

National Taiwan University

國際企業學系暨研究所

統計碩士學位學程

Spring 2020

大數據行銷

(Big Data Marketing)

數據驅動之市場分析

(Big Data-Driven Market Analytics)

策略性資料庫行銷決策模式

(Decision Models for Strategic Database Marketing)

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COURSE DESCRIPTION

Big Data Marketing is a study of recent data/model-driven research in the academic marketing literature and in the practice of e-commerce. The perspective developed in Marketing Management, Statistical Decision Science, and Computer Science (esp. the Big Data in Web Warehousing) provides a useful base for the investigation of research literature. The objectives of this course are the following:

1. Develop an awareness of the current level of understanding and state of research in several areas of database marketing study. It is hoped that pursuit of this goal will provide the student with a greater understanding of database marketing itself, as new questions are posed from the practice perspective.
2. Develop the ability to read and understand the current research literature. Pursuit of this goal will provide a familiarity with research procedure as it is applied to big data marketing. This background should be very useful as the student begins to design and execute research program in the content of e-commerce.

COURSE PREREQUISITES:

1. Marketing Management
 2. Statistics
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COURSE MATERIALS:

Textbook

1. 任立中, 陳靜怡(2019), 大數據行銷:邁向智能行銷之路 (BIG DATA MARKETING: THE ROAD TO AI MARKETING), 前程文化, 臺北市。

Reference Books

1. 任立中, 周建亨, 陳靜怡(譯), 2016 年 12 月, 行銷人攀越的 7 個頂峰, 前程文化, 臺北市。
2. 任立中主編, 2016 年 10 月, 大數據戰略 4.0, 前程文化, 臺北市。
3. 任立中, 陳靜怡(2015), 行銷研究:發展有效行銷策略之基石, 前程文化, 臺北市。
4. 任立中(2010), 行銷源典, 前程文化, 臺北市。
5. Blattberg, Robert C., Byung-Do Kim, and Scott A. Neslin (2008), *Database Marketing: Analyzing and Managing Customers*, Springer, New York, NY.
6. Aaker, David A., V. Kumar, George S. Day, and Robert P. Leone (2011), *Marketing Research*, 10th edition, John Wiley & Sons, Inc.
7. Rossi, Peter E., Greg Allenby, and Rob McCulloch (2005), *Bayesian Statistics and Marketing*, John Wiley and Sons, New York, NY.
8. Leeflang, Peter S.H., Dick R. Wittink, Michel Wedel, and Philippe A. Naert (2000), *Building Models for Marketing Decisions*, Lower Academic Publishers, Norwell, MA.
9. Blattberg, Robert C., Gary Getz, and Jacquelyn S. Thomas (2001), *Customer Equity: Building and Managing Relationships as Valuable Assets*, Harvard Business School Press, Boston, Massachusetts.
10. Lilien, Gary L. and Arvind Rangaswamy (2003), *Marketing Engineering: Computer-Assisted Marketing Analysis and Planning*, Pearson Education, NJ.
11. Koch, Richard (1998), *The 80/20 Principle: The Secret of Achieving More with Less*, Doubleday, New York, NY.

MIDTERM AND FINAL EXAM:

There are two exams during the semester, a midterm and a final exam. Each exam will comprise of 4 to 6 short essay questions. The short essay questions will focus on the various topics discussed throughout the semester. The Midterm and the Final Exam will each count towards 20% of the final mark.

STUDENT EVALUATION

The evaluation of each student's performance in the course will be based on the quality of the contribution to class discussion, performance on the examinations, and the term paper. Details of the comprehensive exams will be provided in class. Approximate weights of the evaluation components are:

30%	Contribution to Class Discussion (extra credit)
20%	Midterm Exam (in class on April 27)
30%	Term Paper (due on June 15)
20%	Final Exam (in class on June 15)

COURSE STRUCTURE

節 次	主 題
1~3	大數據時代之行銷戰略
4~6	萬丈高樓平地起：建構顧客關係行銷資料庫
7~9	顧客價值的解析與策略運用：ARFM 模型
10~12	海誓山盟：顧客終身價值與遷徙路徑之預測
13~15	啤酒與尿布、廚具與內褲：購物籃分析
16~18	透視需求、百步穿揚：新產品推薦系統
19~21	物以類聚，人以群分：顧客的分群與複製
22~24	消費行為大透視：理論、模型、預測、決策

CLASS SCHEDULE

Week 1. March 2

Lecture:

- (1) The Course Philosophy, Structure, and Policy

On Line Viewing Assignment:

- (1) 大數據時代之行銷戰略(上)
- (2) 大數據時代之行銷戰略(中)

Homework Assignment: To be announced on the NTU COOL

Week 2. March 9

Class Discussion:

- (1) 大數據時代之行銷戰略(上)
- (2) 大數據時代之行銷戰略(中)

On Line Viewing Assignment:

- (3) 大數據時代之行銷戰略(下)
- (4) 萬丈高樓平地起：建構顧客關係行銷資料庫(上)

Homework Assignment: To be announced on the NTU COOL

Week 3. March 16

Class Discussion:

- (3) 大數據時代之行銷戰略(下)
- (4) 萬丈高樓平地起：建構顧客關係行銷資料庫(上)

On Line Viewing Assignment:

- (5) 萬丈高樓平地起：建構顧客關係行銷資料庫(中)
- (6) 萬丈高樓平地起：建構顧客關係行銷資料庫(下)

Homework Assignment: To be announced on the NTU COOL

Week 4. March 23

Class Discussion:

- (5) 萬丈高樓平地起：建構顧客關係行銷資料庫(中)
- (6) 萬丈高樓平地起：建構顧客關係行銷資料庫(下)

On Line Viewing Assignment:

- (7) 顧客價值的解析與策略運用：ARFM 模型(上)
- (8) 顧客價值的解析與策略運用：ARFM 模型(中)

Homework Assignment: To be announced on the NTU COOL

Week 5. March 30*Class Discussion:*

- (7) 顧客價值的解析與策略運用：ARFM 模型(上)
- (8) 顧客價值的解析與策略運用：ARFM 模型(中)

On Line Viewing Assignment:

- (9) 顧客價值的解析與策略運用：ARFM 模型(下)
- (10) 海誓山盟：顧客終身價值與遷徙路徑之預測(上)

Homework Assignment: To be announced on the NTU COOL

Week 6. April 6*Class Discussion:*

- (9) 顧客價值的解析與策略運用：ARFM 模型(下)
- (10) 海誓山盟：顧客終身價值與遷徙路徑之預測(上)

On Line Viewing Assignment:

- (11) 海誓山盟：顧客終身價值與遷徙路徑之預測(中)
- (12) 海誓山盟：顧客終身價值與遷徙路徑之預測(下)

Homework Assignment: To be announced on the NTU COOL

Week 7. April 13*Class Discussion:*

- (11) 海誓山盟：顧客終身價值與遷徙路徑之預測(中)
- (12) 海誓山盟：顧客終身價值與遷徙路徑之預測(下)

On Line Viewing Assignment:

- (13) 啤酒與尿布、廚具與內褲：購物籃分析(上)
- (14) 啤酒與尿布、廚具與內褲：購物籃分析(中)

Homework Assignment: To be announced on the NTU COOL

Week 8. April 20 Crouse Review and Discussion**Week 9. April 27 Midterm Exam (25%)****Week 10. May 4***Class Discussion:*

- (13) 啤酒與尿布、廚具與內褲：購物籃分析(上)
- (14) 啤酒與尿布、廚具與內褲：購物籃分析(中)

On Line Viewing Assignment:

- (15) 啤酒與尿布、廚具與內褲：購物籃分析(下)
- (16) 透視需求、百步穿揚：新產品推薦系統(上)

Homework Assignment: To be announced on the NTU COOL

Week 11.May 11

Class Discussion:

- (15) 啤酒與尿布、廚具與內褲：購物籃分析(下)
- (16) 透視需求、百步穿揚：新產品推薦系統(上)

On Line Viewing Assignment:

- (17) 透視需求、百步穿揚：新產品推薦系統(中)
- (18) 透視需求、百步穿揚：新產品推薦系統(下)

Homework Assignment: To be announced on the NTU COOL

Week 12.May 18

Class Discussion:

- (17) 透視需求、百步穿揚：新產品推薦系統(中)
- (18) 透視需求、百步穿揚：新產品推薦系統(下)

On Line Viewing Assignment:

- (19) 物以類聚，人以群分：顧客的分群與複製(上)
- (20) 物以類聚，人以群分：顧客的分群與複製(中)

Homework Assignment: To be announced on the NTU COOL

Week 13.May 25

Class Discussion:

- (19) 物以類聚，人以群分：顧客的分群與複製(上)
- (20) 物以類聚，人以群分：顧客的分群與複製(中)

On Line Viewing Assignment:

- (21) 物以類聚，人以群分：顧客的分群與複製(下)
- (22) 消費行為大透視：理論、模型、預測、決策(上)

Homework Assignment: To be announced on the NTU COOL

Week 14.June 1

Class Discussion:

- (21) 物以類聚，人以群分：顧客的分群與複製(下)
- (22) 消費行為大透視：理論、模型、預測、決策(上)

On Line Viewing Assignment:

- (23) 消費行為大透視：理論、模型、預測、決策(中)
- (24) 消費行為大透視：理論、模型、預測、決策(下)

Homework Assignment: To be announced on the NTU COOL

Week 15.June 8

Class Discussion:

(23) 消費行為大透視：理論、模型、預測、決策(中)

(24) 消費行為大透視：理論、模型、預測、決策(下)

Lecture: 大數據時代之行銷戰略_結論

Week 16.June 15 Final Exam

Week 17.June 22 彈性補充教學

Week 18.June 29 彈性補充教學