

MKT7C4/BUS750 Data Analysis Report (Individual)

Due Date: 19/12/2022

Feedback Released: 21/01/2023

1 What am I required to do in this assignment?

Working individually, you choose one of the datasets available on Blackboard and focus on it to produce a data analysis report. You must use the SAS JMP software platform to conduct your analyses, and you must present your findings in the written report. The target audience is a set of organisational stakeholders from Marketing and/or Finance departments. Your job is to effectively communicate an analytical narrative to the stakeholders, which will inform them of the current scenario, and indicate the next strategic and/or operational direction of travel. This will be informed and supported by your interpretation of various inferential models. You will select one of the datasets provided on Blackboard to provide the data feed for these models.

Specifically, you are expected to deploy *at least* three inferential statistical models, chosen from the following list:

- t-Tests
- ANOVA
- Simple and Multiple Linear Regression
- Logistic Regression

We generally expect you to do at least one t Test, at least one ANOVA, and then *either* Linear Regression (if you are analysing the HBAT data) or Logistic Regression (for Telco, Home Equity, and Bank Marketing).

Analyses should be hypothesis-driven and should attempt to demonstrate findings of significance.

Where appropriate, model assumptions should be addressed¹.

You are also required to provide a managerial/marketing/business narrative for statistical non-experts.

2 Is there a size limit?

The indicative word-count is 2500 words (+/- 10%)

3 What do I need to do to pass?

Please refer to the Marking Criteria Table below. To pass, you must achieve a mark of 50% or above. Only in this way can you satisfy the module learning outcomes indicated above. You should aim higher than just a bare pass.

¹ You are not required to assess the assumptions of Logistic Regression

4 How do I produce high quality work that merits a 70% or above grade?

Please refer to the Marking Criteria Table on the next page. You are required to be consistently good across elements of the table at the 70-79 band.

5 How does assignment relate to what we are doing in the scheduled sessions?

The assignment draws on these key elements of the module:

- Mastery of the designated analytics package(s)
- Interpretation of one or more business scenarios
- Deployment and narrative interpretation of the inferential statistics
- Business-orientated interpretations for potential stakeholders

Much of this sessional work to inform this assessment is carried out in the form of formative individual and group exercises/assessments.

These experiences form the basis of the work necessary for the project assessment.

6 How will I receive formative feedback for this assignment?

Via organised project workshops and on request by email.

7 What are the deliverables?

You should submit two elements:

- a) The main data analysis report, to be submitted in the Turnitin submission area on Blackboard.
- b) The JMP data table used to conduct the analyses, to be submitted in the secondary submission area on Blackboard

Marking Criteria Table

Grade	Clarity and logical flow of report 10%	Quality of inferential analysis 60%	Managerial/Business interpretation 20%	Quality/Professionalism of presentation 10%
90-100 Common Assessment Scale 8	The report is perfectly articulated in every way and all elements are logically positioned and interconnected.	The report demonstrates exceptional levels of inferential analysis. It is almost perfect in its implementation.	An exceptional interpretation of business and managerial factors is presented, with truly actionable insights.	The report is exceptional in its presentation, in terms of formatting and structure. All elements—exec summary, table of contents, headings, visualisations, references if used—are deployed to the highest professional standard.
80-89 Common Assessment Scale 7	The report is articulated to an outstanding level and almost all elements are logically positioned and interconnected.	All aspects of inferential analysis are implemented to an outstanding level. They are used extremely effectively to provide very insightful analyses.	An outstanding interpretation of business and managerial factors is presented, with actionable insights.	The report is outstanding in its presentation, in terms of formatting and structure. All elements—exec summary, table of contents, headings, visualisations, references if used—are deployed to a very high standard.
70-79 Common Assessment Scale 6	The report is very well articulated, and most elements are logically positioned and interconnected.	Many aspects of inferential analysis are excellently implemented. They are used very effectively to provide insightful analyses.	An excellent interpretation of business and managerial factors is presented, with strong recommendations.	The report is very well presented, in terms of formatting and structure. The major elements of strong academic submission are deployed to a good standard.
60-69 Common Assessment Scale 5	The report is mostly articulated to a good standard. The elements of the report fit together reasonably well.	Many aspects of inferential analysis are well implemented. They are used effectively to provide some insightful analyses.	A good interpretation of business and managerial factors is presented, with some useful recommendations.	The report is well presented, in terms of formatting and structure. Most of the requisite elements are in place and are deployed to a reasonable standard.
55-59 Common Assessment Scale 4	The report is mostly articulated to a reasonable standard. Some work is needed on narrative signposting and logical flow.	The report demonstrates a solid level of inferential analysis. The scope of analysis is broadly fine and solidly implemented.	A reasonable interpretation of business and managerial factors is presented.	The report is presented to a reasonable standard, in terms of formatting and structure. Work is needed to bring the level of presentation to a good standard.
50-54 Common Assessment Scale 3	The report articulated to an adequate standard. Work is needed on narrative signposting and logical flow.	The report demonstrates an adequate level of inferential analysis. Not all areas are well supported.	An adequate interpretation of business and managerial factors is presented. There is much room for improvement.	The report is barely adequate in its presentation. Much work is needed to bring the level of presentation to a good standard.
36-49 Common Assessment Scale 2	The report is not articulated to an adequate standard. Much work is needed on narrative signposting and logical flow.	The Report demonstrates an inadequate level of inferential analysis. More is required to achieve a good standard.	Business and managerial factors are not adequately addressed. Insights provided are superficial. More is required.	The report is inadequate in its presentation. Much work is needed to bring the level of presentation to the required standard.
21-35 Common Assessment Scale 1	The report is poorly articulated and has little narrative signposting and logical flow.	The Report demonstrates a minimal amount of inferential analysis. Much more is required.	This is a poor attempt at presenting business and managerial interpretation. Much more is required.	The report is poorly presented. Hardly any effort has been made to present the work to the required standard.
0-20 Common Assessment Scale 0	The report is very poorly articulated and has no narrative signposting or logical flow.	The Report demonstrates no real evidence of inferential analysis.	The Report demonstrates no real evidence of business/managerial analysis.	There is barely any evidence of formatting or structuring. Very poor indeed.