

EXPLORE | DIGITAL SKILLS

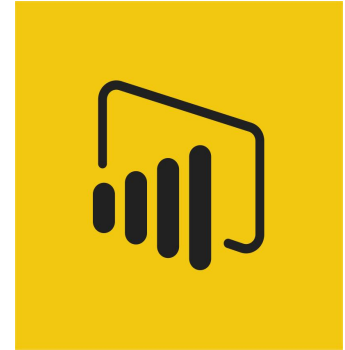
Power-BI Case Study
MARKETING

Marketing Case Study

You are required to use **Power BI to fix a broken dashboard and answer practical Multiple Choice Questions (MCQs)** on a cleaned bank marketing dataset.

In this section of the predict, you will need to:

- Work in the Microsoft Power BI application;
- Understand and apply dashboarding skills (visual graphing, filtering and changing data parameters);
- Work with metrics and understand summary statistics;
- Apply visualisation techniques on a dashboard; and
- Submit a predict solution onto EXPLORE's Athena platform.



Instructions

Story: You are a manager/analyst/recruiter/etc at a medium-sized company. Your team is able to gather some data on the marketing of loans to its clients. Having cleaned the data, the company board has requested that you design a monthly dashboard to assess the different variables during the loan campaign. The dashboard that was previously developed is broken and is missing values. You will need to fix up the dashboard to answer some of the board's question. **You will be using Microsoft Power BI to complete the task.**

Follow these instructions to complete the predict section

STEP 1: Download and open the broken dashboard within PowerBI.

STEP 2: Complete the MCQs.

STEP 3: Zip the file and upload your answers onto Athena.



STEP 1 : Download and open the broken dashboard.

Follow these steps to download and open the .pbix file:

1. Download the ZIP file with the dashboard under “Download Additional Files”.
2. Make sure you have downloaded [Microsoft Power BI for your specific operating system](#).

Below are the variable descriptions within the Power BI Fields:

age	The age of the client (years).	loan	Does the client have a personal loan? Either “no”, “yes” or “unknown”.
job	Occupation of the client.	contact	Type of contact. Either “cellular”, “telephone”, “unknown”.
marital	The client's marital status: “divorced”, “married”, 'single', 'unknown'.	day	Day of the month.
education	The client's level of education either being: “primary”, “secondary”, “tertiary” or “unknown”.	month	Month of the year (Format: mmm).
default	Has the client defaulted on their payment for any of their loans? Either “yes” or “no”	duration	Duration of last recorded contact with the client (in seconds).
balance	The client's account balance (in R xxx00).	campaign	The number of contacts made in the current campaign.
housing	Does the client have a housing loan? Either “yes” or “no”.	pdays	The number of days that passed after the client was last contacted from a previous campaign.
previous	The number of contacts made in the previous campaign.	Previous Outcome	The outcome of the previous marketing campaign: “failure”, “nonexistent”, or “success”.
		Current Campaign Outcome	Whether the client took out a loan in the current campaign.

STEP 1: Download and open the broken dashboard.

During the fixing of the dashboard, you will need to complete the following:

1

Add specified graphs in the grey blocks.

2

Make sure all graphs/visuals have the correct metric aggregating the data.

3

Ensure the dashboard follows good visualisation and dashboard standards.

STEP 2: Complete the MCQs.

Complete the following question on Athena under “Case Study : Marketing [MCQ]” in the Test tab:

<p>To complete this MCQ, please make sure that you have read through the accompanying slides (Case Study: Marketing [Slides]) and that you have downloaded the broken Power BI dashboard. You will be required to fix the broken dashboard and then proceed to answer the questions. Keep in mind a loan deal is considered a personal and home loan.</p> <p>How many previous outcomes are labelled as unknown?</p>	<p>During any month, which day of the month did the call centre agents take the shortest average time to close any type of loan deal in the current campaign?</p>
<p>What is the median age of the previous campaign failed outcome?</p>	<p>Which month was the third most successful month to close a deal on the current campaign?</p>
<p>Under which current campaign outcome ("yes" or "no") is there a higher proportion or percentage of clients with no housing loan?</p>	<p>Which month was the most successful month to close a loan deal to those who did not have a home loan?</p>
<p>Which job title had the most loan product rejections during the current campaign?</p>	<p>Which day of the month had the highest volume of failed loan applications in the previous campaign, from applicants with a tertiary education?</p>
<p>How many clients took a loan product during both campaigns?</p>	<p>Given the scenario below, answer the following question.</p> <p>SCENARIO: You are trialling the dashboard to make changes in the call centre for an additional campaign. We want to use the volumes of advertising, and of loan acceptance from the current campaign to prepare for the additional campaign.</p> <p>For clients who took out a loan in the current campaign, after failing to secure a loan in the previous campaign; which date had the highest volume of loan acceptances? [You need to simultaneously identify the day & month]</p>