



Data Analytics

Explore the power of data and its ability to power breakthrough possibilities for individuals, organisations and societies with Quantum.

Data · Free · 5800+ 5 Star Reviews

Get Career Ready

-  Complete work that simulates life on the job. 4-5 hours and self-paced.
-  Stand out in your application to Quantum. Show us you're a motivated candidate.

Start Free Program

Why complete our Job Simulation

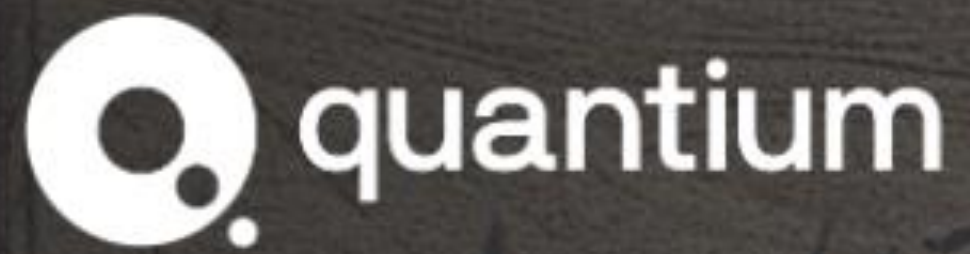
A risk-free way to experience work on the job with us at Quantum. Practice your skills with example tasks and build your confidence to ace your applications.

Self-paced **4-5 hours** · No grades · No assessments

Conduct analysis on your client's transaction dataset and identify customer purchasing behaviours to generate insights and provide commercial recommendations.

What you'll learn

- Understand how to examine and clean transaction and customer data.
- Learn to identify customer segments based on purchasing behavior.
- Gain experience in creating charts and graphs to present data insights.
- Learn how to derive commercial recommendations from data analysis.



How it works



Complete tasks guided by pre-recorded videos and example answers from our team at Quantium. No live sessions, all self-paced.



Earn a certificate and add it to your resume and LinkedIn as an extra curricular activity.



Stand out in applications. Confidently answer interview questions and explain why you're a good fit for our team.

Skills you will learn and practice:

Data validation

Data visualisation

Data wrangling

Programming

Data analysis

Commercial thinking

Statistical testing

Presentation skills

Communication skills

[View All](#)

1

Task One

Conduct analysis on your client's transaction dataset and identify customer purchasing behaviours t...

 1-2 hours

2

Task Two 1-2 hours

3

Task Three 1-2 hours**Finish Line**

Achievements

**Task 1: Data preparation and customer analytics**

Here is your task

We need to present a strategic recommendation to Julia that is supported by data which she can then use for the upcoming category review. However, to do so, we need to analyse the data to understand the current purchasing trends and behaviours. The client is particularly interested in customer segments and their chip purchasing behaviour. Consider what metrics would help describe the customers' purchasing behaviour.

We have chosen to complete this task in R, however you will also find Python to be a useful tool in this piece of analytics. If you aren't familiar with R or Python we would recommend searching a few online courses to help get you started. We have also provided an R solution template if you want some assistance in getting through this Task. Whilst its possible to complete the task in Excel you may find the size of the data and the nature of the tasks is such that it is more difficult to complete in Excel.

To get started, download the resource csv data files below and begin performing high-level data checks such as:

- Creating and interpreting high-level summaries of the data
- Finding outliers and removing these (if applicable)
- Checking data formats and correcting (if applicable)

Here are some resources to help you



Download "R" Software

[Click here to visit website →](#)



QVI Transaction Data

[Click to download file →](#)



QVI Purchase Behaviour

[Click to download file →](#)



R Solution Template

[Click to download file →](#)

This file should be transferred to an R Markup (.Rmd)

1

Task One 1-2 hours

2

Task Two

Extend your analysis from Task 1 to help you identify benchmark stores that allow you to test the impact o...

 1-2 hours

3

Task Three 1-2 hours**Finish Line****Task 2: Experimentation and uplift testing**

Task Overview

**What you'll learn**

- Understand experimentation and uplift testing, comparing trial and control stores.
- Learn control store selection based on defined metrics.
- Gain experience in data visualization.
- Perform statistical analysis to assess sales differences and formulate recommendations.

**What you'll do**

- Define metrics to select control stores.
- Analyze trial stores against controls.
- Use R/Python for data analysis and visualization and summarise findings and provide recommendations.



Task 3: Analytics and commercial application

Task Overview

1

Task One

🕒 1-2 hours

2

Task Two

🕒 1-2 hours

3

Task Three

Use your analytics and insights from Task 1 and 2 to prepare a report for your client, the Categor...

🕒 1-2 hours



Finish Line



What you'll learn

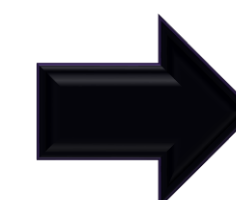
- Gain experience in preparing a client report based on data analysis.
- Understand the "Pyramid Principles" framework for report structure.
- Practice creating data visualizations and key callouts.
- Develop skills in translating data into actionable insights and recommendations.



What you'll do

- Use the Pyramid Principles framework for structuring the report.
- Submit a report that incorporates data visualizations, key insights, and recommendations.

Register Now



<https://bit.ly/3YLtPJJ>