

**Humboldt University Berlin**

**Institute of Marketing**

**Prof. Dr. Daniel Klapper**

**Customer Analytics and Customer Insights**

**Syllabus WS 2019/20**

**Course Dates:**

Lectures	Wednesday,	12.15 pm – 13:45 pm, SPA 1, 22
Exercises	Thursday,	12:15 pm – 13:45 pm, SPA 1, 22

**Course Prerequisites:**

No prerequisites but successful participation in Marketing Management and Econometric Methods is recommended.

**Course Description and Objectives:**

Marketing is about offering customers products that provide more value than competitors' products. Firms must constantly focus on gaining and sustaining competitive advantages. Therefore, marketing has to ensure that firms develop and market superior products in the mind of consumers. Because consumer preferences for product offerings continuously change or evolve over time firms have to engage in an ongoing process of delivering superior products to their customers or new customer groups. In this class we will study core concepts and methods to gain better understanding of the firm's actual and potential customers. For that reason we focus on methods to better understand customers and their preferences. We will learn how to obtain quantitative measures and descriptions about customers and their perception of the market, and we learn how to estimate customer preferences for product characteristics of established and new products. A large part of the class work will therefore focus on econometric and statistical tools to support firms in their marketing decisions. We use the software R, and the empirical modeling with R follows closely the book by Chapman and McDonnell Feit from 2019.

**Course Web Page:**

Course material will be made available in the Moodle system of the Humboldt-University Berlin.

**Course Grading:**

Your grade bases on a written assignment of 8 pages (including tables and graphs) about a market research project on customer insights and customer analysis. For this project you have to collect your own data.

The individual assignment must be sent to [daniel.klapper@hu-berlin.de](mailto:daniel.klapper@hu-berlin.de) before March 03, 2019, 4:00pm.

It is also requested that students submit 4 non-graded written special work performances of 5 pages each. All special work performances must be sent as pdf before the deadline to [daniel.klapper@hu-berlin.de](mailto:daniel.klapper@hu-berlin.de). Special work performances can be done in a group of 1-4 students (more details in class). The deadline for submitting the special work performance will be announced in class and via the Moodle system.

## **Course Software:**

The majority of computing in the course will be done with R. This will include in-class demonstrations and a tutorial how to use R.

## **Course Reference Materials:**

This course bases in large parts on the book “R for Marketing Research and Analytics” from Chris Chapman and Elea McDonnell Feit (2019, Springer International Publishing). It is highly recommended to purchase this book. Additional help on methods and contents is nicely provided by Malhotra, N. K. (2009). Marketing Research: An Applied Orientation. Prentice Hall, 6<sup>th</sup> ed.

## **Course Topics:**

We will cover the following general topics in this course:

- (1) The Marketing Management Process
- (2) Fundamentals of Data Analysis
  - a. Describing Data
  - b. Relationships Between Continuous Variables
  - c. Comparing Groups: Tables and Visualizations
  - d. Comparing Groups: Statistical Tests
  - e. Identifying Drivers of Outcomes: Linear Models
- (3) Customer Analytics
  - a. Segmentation
  - b. Measuring Product Perceptions
  - c. Cluster Analysis
  - d. Identifying Needs of Potential Customers
- (4) Consumer Insights
  - a. Conjoint Analysis
  - b. Choice-Based Conjoint Analysis

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 Thursday, 12:15 pm – 13:45 pm, SPA 1, 22

<b>CW</b>	<b>Date</b>	<b>L/E</b>	<b>Content and Readings</b>
42	Oct 16	L	Course Logistics and Introduction to the Course 1 The Marketing-Management Process and its link to Customer Analytics and Customer Insights
42	Oct 17	E	Introduction to R Readings: Chapman & McDonnell Feit (2019), Chapter 2.
43	Oct 23	E	2 Fundamentals of Data Analysis 2.1 Describing Data 2.2 Relationships Between Continuous Variables Readings: Chapman & McDonnell Feit (2019), Chapter 3, 4.
43	Oct 24	E	2 Fundamentals of Data Analysis 2.3 Comparing Groups: Tables and Visualizations 2.4 Comparing Groups: Statistical Tests Readings: Chapman & McDonnell Feit (2019), Chapter 5, 6.
44	Oct 30	L	3 Customer Analytics 3.1 Segmentation 3.2 Multidimensional Scaling Readings: Chapman & McDonnell Feit (2019), Chapter 8. Malhotra, N. K. (2009). Marketing Research: An Applied Orientation. Prentice Hall, 6 <sup>th</sup> ed., Chapter 21, 688-721.
44	Oct 31	E	2 Fundamentals of Data Analysis 2.5 Identifying Drivers of Outcomes: Linear Models Readings: Chapman & McDonnell Feit (2019), Chapter 7.
45	Nov 06	L	3.2 Multidimensional Scaling Readings: Chapman & McDonnell Feit (2019), Chapter 8. Malhotra, N. K. (2009). Marketing Research: An Applied Orientation. Prentice Hall, 6 <sup>th</sup> ed., Chapter 21, 688-721.

45	Nov 07	E	Exercise on Measuring Product Perceptions with Multidimensional Scaling
46	Nov 13	L	3.3 Dimension Reduction Techniques 3.3.1 Principal Component Analysis 3.3.2 Factor Analysis  Readings: Chapman & McDonnell Feit (2019), Chapter 8. Malhotra, N. K. (2009). Marketing Research: An Applied Orientation. Prentice Hall, 6 <sup>th</sup> ed., Chapter 19, 634-659.
46	Nov 14	E	Exercise on Measuring Product Perceptions with Principal Component Analysis
47	Nov 20	L	Feedback on “Special Work Performance 1”
4	Nov 21	E	Feedback on “Special Work Performance 1”
48	Nov 27	L	3.3 Factor Analysis  Readings: Chapman & McDonnell Feit (2019), Chapter 8. Malhotra, N. K. (2009). Marketing Research: An Applied Orientation. Prentice Hall, 6 <sup>th</sup> ed., Chapter 19, 634-659.Group
48	Nov 28	E	Exercise on Measuring Product Perceptions with Factor Analysis
49	Dec 04	L	3.4 Cluster Analysis  Readings: Chapman & McDonnell Feit (2019), Chapter 11. Malhotra, N. K. (2009). Marketing Research: An Applied Orientation. Prentice Hall, 6 <sup>th</sup> ed., Chapter 20, 660-687.
49	Dec 05	E	Exercise on Cluster Analysis
50	Dec 11	L	3.4 Cluster Analysis  Readings: Chapman & McDonnell Feit (2019), Chapter 11. Malhotra, N. K. (2009). Marketing Research: An Applied Orientation. Prentice Hall, 6 <sup>th</sup> ed., Chapter 20, 660-687.
50	Dec 12	E	Exercise on Cluster Analysis
51	Dec 18	L/E	Feedback on “Special Work Performance 2”
51	Dec 19	L/E	Feedback on “Special Work Performance 2”

2	Jan 08	L	4 Customer Insights 4.1 Basic Principles 4.2 Identifying Consumer Preferences 4.2.1 Conjoint Analysis Readings: Chapman & McDonnell Feit (2019), Chapter 9.
2	Jan 09	E	Exercise on Conjoint Analysis
3	Jan 15	L	4.2.1 Conjoint Analysis Readings: Chapman & McDonnell Feit (2019), Chapter 9.
3	Jan 16	E	Exercise on Conjoint Analysis
4	Jan 22	L	Feedback on “Special Work Performance 3”
4	Jan 23	E	Feedback on “Special Work Performance 3”
5	Jan 29	L	4.3 Model Extensions Readings: Chapman & McDonnell Feit (2019), Chapter 13.
5	Jan 30	E	Exercise on Choice-Based Conjoint Analysis
6	Feb 05	L/E	Course Wrap up and Discussion about the upcoming Assignment
6	Feb 06	L/E	Course Wrap up and Discussion about the upcoming Assignment
7	Feb 12	L/E	Feedback on “Special Work Performance 4”
7	Feb 13	L/E	Feedback on “Special Work Performance 4”

CW = Calendar week

L = Lecture

E = Exercise