B8679: Digital Marketing

Term: 2024 January Block
Dates and Times: Tuesday, January 16 to Saturday, January 20, 9:00 am to 5:00 pm
Classroom: Kravis 820 (TBC)

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Instructor office hours: By appointment

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TA office hours: TBD

Course Description

Digital marketing has seen explosive growth—in the US, digital marketing spend increased from approximately $15 billion in 2006 to approximately $250 billion in 2022, and is estimated to be nearly $300 billion in 2024.[1] Digital marketing has become an essential, if not dominant, component of a firm's marketing strategy. However, with advances in technology and new privacy-related regulations being passed, managers are still grappling with this continuously evolving medium.

In this course, we will develop a systematic understanding of digital marketing by learning concepts and tools whose applicability will endure even as specific technologies and implementation procedures change. We will start with understanding the ARD (Acquisition, Retention and Development) framework, and how to influence consumers at each step of the purchase journey. Next, we will conduct an in-depth study of different advertising and marketing channels (including display advertising, search advertising, social media marketing, influencer marketing, content marketing and email marketing) and synergies between them. Using cases and examples, we will invest a significant amount of time on causal impact measurement methods such as A/B testing and multi-touch attribution, and campaign evaluation metrics and optimization methods. We will also discuss a host of varied topics central to digital marketing, such as Gen-AI, privacy issues, regulation and anti-trust activity in digital marketing and digital ad fraud.

The course will be primarily lecture and discussion based, with industry cases, examples, relevant academic papers, and pre-class and in-class exercises and activities used to anchor class discussions. Students will also gain hands-on experience with key MarTech tools through video tutorials. Group assignments will reinforce, and extend, concepts learnt in class. Finally, students will conduct (in groups) company analyses for digital marketing companies. We will also hear from a number of industry speakers.

By the end of the course, students will gain a solid understanding of digital marketing topics, and the knowledge to navigate (and "cut through the hyperbole" in) this continually evolving industry. Students will leave the course with the skills and strategies to build, evaluate and optimize digital campaigns, manage digital marketing teams and work with digital marketing agencies. Many of the learnings will be applicable beyond digital marketing.

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[1] https://www.emarketer.com and https://content-na1.emarketer.com/digital-ad-spending-surging

Overview

Day	Topic(s)	Required Readings	Due that day (EST)
Day 1 1/16 (Tu)	**Introduction:** Media landscape, CLV and the Acquisition-Retention-Development framework **Display Advertising:** Industry structure and economics; Measuring impact; Randomized experiments, Metrics for a display ad campaign **Guest Speaker:** TBD	- The Growing Culture of Marketing Experimentation - General Data Protection Regulation (GDPR)	-- OS 1 (7:00 AM)
Day 2 1/17 (W)	**Search Advertising:** Sponsored search; Search engine optimization; Evaluation metrics, in-class exercise, Gen-AI in Digital Marketing **Guest Speaker:** TBD	- Search Engine Optimization - General Data Protection Regulation (GDPR) - Bazaar case (on Canvas)	-- OS 2 (7:00 AM) -- Assignment 1 (11:59 PM)
Day 3 1/18 (Th)	**Attribution** **Social Media Marketing:** User engagement on social networks; Social advertising **Guest Speakers:** TBD	-- Attribution Modeling Overview - Attribution case (on Canvas)	-- OS 3 (7:00 AM)
Day 4 1/19 (F)	**Social Media Marketing:** Online word-of-mouth; Influencer marketing; Viral marketing **Email and Content marketing** **Guest Speaker:** TBD **Company Analysis Presentations**	-- Basics of Influencers	-- Assignment 2 (11:59 PM)
Day 5 1/20 (Sa)	**Advertising Budget Allocation:** Marginal returns within media; Interactions across media **Guest Speaker:** TBD **Company Analysis Presentations** **Wind Up**		-- OS 4 (7:00 AM) -- Final Company Analysis Reports (6:00 PM)
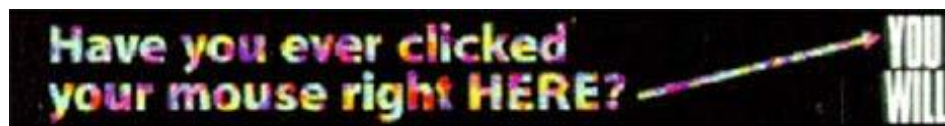
Course Readings and tutorials
For readings and tutorials before each class, please see reading list provided on Canvas and on the Course Overview above.

Video Tutorials can be accessed here: https://drive.google.com/drive/folders/1WU-uY-FTTUXxKA7H_EB6lMuDPcxFwUg4?usp=drive_link

Recommended Readings for Current Issues:
‒ WSJ CMO Today (https://www.wsj.com/news/cmo-today; access through Columbia email address)
‒ eMarketer (https://www.emarketer.com/; access through Columbia email address)
‒ TechCrunch.com, BusinessInsider.com, other tech industry blogs

Evaluation
1. Class participation and preparedness—individual
   a. Attendance—5%
   b. In-class work and discussion—15%
   c. Pre-class surveys—10%

2. Two group assignments—group* (25% each = 50%)

3. Company analysis project—group** (20%)

* Group assignment teams should ideally have three members; two and four member teams will be allowed. It is preferred but not required that team composition be the same for both assignments.

** Two group assignment teams can join for one company analysis, therefore, company analysis teams should ideally have six members.

Class Participation and Preparedness—Individual
Several criteria are considered when evaluating your class participation. This includes the quality and the quantity of the class participation. High quality class participation includes comments that add to our understanding of a situation. High quality class participation can be supported with qualitative and/or quantitative analysis. Your comments should take into account the comments and analyses of your classmates. Participation should move our discussion forward. Finally, you need to be present in class in order to receive a strong class participation score. Attendance is mandatory in every session.

There will be a number of pre-class questions you are asked to answer via online surveys. These have to be completed individually and submitted before 7:00 AM of the day of class. Many of the pre-class questions do not have a unique answer as they depend on how one interprets and uses the data and other information. My expectation is that you would respond thoughtfully to the questions, giving reasonable justification for your answers. You will get full points for a good attempt.

Home Work Assignments—Group
There will be two homework assignments. The first will be on Measuring Advertising Effectiveness Using Field Experiments and the second will be on Email Marketing, ROI and Attribution. More details will be provided in the assignments.

Company Analysis Project—Group

Each group has to pick a company related to digital marketing that is a leader in its "category" and conduct a thorough analysis of this company and its relevant landscape. Digital marketing is a high-innovation field with many exciting companies being created regularly that provide novel solutions to advertisers, publishers and developers. Through this project, the class will collaboratively create and share a comprehensive collection of innovative and cutting-edge solutions provided by companies for different aspects of digital marketing.

As an example, a group could choose the company Brandwatch, which is in the "social media listening and analytics" category. The company analysis may address the following points:
- What is Brandwatch's offering and what important problem does it solve for its clients?
- How would you define Brandwatch's broader solution or technology category? How recent is the category and what is its history? How big is this category? What is Brandwatch's operational footprint? Who are its competitors?
- What is unique to Brandwatch's offering that differentiates it from other similar offerings? Was this always Brandwatch's offering and what is the company's history?
- What important relevant problems does Brandwatch leave unsolved?
- What is the expected future of this company and the category?

While choosing the project, you should consider both the company as well as the category it operates in. Below are some examples of leading companies in their respective industries that you may choose from. Two groups cannot choose the same company although different companies in the same industry is OK.

Company	Solution or Technology Category
BrandHeroes	Influencer marketing
Adroll	Retargeting
Outbrain	Native advertising
mParticle	Customer Data Platform
Wirewheel	Data privacy management platform
WhiteOps/Human	Ad fraud
Kargo	Mobile ad serving
OneTrust	Consent management platform
SEOImage	Search engine optimization
Optimizely	A/B testing
Hootsuite	Social media management

These are just examples. Please do not pick a company from the list above. Once you have an idea of the company that you would like to analyze, discuss with the professor (over email or, preferably, in person) for approval and possible adjustment/advice. This should be done before the start of the third day of the course.

Each group will make 15-minute company analysis presentations starting on Friday and Saturday.

The final deliverables for the project, due on <u>Saturday, January 20 at 6:00 PM</u>, are the following:
1. A set of 7-10 slides addressing the above points. This can simply be your presentation slides. This will account for <u>18% of the course grade</u>.
2. ONE slide highlighting the main points of your company analysis. This will be shared with all the students in the class. Submitting this will <u>give you 2% of the course grade</u>.

ATTENDANCE, CLASSROOM NORMS AND EXPECTATIONS
You are required to attend each class. If you want an excused absence, please contact OSA and ask them to send Prof. Donati an email (or forward their approval email to Prof. Donati). Students are expected to adhere to CBS Core Culture in this class by being Present, Prepared, and Participating.

Laptops and cell phones are not allowed in class.

GENERATIVE AI POLICY
Students in this course may only use Generative AI tools, such as ChatGPT, for idea generation and must include a citation describing any usage. Using these tools to generate responses to assignments violates CBS's Honor Code, and I will report suspected instances of plagiarism. Please contact me if you have any questions about this policy.

INCLUSION, ACCOMMODATIONS, AND SUPPORT FOR STUDENTS
At Columbia Business School, we believe that diversity strengthens any community or business model and brings it greater success. Columbia Business School is committed to providing all students with the equal opportunity to thrive in the classroom by providing a learning, living, and working environment

free from discrimination, harassment, and bias on the basis of gender, sexual orientation, race, ethnicity, socioeconomic status, or ability.

Columbia Business School will make reasonable accommodations for persons with documented disabilities. Students are encouraged to contact the Columbia University's Office of Disability Services for information about registration. Students seeking accommodation in the classroom may obtain information on the services offered by Columbia University's Office of Disability Services online at www.health.columbia.edu/docs/services/ods/index.html or by contacting (212) 854-2388.

Columbia Business School is committed to maintaining a safe environment for students, staff and faculty. Because of this commitment and because of federal and state regulations, we must advise you that if you tell any of your instructors about sexual harassment or gender-based misconduct involving a member of the campus community, your instructor is required to report this information to a Title IX Coordinator. They will treat this information as private, but will need to follow up with you and possibly look into the matter. Counseling and Psychological Services, the Office of the University Chaplain, and the Ombuds Office for Gender-Based Misconduct are confidential resources available for students, staff and faculty. "Gender-based misconduct" includes sexual assault, stalking, sexual harassment, dating violence, domestic violence, sexual exploitation, and gender-based harassment. For more information, see http://sexualrespect.columbia.edu/gender-based-misconduct-policy-students.

ASSIGNMENTS

All of your assignment submissions are subject to the CBS Honor Code. Violations of the CBS Honor Code may lead to failing the assignment, failing the course, suspension, and/or dismissal. In order to avoid ambiguity that may lead to unintentional violations of the Honor Code, assignment description types have been standardized and specified below.

Type	Designation	Grade	Preparation of submission	Discussion of Submission*	Discussion of Concepts**
A	Group Work	Same grade for all group members	By the group	Permitted to discuss (within group)	Permitted
B[1]	Individual w/ Discussions of Concepts and Submission	Individual grade	Individual preparation	Permitted to discuss; sharing solutions or submission files is not allowed	Permitted
B[2]	Individual w/ Discussions of Concepts Only	Individual grade	Individual preparation	Not permitted to share/discuss solutions or submission	Permitted
C	Individual	Individual grade	Individual preparation	Not permitted to share/discuss solutions or submission	Not permitted***

The designated group can be either an assigned study group or a self-selected one.

* Submission means any work and/or output pertaining to the specific assignment. If an assignment submission contains a calculation or decision related to a specific set of data and setting, discussing the details how to make this calculation or decision with regard the data/setting is to discuss the submission. Providing another student with a draft of the calculation or decision is sharing the submission.

** Concepts mean any ideas, examples, readings, or other related materials from the class/course. Conceptual discussion should not be based on a specific set of data or setting related to a calculation or decision required in the assignment, but could be based on other related examples, preferably those from class/course materials.

*** As no conceptual discussion is permitted, Type C is akin to a take-home exam.