can download the template directly from the following attachment.

📎Activity Template_ RACI Matrix
DOCX File

⟩ Step 2: Assign responsibility

Assign the business intelligence engineer, the data scientist, the analytics team manager, and the data engineer one of the RACI categories for three different data project tasks: R: Responsible, A: Accountable, C: Consulted, or I: Informed. For this matrix, there are three common tasks that need to be assigned: access to data, create models to analyze data, and drive insights and recommendations based on data. Remember to consider each role's usual responsibilities as you complete your matrix.

⟩ Step 3: Expand your RACI matrix

The four data team roles identified on this chart are examples of titles that you will work closely with on a regular basis. Now it's time to consider how to incorporate an additional executive-level role:
Chief data officer: The chief data officer is in charge of consistency, accuracy, relevancy, interpretability, and reliability of the data a team provides.

There will be some tasks that will require more senior stakeholder engagement. One of those tasks is ensuring that data used in analysis is compliant with industry standards and regulations.

Ensure Data Compliance: Team members responsible for making sure that the organization follows protocols and legal requirements of data stewardship.

Add this new role and task to your RACI matrix.

What to Include in Your Response

Be sure to address the following elements in your completed activity:

The roles and responsibilities of common data professional roles

How the RACI criteria applies to different data tasks

The organization of a data team's roles and responsibilities