

Class 1 Intro to Marketing Analytics

Dr Wei Miao

UCL School of Management

October 2, 2024

Section 1

Module Overview

About Me

- Hi there, I'm Wei!
- I did my PhD in Quant Marketing at NUS (Singapore) and an undergrad degree in Finance at Fudan (Shanghai)
- I love musical instruments, video games, and food (bubble tea is my soul mate)!
- My research focuses on **digital marketing**, **sharing economy**, and **platform design**.

Weekly Arrangements

- Detailed weekly arrangements can be found in this [link](#)
 - Add bookmark for easier reference
- Each week, we have a 3-hour lecture on Wednesday, usually with 3 sessions
 - A short **quiz** at the beginning of each class to review the previous week's content
 - A **methodology** session, in which we learn a new data analytics tool
 - A **case study** session, to learn how the newly learned analytics tool can be applied to a real-life business scenario

Assignments

- No exams; 3 **individual assignments**, which are similar to case studies in class, and you will apply what you've learned in class to solve real-life marketing analytics problems.
 - 1st assignment, 30% weight, 1500 words, due on Oct 25
 - 2nd assignment, 30% weight, 1500 words, due on Nov 15
 - 3rd assignment, 40% weight, 2000 words, due on Dec 13
- How to submit?
 - **Please ensure submissions are in PDF (preferred) or Word format; submissions in other formats won't be accepted for marking.**
 - The quarto-based answer sheets (qmd files) will be given to you.

Assignments (Cont.)

- **Word count** and **late submission** penalties will be applied by **BA admin**. For related queries and EC applications, please directly contact BA admin at mgmt.ba-admin@ucl.ac.uk.
- We have random second marking in place to mitigate marking errors. **Please refrain from emailing teaching assistants for re-marking** as re-marking is not allowed by school policy.

Section 2

What is Marketing?

What is Marketing?

When we say “marketing,” what comes to your mind?

Role of Marketing

- Finance (finance a company's business activities)
- Accounting (bookkeeping of past transactions)
- Operations (supply chain, manufacturing, inventory management)
- **Marketing** (directly deal with consumer; value exchange and value realization)



What is Marketing?

- Kotler (1991): “Marketing is a social and managerial process by which individuals and groups obtain what they **want and need** through **creating, offering** and **exchanging** products of value with others.”
- British Chartered Institute of Marketing (2000s): “Marketing is the **management process** responsible for **identifying, anticipating and satisfying** customers’ requirements **profitably**.”
- American Marketing Association (2017): “Marketing is the activity, set of institutions, and **processes** for creating, communicating, delivering, and **exchanging** offerings that have value for customers, clients, partners, and society at large.”

What is Marketing? A Text Mining Approach



Marketing is a management **process** that **creates and exchanges values** for the company by selling the right products to the right **customers**. - Wei, 2024

Marketing Process



- We will go through the four steps using **Uber** and **Apple**.

Situation Analysis: 5 C's

- Any marketing decision can benefit from a deep understanding of the players within the market ecosystem—your own company, current and potential customers, collaborators and competitors—and the context they interact within: the 5Cs for short.

Company

- Business model

Customers

- Goals, objectives, and culture
- Who are the customers
- Market size, segments
- Overall customer satisfaction and perceived value by customers

Competitors

- Direct/indirect/potential competitors
- Strengths, weaknesses, opportunities, and threats (SWOT)

Collaborators

- Suppliers/distributors/alliances and partners

Climate

- PESTLE
-

- **Company analysis** is a strategic planning method used to assess the internal strengths and weaknesses of your company.
 - **Business model** is the way your company makes money.
 - **Goals, objectives, and culture** are the guiding principles that shape your company's actions.
- **Customer** is the most important player in the market ecosystem.
 - **Market size, segments** are the number of potential customers and the different groups they can be divided into.
 - **Overall customer satisfaction and perceived value by customers** are the key to marketing success.

- What is the business model of Uber? Does it directly provide transportation services? If not, who does?
- Who are Uber's customers?

Situation Analysis: Collaborators

- **Collaborators** are entities that work with your company to help you deliver your product or service to the customer.
 - **Suppliers** provide the raw materials or components needed to produce your product.
 - **Distributors** help you get your product to the customer.
 - **Retailers** sell your product to the customer.

- Who are the collaborators of Uber?

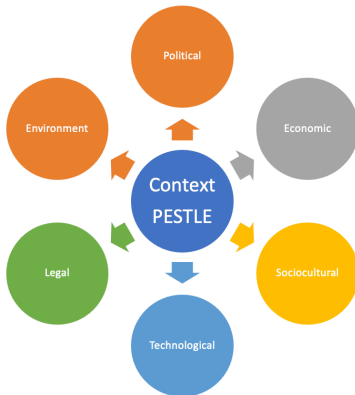
Situation Analysis: Competitors

- We tend to pay more attention towards more salient direct competitors, but we should also consider indirect and potential competitors.
 - Indirect competitors are companies that satisfy the same customer goals, even if they offer different products or services.
 - Potential competitors are those who might pose a competitive threat in the future; who possess equivalent resources that would allow them to enter the market



Situation Analysis: Context/Climate

- **Context/Climate analysis** is a strategic planning method used to assess major external factors that influence the market ecosystem, and is often referred to as **PESTLE analysis**.



- **Political:** Brexit
- **Economic:** Minimum wage, inflation, economy recession
- **Social:** Gig economy
- **Technological:** Big Data, mobile tech penetration
- **Legal:** GDPR, government regulations (BBC: [partner or employee?](#))
- **Environmental:** sustainability, CSR

Strategy: STP

- Situation analysis is a critical input into marketing **strategy**, i.e., the sequential application of the processes of segmentation, targeting, and positioning.



Tactics: 4P's

- The marketing mix provides an implementation of your positioning. Segmentation is here applied at the tactical level, to optimally design the marketing mix or 4Ps.



Section 3

Marketing Analytics

Big Data Era

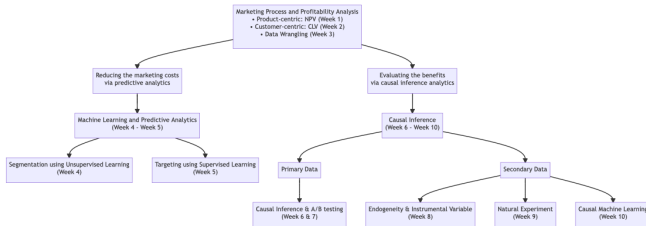
With the advancement in ICTs and computing power, data scientists nowadays are equipped with data analytics tools powerful than ever!

Firms now have access to enormously rich information trail of customers

- Demographic profiles (DoB, gender, ethnicity, income)
- Purchase history (recency, frequency, monetary value, spending behavior)
- Online browsing and search history (browsing, click through, add to cart, purchase)
- GPS data from mobile phones for offline store visits
- Social media (location, consumer preference, social network)

Our Roadmap

- Weeks 1-3: Marketing Process and Profitability Analysis
 - Concepts and R basics, which lay the foundation for the rest of the course
- Weeks 4-5: Machine Learning and Predictive Analytics
 - How to reduce the costs of marketing campaigns
- Weeks 6-10: Causal Inference
 - How to correctly evaluate the benefits of marketing campaigns



Unique Position of Marketing Analytics

