

TA-WEI (DAVID) HUANG

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EDUCATION

Harvard Business School Ph.D. in Marketing (Quantitative Track) Affiliate, Customer Intelligence Lab @ D ³ Institute at Harvard	2020 – 2025 (Expected)
National Taiwan University M.S. in Statistics	2015 – 2017
National Tsing Hua University B.S. in Quantitative Finance	2011 – 2015

RESEARCH INTERESTS

Topics	Targeting and Personalization, Customer Relationship Management, Customer Privacy, Business Experimentation
Methods	Causal Machine Learning, Causal Inference, Representation Learning, Deep Learning, Differential Privacy, Fair Machine Learning, Adaptive Experimentation

PUBLICATION

- **Doing More with Less: Overcoming Ineffective Long-term Targeting Using Short-Term Signals.**
Ta-Wei Huang and Eva Ascarza (2024)
Forthcoming, Marketing Science.

WORKING PAPERS

- **Debiasing Treatment Effect Estimation for Privacy-Protected Data: A Model Auditing and Calibration Approach.**
Ta-Wei Huang and Eva Ascarza (2023)
Revise & Resubmit at Management Science.

SELECTED WORK IN PROGRESS

- **Synergizing Experiments: Designing Personalized Marketing Interventions through Incrementality Representation Learning.**
Ta-Wei Huang, Eva Ascarza, and Ayelet Israeli (2024).
Draft in preparation.

RESEARCH PRESENTATIONS

- **Debiasing Treatment Effect Estimation for Privacy-Protected Data: A Model Auditing and Calibration Approach**
 - Conference on Digital Experimentation @ MIT, November 2023
 - ISMS Marketing Science Conference, June 2023
 - American Causal Inference Conference, May 2023
- **Doing More with Less: Overcoming Ineffective Long-term Targeting Using Short-Term Signals**
 - Marketing Dynamics Conference, September 2023
 - ISMS Marketing Science Conference, June 2022
 - American Causal Inference Conference, May 2022
 - HBS Marketing Seminar, May 2022

TEACHING EXPERIENCE

- **Harvard Business School**
 - Teaching Fellow for **Managing Customer for Growth** (MBA Elective), Fall 2022 & Fall 2023
 - Teaching Fellow for **Data-driven Marketing** (Harvard Business Analytics Program), Fall 2023
- **Self-developed Online Courses**
 - Instructor for **Data-informed Product Strategy** (2,043 students; Evaluation: 4.9 / 5.0)
 - Instructor for **Business Analytics Using R** (1,846 students; Evaluation: 4.9 / 5.0)
 - Instructor for **Text Mining Using R** (519 students; Evaluation: 4.6 / 5.0)
- **Workshop**
 - Invited instructor for **Data-informed Decision Making for Commercial Banking** (two-day workshop) hosted by Taiwan Academy of Banking and Finance, Spring 2020

TEACHING MATERIALS

- **Travelogo: Understanding Customer Journeys**
Eva Ascarza and Ta-Wei Huang (2024).
HBS Teaching Note [524044]
Keywords: Customer Relationship Management; Travel Industry; United States
- **Customer Data Privacy.**
Eva Ascarza and Ta-Wei Huang (2023).
HBS Background Note [524005]
Keywords: Retail Industry; Technology Industry; Financial Services Industry; Telecommunications Industry
- **Design and Evaluation of Targeted Interventions.**
Eva Ascarza and Ta-Wei Huang (2023).
HBS Technical Note [524034], Dataset [524703]
Keywords: Targeting; Personalization; Policy Evaluation; Uplift Models; Heterogenous Treatment Effects
- **Managing Customer Retention at Teleko.**
Eva Ascarza and Ta-Wei Huang (2023).
HBS Teaching Note [524036], Dataset [524704]
Keywords: Customer Management; Retention; Targeting; Uplift; Heterogenous Treatment Effects, Exercise

HONOR & AWARD

- AMA-Sheth Foundation Doctoral Consortium Fellow, 2023
- ISMS Marketing Science Doctoral Consortium Fellow, 2021 & 2022
- Summer Research Fellowship, Institute of Mathematics, Academia Sinica, 2015
- Phi Tau Phi Scholastic Honor Society, 2015
- First Prize, International ICT Innovation Competition, 2014
- Hui-Chun Chin and Tsung-Dao Lee Undergraduate Research Endowment, 2014
- Undergraduate Research Fellowship, Ministry of Science and Technology Taiwan, 2013
- Dean's Award of Outstanding Academic Performance, National Tsing Hua University, 2013
- Dean's List, National Tsing Hua University, 2011, 2013, 2014

INDUSTRY EXPERIENCE

- **Migo.tv** Data Science Manager 2019 – 2020
- **Mastercard** Consultant, Data & Services 2018 – 2019
- **InrayTek Inc.** Data Scientist 2017 – 2018

RELEVANT COURSEWORK

- **Statistics and Machine Learning**
 - Design of Experimental and Non-experimental Studies José Zubizarreta
 - Inference on Causal and Structural Parameters Using ML and AI Victor Chernozhukov
 - Sequential Decision Making (Reinforcement Learning) Susan Murphy
 - Differential Privacy and Algorithmic Fairness Cynthia Dwork
 - Bayesian Modeling and Inference Tamara Broderick
 - Statistical Machine Learning Lucas Janson
 - Advanced Demand Modeling Moshe E. Ben-Akiva
 - Econometrics I George Bruich
- **Economics**
 - Microeconomics I Rahul Deb
 - Microeconomics II Dennis Yao / Christopher Avery
 - Industrial Organization I Ariel Pakes
 - Stochastic Choice Tomasz Strzalecki
- **Marketing and Behavioral Science**
 - Marketing Models - Fundamental Navid Motijr
 - Marketing Models - Methods Navid Motijr
 - Consumer Behaviors John Deighton
 - Field Experiments Michael Luca
 - Science of Behavior Change Todd Rogers