**MKTG 3501: Marketing Analytics (LEE)**

**Spring 2025**

**Group Project Instructions**

The group project is an important component of this course. You will work with your teammates on a marketing analytics project. Your group is expected to analyze interesting relationships and patterns using a significant amount of real data. Each group should have 4 or 5 members. In the project, you are expected to solve a business problem using one or more of the advanced tools in this class. The final report should provide marketing strategy guidelines for the business problem that are derived from the data and associated analyses conducted. Example problems:

* Who should I target in my next marketing campaign? Segmentation, targeting, and positioning analysis can be helpful here.
* What will sales be for a product? A forecasting model based on regressions can be useful.
* How valuable are my customers? RFM analysis can be valuable here.
* What are my customers saying about my and my competitors’ products? Text analysis can be useful here.

Keep in mind that the examples above are very generic. Each business faces unique challenges and requires specific solutions. Your group project will adopt the analytic tools we learn in class to address those challenges.

**Software**

You should use Python and Polars to conduct your analyses and generate visualizations.

**Required Components**

You need a **dataset** to work with. The dataset can come from your current/past co-ops or from anyone you know that owns a business. You can also search online databases for interesting datasets. Most importantly, please be aware of any required **confidentiality or non-disclosure agreement** that might be in place—make sure you have the permission to use, analyze, and present the data.

You should start your project by **describing the dataset** and **stating the marketing questions** you hope to answer.

Given the dataset, conduct an **exploratory data analysis**. This includes visualizing numerical and/or categorical variables, exploring interesting patterns/relationships among sets of variables.

You will then conduct **model-based analyses**, where the model is chosen based on your research objectives.

You will present your **findings and results** and what the results mean for the stakeholders. You should present your results both quantitatively and visually.

**Managerial recommendations** and **actionable plans** are required to conclude your project.

Each group has to obtain the instructor’s permission regarding the appropriateness of the topic chosen by submitting a 1-page proposal. Your group project grade will be based on: a) HTML document knitted from a Quarto document and b) in-class powerpoint presentation.

**Evaluation of Your Project**

| **Assessment** | **Percentage Weight** |
| --- | --- |
|  | |
| **Project Group Member Sheet** | **2%** |
| **Project Proposal** | **2%** |
| **Project Presentation** | **15% (Presentation) + 3% (Peer Evaluation)** |
| **White Paper (HTML + QMD)** | **15% (Write-Up) + 3% (Peer Evaluation)** |

Each group should upload a group member sheet to Canvas by Jan 28, 2025, which lists the group members (4 or 5 people). This is 2% of your course grade.

Each group should submit a 1-page **proposal** on Feb 14, 2025, which describes (1) the topic chosen, (2) a brief description of the project including the data source and summary statistics of the data set. This is 2% of your course grade.

Each group will have 15 minutes to present their project in class during the last two classes of the semester. This 15-minute presentation should cover **(1) motivation and problem definition, (2) analyses performed, (3) main findings, (4) implications and actionable plans, and (5) brief Q&A. This presentation is 18% of your course grade. All team members are required to participate in the presentation.**

In addition to the in-class presentation, each group must submit a white paper (both .html and .qmd files) for your project. The white paper must contain an executive summary of the problem and major findings, a list of actionable recommendations, data analytics performed, and visualizations. The white paper is 18% of your course grade and due on April 10, 2025.

Finally, there will be a peer evaluation form, which should be uploaded to Canvas by April 15, 2025.

| **Important Dates**  Jan 28: Group Member Sheet due (Deliverable**: group member list uploaded to Canvas**)  Feb 14: Proposal due (Deliverable**: proposal uploaded to Canvas**)  April 8: Group project work day--check in with instructor individually. (Deliverable: **presentation slides**, **white paper, both uploaded to Canvas on or before April 10**)  April 11 & 15: Presentations  April 15: Peer evaluation form due on Canvas |
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