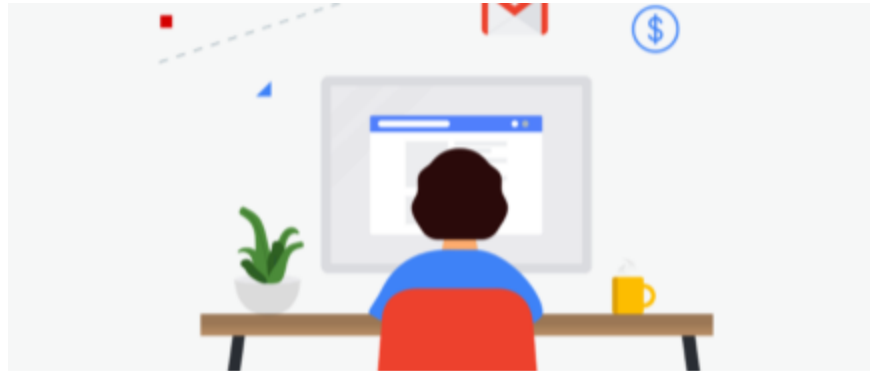


# Collaboration with business intelligence partner



## Business stakeholder initiates project

The **chief operating officer (COO)** sends you an email asking for a way to track how the company's travel spending compares to the travel budget for the current fiscal year.



## Project manager defines the work

The **project manager** starts gathering requirements, defines the project scope, and prepares the timeline. You have daily check-ins with them to confirm alignment.



## You find the right data

As the **business intelligence professional** on the project, you meet with the sales and finance team. You learn that company travel details are in an in-house expense system, and budgets are in the company's planning software.

### 你找到正确的数据



## Engineer helps access the data

Now that you know where the data is, you need access. You ask an **application programming interface engineer** to help get the data. They write Python programs that pull data from the two systems and deliver it into a data warehouse.

### 工程师帮忙访问数据



### Data specialists clean the data

Now that the raw spend and budget data is in a warehouse, **data warehousing specialists** clean and standardize the data, validate it, and deliver it into a BigQuery database.

#### 数据专家清理数据



### Review for data governance

With the data available as analyst-ready tables in a BigQuery database, a **data governance professional** makes sure the data has proper access controls in place.

#### 审查数据控制



## Analyze the data with data analysts

Working closely with **data analysts**, you understand the data, identify key fields, and conduct a preliminary analysis. Then, you merge travel history data with budget data in order to answer your COO's question about how travel spend compares with the budget.

### 与数据分析师一起分析数据



## Create a dashboard and present results

Because the COO also wants to monitor travel spend going forward, you build an insights dashboard that's connected to the data warehouse. Then, you prepare a short slide presentation to share the results of the project with the COO.

### 创建一个仪表板并显示结果

项目的结果。