Overview and Objectives

Firms have access to detailed data of customers and past marketing actions. Such data may include in-store and online customer transactions, customer surveys as well as prices and advertising. Using real-world applications from various industries and vivid examples, the goal of the course is to familiarize students with several types of managerial problems as well as data sources and techniques, commonly employed in making effective marketing decisions. The course involves formulating critical managerial problems, developing relevant hypotheses, analyzing data and, most importantly, drawing inferences and telling convincing narratives, with a view of yielding actionable results.

Critically, as I believe that students will develop competences when implementing several concepts, a strong emphasis will be on application of theory. In this regard, students will receive a hands-on, as opposed to theoretical introduction into R, aimed at enabling them to conduct research by themselves. Furthermore, having taken this course, students should be able to critically assess and evaluate market research services and available data, should know
the limitations of data as well as most important decision biases — ultimately enabling them to become more sound decision-makers.

Assessment

Your final grade will be based on the following components:

A. Individual Assignment 20%
B. Group Assignment 40%
C. Exam I 20%
D. Exam II 20%

Please note that no late assignments will be accepted. All written work is due on the specified date. The due dates for the assignments are listed on the course schedule.

Students must organize themselves into groups of 5-6 people in order to do the group assignment. As part of the group assignment, I expect groups of students to jointly identify a current challenge in their prior job, solve this challenge by conducting market research, and to present their findings in class. Presentation time of each group will be 15 minutes followed by a “defense” of their research, findings, and implications of around 5 minutes.

Tentative Schedule of Class (Zoom) Meetings

<table>
<thead>
<tr>
<th>Lecture #/Date</th>
<th>Topic</th>
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| Session 1/ Monday, September 14; 3:00 pm – 5:40 | Introduction  
Objectives and Process of Market Research  
Requirements of Good Market Research  
Data Collection I |
| Session 2/ Monday, September 21; 3:00 pm – 5:40 | Data Collection II  
Sampling  
Scaling  
Questionnaire Design |
| Session 3/ Monday, September 28; 3:00 pm – 5:40 | Designing Online Questionnaires and Experiments  
Descriptive Statistics  
Introduction into R |
| Session 4/ Monday, October 5; 3:00 pm – 5:40 | Hypothesis Testing  
Inferential Statistics: Association and Correlation Analysis, Chi-Square Independence Test; Comparison of Means  
Managerial Decision-Making and Frequent Biases  
*Introduction into Individual Assignment* |
| Session 5/ Monday, October 12; 3:00 pm – 5:40 | Managerial Decision-Making and Frequent Biases C’td  
Analysis of Variance |
| Session 6/ Monday, October 19; 3:00 pm – 5:40 | Analysis of Variance C’td (M-way ANOVAs, Interactions, Planned Contrasts)  
Introduction into Regression Analysis  
Exam I (45 minutes) |
| Session 7/ Monday, October 26; 3:00 pm – 5:40 | Regression Analysis C’td  
Non-Linear Regressions |
<p>| Session 8/ Monday, November 2; 3:00 pm – 5:40 | Advanced Regression Analysis and Real-World Applications |</p>
<table>
<thead>
<tr>
<th>Session 9/ Monday, November 9; 3:00 pm – 5:40</th>
<th>The Promises and Perils of Big Data, Digital Analytics, and AI Market Research, Insights, and Ethics</th>
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<tbody>
<tr>
<td>Session 10/ Monday, November 16; 3:00 pm – 5:40</td>
<td>Segment of One vs. Segment of Many Introduction to Cluster Analysis and Related Tools (LCA, LPA)</td>
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<tr>
<td>Session 11/ Monday, November 23; 3:00 pm – 5:40</td>
<td>Discriminant Analysis</td>
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<tr>
<td>Session 12/ Monday, November 30; 3:00 pm – 5:40</td>
<td>Multidimensional Scaling <em>Group Presentations (Part 1)</em></td>
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<tr>
<td>Session 13/ Monday, December 7; 3:00 pm – 5:40</td>
<td><em>Group Presentations (Part 2)</em> Summary of Course / Q&amp;A</td>
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<tr>
<td>Session 14/ Thursday, December 10; 3:00 pm – 5:40</td>
<td>Guest Lecture or Current Topics of Interest <em>Exam II (75 minutes)</em></td>
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</tbody>
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1due October 12th, 2020