MKT 372 – Customer Analytics & Database Marketing

DRAFT – To Be Finalized

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The syllabus is a general plan for the course; changes announced to the class by the instructor may be necessary. You are responsible for keeping up with any adjustments.

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Day/Time: M & W 3:30 – 4:45 PM	Classroom: CBA 4.348

Office Hours: By appointment

Course Materials:

- 1. Required coursepack https://hbsp.harvard.edu/import/TBD
- 2. Supplementary readings, datasets, slides, notes, etc. available @ Canvas; slides for each class will be posted **AFTER** the class
- 3. Check your UT email on a regular basis for class announcements
- 4. Recommended reading "Competing on Analytics: The New Science of Winning," by Thomas H. Davenport and Jeanne G. Harris, available @ amazon.com

Software:

- 1. Microsoft Excel (with Solver enabled)
- 2. BlueSky Statistics Open Source Edition (Build 10 Beta), downloadable @ https://www.blueskystatistics.com/ is a fully featured analytical workbench.
- Build 10 Beta is free and works for both PC and Mac. Follow the instructions carefully for installation.
- An intuitive graphical user interface, attractive interactive output for hundreds of frequently
 used exploratory analysis, data preparation, visualization, basic and advanced modeling
 techniques including model scoring.
- Automatic R syntax generation for hundreds of frequently used exploratory analysis, data
 preparation, visualization and modeling techniques. R syntax editor that allows you to write
 and execute R code and see richly formatted output. Save and share output in PDF, HTML.

Course Background:

Customer Relationship Management (CRM) represents Marketing's return to its pre-industrial revolution origins of doing business through one-to-one relationships, using the new technological advances brought up by the information revolution. Traditionally, marketers have grown accustomed to focusing on the acquisition of new customers through mass advertising and price-oriented promotions, accepting as a fact of life that these customers would eventually switch to competitors. As more and more markets reach saturation, customer acquisition comes mostly at the expense of competitors, leading to a frontal battle for "switchers." As a result, the focus of marketing has been shifting from customer acquisition to development and retention, particularly for the firm's "best" customers.

This shift from customer acquisition to development and retention requires a change of mindset from product-centric, transactional marketing to customer-centric, relational marketing, and a new set of analytical tools for understanding and predicting customer behavior (i.e., customer analytics). Since the customer base is now treated as one of the most valuable assets of the organization, the customer database becomes the focus of analysis and the platform for developing and implementing marketing strategies and tactics.

This course addresses two broad themes: 1) customer-centric value-based marketing, and 2) customer data analytics. The first theme explores what customer relationship management and customer equity mean. The customer lifecycle is introduced as an integrating framework. The importance of customer profitability and lifetime value as a criterion in CRM decisions is emphasized. The second theme emphasizes the analysis of customer database, with a particular focus on different types of predictive models (e.g., whether a customer will respond to a marketing offer, whether a customer will churn, or which products a customer would be most likely to buy next).

This course also introduces issues, techniques and terminologies associated with database marketing and data mining. Specific topics include, for example, RFM analysis, lift and gains charts, lead scoring, cluster analysis for segmentation, collaborative filtering and association rules for product recommendation, multivariable testing, etc. The focus will be on intuition and real-life applications in the context of CRM. It would be a good fit for students who are interested in improving their skills in business analytics in general, customer analytics in particular.

Learning Objectives:

- To build your knowledge of customer-centric marketing;
- To emphasize the importance of the customer lifecycle and customer valuation in CRM decisions;
- To emphasize how customer analytics can help accomplish strategic marketing initiatives and improve firm profitability;
- To expose you to various commonly used modeling techniques and analytical tools for database marketing.

Class Format:

The primary teaching philosophy of this course will be *learning by doing*. We will use a variety of tools to help understand the basic concepts of CRM, and learn the tools for its implementation with direct hands-on experience:

- Lectures
- Case analyses and in-class case discussions
- In-class data analytics demonstration
- Data-intensive exercises and database marketing contest

Class Participation:

Quality contributions that are relevant to in-class discussions will improve your participation grade. I will cold call on students at random to open case and assignment discussions. Your class participation grade will be significantly hurt if you are called upon to offer your analysis on a case or assignment question and you are not prepared. If you have an emergency and thus cannot attend a particular session, let me know by email in advance.

Individual and Group Exercises:

Much of the learning during the course will take place with the help of individual and group exercises. If an exercise is labeled "individual" you are not allowed to work with other students – it should reflect your own work only. If an exercise is labeled "group" you should work on it in groups, 3 students per group, and only submit one group write-up. Groups should remain constant for all group exercises. It will be a violation of academic integrity if you base your assignments on solutions you have found on the Internet or which you have obtained from others inside or outside of UT. If you are uncertain about the nature of any assignment or resource, please ask me.

Every group member is expected to participate actively in all aspects of the group exercises. Group participation grade will be determined by the average of peer evaluations. Specifically, each group member will evaluate, at the end of the course, the contribution made by the other group members on a 100-point scale, which in turn will determine the proportion of your group's grades that you will get credit for.

UT Student Honor Code and Classroom Etiquette:

All academic work must meet the standards in a culture of honesty, and you are expected to comply with the UT student honor code. All students are responsible for informing themselves about those standards before performing any academic work. Our classroom shall have a professional environment.

Grading:

Assignments and activities will contribute to the final grade according to the distribution shown in the table below. **All group assignments are due at the beginning of class**.

Grading Element	Weight
In-class discussion participation (individual)	5%
Grupo IUSACELL case write-up (group)	8%
Harrah's Entertainment case write-up (group)	8%
Pilgrim Bank case write-up (group)	8%
King-Size Co. case write-up (group)	8%
Customer Churn at QWE case write-up (group)	8%
Data Analytics Exercises (individual)	15%
Essay on course takeaways (individual, due at the start of the last session)	5%
Database marketing contest (individual)	35%

Grading Distribution

Semester		Grade
Average	Grade	Points
93-100	A	4.00
90-92	A-	3.67
87-89	B+	3.33
83-86	В	3.00
80-82	B-	2.67
77-79	C+	2.33
73-76	C	2.00
70-72	C-	1.67
67-69	D+	1.33
63-66	D	1.00
60-62	D-	0.67
59 or less	F	0.00

Class Attendance

Attendance is mandatory for all class sessions. If you have an emergency and thus cannot attend, let me know by **email** in advance. **1% will be deducted from the final grade for each unexcused absence**.

Summary of Class Sessions (DRAFT – To Be Finalized):

This a general schedule for the course; minor adjustments may be necessary.

Session	Date	Day	Topics	Coursepack Materials
1	1/19	Wed	Course Overview	
2	1/24	Mon	Customer Lifecycle	
3	1/26	Wed	Customer Lifetime Value	Customer Profitability and Lifetime Value
4	1/31	Mon	Customer Effetime value	Grupo IUSACELL
5	2/2	Wed	Customer Equity	Valuing Customers
6	2/7	Mon	Customer Centricity	Harrah's Entertainment, Inc.
7	2/9	Wed	Database Marketing I	Pilgrim Bank (A): Customer Profitability
8	2/14	Mon		Pilgrim Bank (B): Customer Retention
9	2/16	Wed		Pilgrim Bank (C): Electronic Billpay
10	2/21	Mon	Database Marketing II	
11	2/23	Wed		
12	2/28	Mon	Customer Acquisition I	The King Size Company
13	3/2	Wed	Customer Acquisition I	The King-Size Company
14	3/7	Mon	Customer Acquisition II	
15	3/9	Wed	Customer Acquisition II	
3/14 – 3/19 Spring Break				
16	3/21	Mon	Customer Development I	Size and Share of Customer Wallet
17	3/23	Wed		Size and Share of Customer wallet
18	3/28	Mon	Customer Development II	
19	3/30	Wed	Customer Development II	

20	4/4	Mon	Customer Retention	Predicting Customer Churn et OWE Inc
21	4/6	Wed	Customer Retention	Predicting Customer Churn at QWE Inc.
22	4/11	Mon	Customer Intelligence	Progressive Insurance: Multivariable
23	4/13	Wed	Customer Intelligence	Testing
24	4/18	Mon	Custom on Trand Analysis	
25	4/20	Wed	Customer Trend Analysis	
26	4/25	Mon	Database Marketing Contest Prep	
27	4/27	Wed	NO In-Class Meeting, Optional Q&A on Zoom	
Database Marketing Contest				
Sat 4/30 9AM—3PM				
28	5/2	Mon	Database Marketing Contest Debrief	
29	5/4	Wed	Course Review	