Mnguni Zulu

Exercise 1.6

18.09.2023

Scenario 1

Question 2:

A **diagnostic analysis** is required, since the question here is: *Why is it happening?*

Question 3:

Multivariate Analysis, is suitable because there are numerous variables to consider when trying to understand and plot. Descriptive statistics will be used, since we can have perfect information on the population, which is the dataset.

Question 4:

- How have sales of other genres been over the same period?
- Are sales for the whole genre dipping or just the company´s?
- How has the genre performed in previous periods/years?

Without this information, I won´t know if the slump in sales is due to internal or external factors. It may be that puzzle games have a cyclical tendency.

Scenario 2

Question 2:

A **prescriptive analysis** is required, because the team *wants to know what is going to happen AND what to do going forward*, but *the real-word restrictions* are important for the prescribed actions.

Question 3:

Multivariate Analysis, inferential statistics

Question 4:

- How have sales for previous periods been in the cities?
- What are the sales prices and gross profit margins for each of the games?
- What is the cost from central distribution point to each city?

Without knowing the acceptable margins, it will be difficult to decide which games qualify to be sent to which cities. I also need to know which genres have been most successful in which cities.

Scenario 3

Question 2:

A **descriptive analysis** will suffice, because the executive needs to report on *what has happened*.

Question 3:

Univariate Analysis, descriptive statistics

Question 4:

- Who is this data being presented to? Sales, Executives, or technical staff?
- Over what period should the data report? How many years?
- Total sales, or sales per genre?

Without this information I could create information which is irrelevant to the viewers or too complicated for them. Is the presentation and update? It might be unnecessary to discuss previous years.

Scenario 4

Question 2:

A **predictive analysis** is required, because the team wants to be able *to predict future demand. Operational restrictions are not yet important.*

Question 3:

Bivariate Analysis, inferential statistics

Question 4:

- Are these Winter or Summer Olympics?
- What percentage of games are bought online vs through a retailer?
- What are the month-on-month sales data for the Sports genre in the years of previous Olympics?

With this data I would be able to identify the increase/ decrease in sales in and around previous Olympic events. Also important is which types of sports games, because there clearly winter and summer sports