Customer Analytics

Introduction Lecture

Tilburg University

Agenda

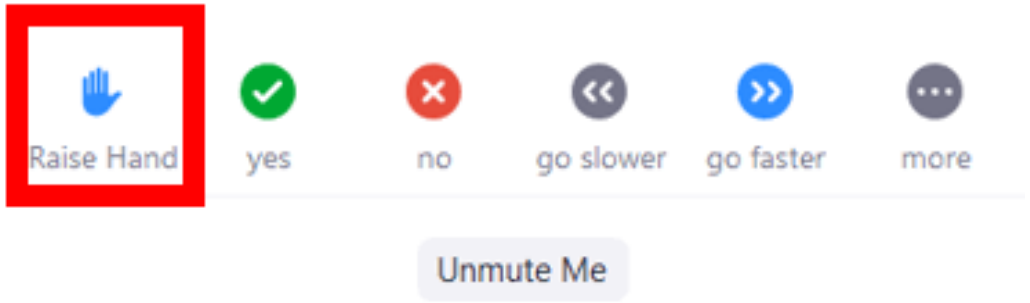
1. House rules & Introduction of the team
2. Introduction Customer Analytics
3. General Course Information
4. Web clips Module 1

1. House rules & Introduction of the team

House Rules

- Keep your microphone muted when you don’t speak
- Keep your camera on for the lectures
- If you would like to speak, raise your hand with the Raise Hand function and wait to be called on

  Or
- Use the chat to ask questions throughout the class



Teacher team

Instructor
George Knox

Assistant
Anne van der Vliet

Assistant
Gijs van Bussel

2. Introduction Customer Analytics

Marketing: then and now

Product-centric

Transaction-focused

Customer-centric

Relationship-focused

Customers are assets that generate profits over time

Customer lifecycle

Customer **development**: change in behavior over time: buying more (up-selling) or different things (cross-selling)

Customer **acquisition**:
how customers are "born" or first contact with the firm.

Customer **retention**: preventing customer "death" or churn.

Marketing is about acquiring, developing and retaining customers

Customer analytics

Using customer data and statistical models to make business decisions:

- Who should be targeted for … a marketing campaign, churn prevention, cross-selling, acquisition?
- Should we do a test before we roll it out? How big?
- How many subscriptions/transactions can we predict over time for a cohort of customers?
- How valuable is a customer to the firm over his or her lifecycle? How does it differ across customers?

3. General course information

Course components

1. Q&A session ⟵ In the next week
2. Lecture
3. Computer lab

Everything will be given online; no in-person/offline sessions

Everything will be given <u>live and recorded</u>

Lectures 1-5: Short-term analytics

- **Testing and Uncertainty**: Why test? Quantifying uncertainty; how large should the test be?

- **Models for selecting customer to target**: which customers should be selected for e.g., acquisition, retention, direct mailing?

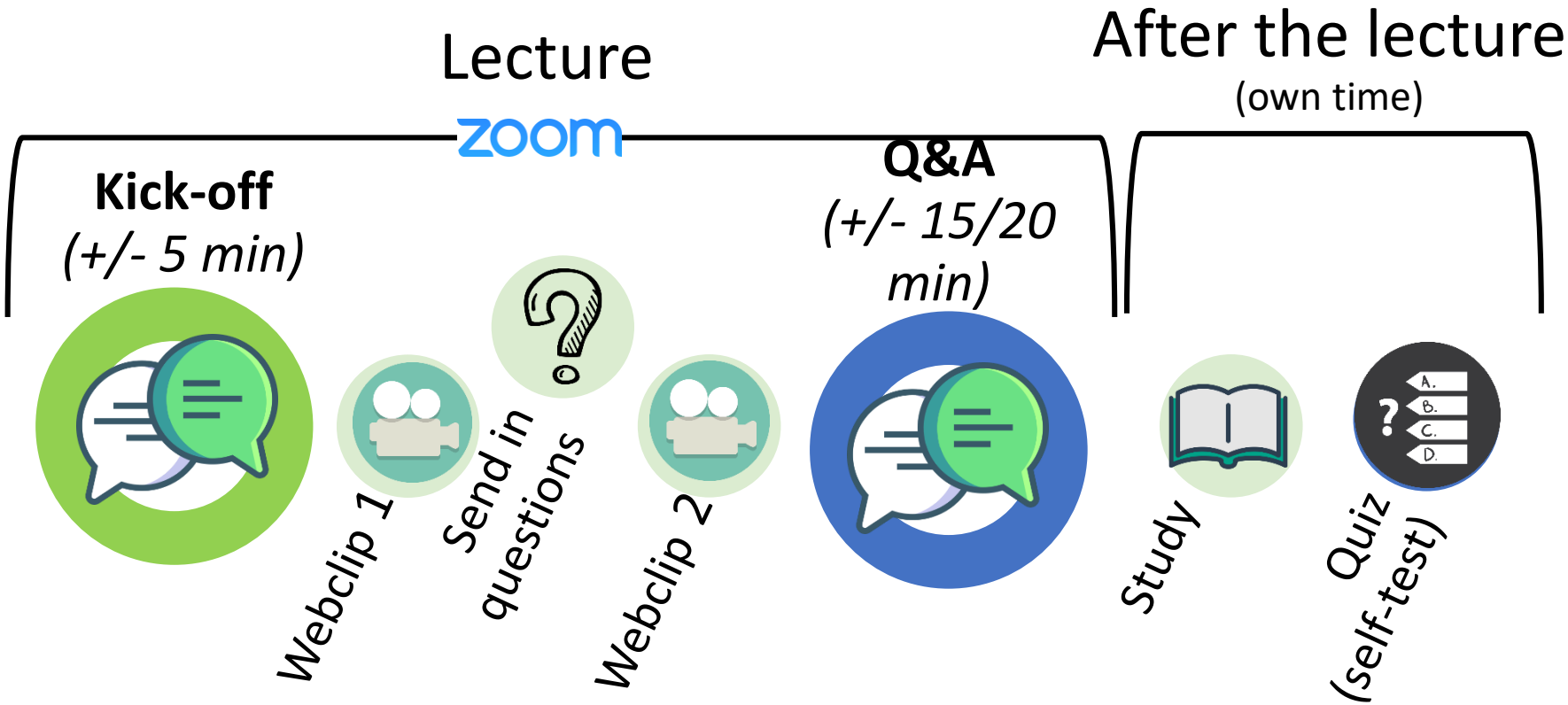
- **Models for customer development**: collaborative filtering, cross-selling

Lectures 6-7: Long term analytics

- **How does the customer base change over time** as customers drop out? Why does retention increase over time?

- **Customer lifetime value (CLV)**: who are the most valuable customers: how do you calculate the value to the firm of the customer over his or her lifecycle?

Structure lectures and lab sessions



Individual: watch the webclips and send in questions via email
(+/- 60/70 min)

Grading

1. Individual assignments: 30%
2. Computer exam (individual): 70%

To pass the course you need:

final grade ≥ 6

exam grade ≥ 5

The assignment grade still counts if you take the resit

Assignments

- Each module has an assignment
- Opens up after the lecture of that week, deadline before the next lecture
  - **Late assignments not accepted**
- It’s OK if you discuss with others, but all assignments are to be done individually.
- Canvas Assignment

Data sets & software

- The course is organized around several data sets that illustrate an important concept.
  - All these examples will be "hands-on" and have an emphasis on real-time problem solving.

- We're using **R** (4.1.1. "Kick Things")
  - Advantages: widely used & lots of contributed software, free
  - Disadvantages: programming language, unpredictability of packages, updates

- R notebooks in the computer lab

Readings

- Book: Blattberg, Robert C., Byung-Do Kim, and Scott A. Neslin. *Why Database Marketing?* Springer New York, 2008. **[BKN]**

- Articles: Other articles and material you can find on canvas under modules.

Contact

1. Consult the **FAQ page** on Canvas;
2. Check the **Announcements** on Canvas;

- If you send us an e-mail (after following steps 1-2 above), please always send it to customeranalytics@tilburguniversity.edu.

Do not send e-mails to the instructors' personal Tilburg University e-mail addresses (these e-mails will not be answered).

Questions?

4. Web clips Module 1