

EXPLORE || DIGITAL SKILLS

Power-BI Case Study
INSURANCE

Insurance Case Study

You are required to use **Power BI to fix a broken dashboard and answer practical Multiple Choice Questions (MCQs)** on a cleaned insurance default 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 summarised statistics;
- Apply visualisation techniques on a dashboard; and
- Submit a predict solution onto the EXPLORE Athena.



Instructions

Story: You are a manager/analyst/recruiter/etc at a medium-sized company. Your team is able to gather you some data on the credit defaults. You have cleaned the data and the board requires you to design a monthly dashboard to assess the different variables during the new 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.

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 the “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:

company	Name of the company.	current_assets	All assets utilised for standard business operations.
id	Identification number of the company.	lt_liabilities	Long term (due more than one in the future) liabilities to the company.
year	Year of recording.	curr_liabilities	Short term (due date is less than a year).
net_sales	Total revenue of the company (Rxxx 000).	revenue	Income generated by the company (Rxxx 000).
op_profit_ebit	Operating profit before interest and tax (Rxxx 000).	num_employees	The number of employees (hundreds) working in each company.
prof_after_net_fin_items	Profit after net financial items (Rxxx 000).	op_prof_ebitda	Operating profit before interest, tax, depreciation and amortisation.
results	Profit after tax (Rxxx 000).		

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Below are the variable descriptions within the Power BI Fields (continued):

gross_prof	Revenue less the cost of sales.
quick_ratio	Indicator or short-term liquidity. Calculated as the current assets minus inventory, divided by current liabilities.
default	Indication of a default. (1=Yes, 0=No)
actual_status	Status of activity of insurance (Either active or inactive).
default_date	Date of default, if defaulted.
date	Date of recording (mm/dd/year)
fixed_assets	Long term assets of a company.
prof_margin	Percentage of profit relative to the revenue. Calculated as gross profit divided by the revenue, multiplied by 100.

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 questions on Athena under “Case Study : Insurance [MCQ]” in the Test tab:

1. How many defaults occurred from 2007 to 2020?	6. If you only select companies that have defaulted, which year had the largest sum of fixed assets?
2. Acona AB is a new startup that your organisation serviced. What is their median profit margin?	7. AB Imarc Borr is a loyal customer. Through hard work and collaboration with your company, they managed to obtain more long term (fixed) assets in the year 2019. What was the change in their sum of fixed assets (rounded to the nearest thousand) from 2018 to 2019?
3. What was the median profit margin for the companies which defaulted?	8. In the year of Ventilation AB's default, how many employees' jobs were cut if you compare the number of employees to that of the previous year?
4. In the year Ventilation AB defaulted, what was their median quick ratio compared to the previous year?	9. Akira AB has not recorded any activity leading to its default. Using the data available on the dashboard, what would a plausible explanation for their default?
5. Regarding Adeo Bygg AB and Ventilation AB, what was the combined median quick ratio in the years that the two companies defaulted?	10. AB Golv & Tak is a successful client and has seen massive growth since its inception. You intend on doing a study on their finances. Which of the following statements are true? (Based on 4 options)