Module Overview
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What is Marketing?
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Marketing Analytics
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Class 1 Intro to Marketing Analytics

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UCL School of Management

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Module Overview
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Section 1

Module Overview

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About Me

- Hi there, I'm Wei Miao!
- I did my PhD in quant Marketing at NUS Singapore and a undergrad in Finance from Fudan
- I love musical instruments, video games, travelling, and food (bubble tea is my fav)!
- My research focuses on **digital marketing**, **sharing economy**, and **platform design**.

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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, divided into two sessions
  - A **_case study_** workshop session, to practice the tools learned in the previous week
  - A **_methodology_** session, in which we learn a new analytics tool
- Class recordings are available on Moodle "LectureCast Recordings" section.

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Assignments

- No exams; 3 **individual assignments**, which are similar to case studies in class, and you will need to use what you learned in class to solve these real-life marketing analytics problems.

  - 1st assignment, 30% weight, 1500 words, due on Oct 27
  - 2nd assignment, 30% weight, 1500 words, due on Nov 24
  - 3rd assignment, 40% weight, 2000 words, due on Dec 15

- How to submit?

  - Only submit **PDF** rendered from R Quarto with codes printed; **don't submit any other file format or your submission won't be marked**.
  - The quarto-based answer sheets (qmd files) will be given to you.

- **Word count** and **late submission** penalties will be applied by **BA admin**. For related queries and EC applications, please directly contact BA admin.

- Your marks will be released in due time (no later than 4 weeks).

- We have random second marking in place to mitigate marking errors. **Please refrain from emailing teaching assistants for re-marking** as this is not allowed by school policy.

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Section 2

What is Marketing?

Role of Marketing

— CANARY WHARF —

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

[link to code]

Marketing *is a management* **process** *that* **creates and exchanges values** *for the company by selling the right products to the right* **customers**. *- Wei, 2023*

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Marketing Process

Figure 1: Marketing Process

- We will go through the above concepts quickly in the case of Uber.
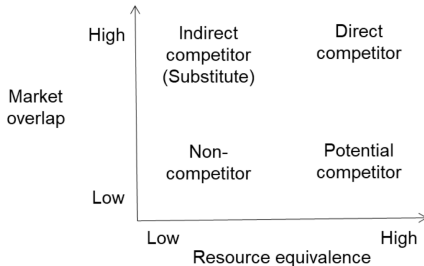
Situation Analysis: 5 C's

- 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.

Figure 2: 5Cs of Marketing

Situation Analysis: Competitors

- Managers tend to exhibit a supply-side bias, largely paying attention towards more salient direct (industry) competitors.
    - Indirect competitors are defined by who your customers consider to satisfy the same goals.
    - 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

Figure 3: Situation Analysis: Competitors

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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**.
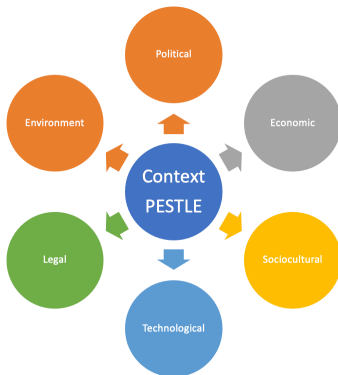

Figure 4: Situation Analysis: Context

Strategy: STP

- Situation analysis is a critical input into marketing strategy design, the sequential application of the processes of segmentation, targeting, and positioning. Marketing strategy is inherently related to the concepts of the business model and business strategy—who you are serving, with what value proposition, and how you do so.

Figure 5: Segmentation, Targeting, and Positioning

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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.

Figure 6: 4Ps of Marketing

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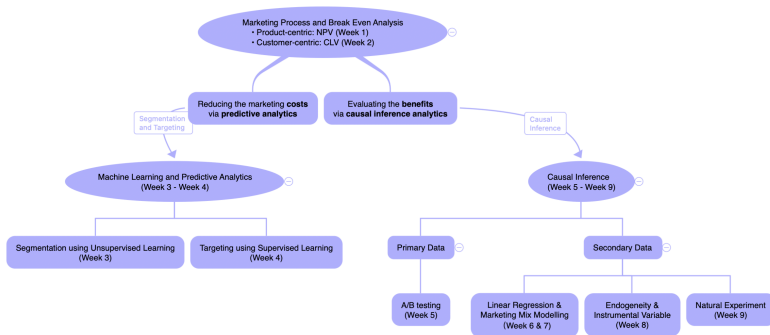●○○○

Section 3

Marketing Analytics

Big Data Era

With the advancement in information and communication technologies (ICTs), 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)

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What Marketing Analytics Can Do?

Marketing Process and Break Even Analysis
· Product-centric: NPV (Week 1)
· Customer-centric: CLV (Week 2)

Reducing the marketing **costs**
via **predictive analytics**

Evaluating the **benefits**
via **causal inference analytics**

Segmentation
and Targeting

Causal
Inference

Machine Learning and Predictive Analytics
(Week 3 - Week 4)

Causal Inference
(Week 5 - Week 9)

Segmentation using Unsupervised Learning
(Week 3)

Targeting using Supervised Learning
(Week 4)

Primary Data

Secondary Data

A/B testing
(Week 5)

Linear Regression &
Marketing Mix Modelling
(Week 6 & 7)

Endogeneity &
Instrumental Variable
(Week 8)

Natural Experiment
(Week 9)

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Unique Position of Marketing Analytics