

B8679: Digital Marketing

Term: Fall 2022

Dates and Times: TBD, one 3-hour lecture per week

Classroom: TBD

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Office hours:

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TA: TBD

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Course Description

Digital marketing has seen explosive growth—in the US, digital marketing spend increased from approximately \$15 billion in 2006 to approximately \$150 billion in 2020, 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 consumer purchase process and how to influence consumers. 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. 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 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 used to anchor class discussions. Students will also gain hands-on experience with key tools by building digital campaigns on different advertising platforms and obtaining industry certifications. Group assignments will reinforce, and extend, concepts learnt in class. Students will, in teams, do a semester-long project in collaboration with companies while being guided by mentors who are active practitioners. We will hear from five or six industry leaders spread throughout the course. Finally, students will complete an individual Google Analytics certification. 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.

¹ <https://www.emarketer.com/Article/eMarketers-Seven-Predictions-2006/1003773> and <https://content-na1.emarketer.com/digital-ad-spending-surgin>

Overview

Date	Agenda	To do/Deliverables
Session 1	<ul style="list-style-type: none"> • Introduction • Customer purchase journey 	
Session 2	<ul style="list-style-type: none"> • Display advertising • Cookie deprecation and privacy 	<ul style="list-style-type: none"> • Finalize project groups
Session 3	<ul style="list-style-type: none"> • 0/1/2 company analysis talks • Experiments and causal measurement of ad impact • Guest speaker (tentative) 	<ul style="list-style-type: none"> • Pre-class exercise 1 (Star Digital case) • Finalize project company from given set and meet with company representative and mentor
Session 4	<ul style="list-style-type: none"> • 0/1/2 company analysis talks • Search advertising 	<ul style="list-style-type: none"> • Project deliverable: project background and goals report (1 page)
Session 5	<ul style="list-style-type: none"> • 0/1/2 company analysis talks • Antitrust issues in display and search advertising markets • Calculating ROI • Guest speaker (tentative) 	<ul style="list-style-type: none"> • Pre-class exercise 2 (ROI) • Last day for Google Analytics certification
Session 6	<ul style="list-style-type: none"> • 0/1/2 company analysis talks • Attribution • Guest speaker (tentative) 	<ul style="list-style-type: none"> • Pre-class exercise 3 (Attribution) • HW 1 due
Session 7	<ul style="list-style-type: none"> • 0/1/2 company analysis talks • Social media marketing 	<ul style="list-style-type: none"> • Project deliverable: project display and search ads strategy report (2-3 pages)
Session 8	<ul style="list-style-type: none"> • 0/1/2 company analysis talks • Influencer marketing • Email and content marketing 	<ul style="list-style-type: none"> • Last day for Google Analytics certification
Session 9	<ul style="list-style-type: none"> • 0/1/2 company analysis talks • Customer lifecycle marketing • Guest speaker (tentative) 	<ul style="list-style-type: none"> • Project deliverable: project social media marketing strategy report (1-2 pages)
Session 10	<ul style="list-style-type: none"> • 0/1/2 company analysis talks • Building, evaluating and optimizing a campaign • Branding and full-funnel marketing • Guest speaker (tentative) 	<ul style="list-style-type: none"> • Pre-class exercise 4 (Optimizing spend)
Session 11	<ul style="list-style-type: none"> • 0/1/2 company analysis talks • Special topics: growth hacking, inter- and intra-firm frictions in online advertising, emerging technologies • Guest speaker (tentative) 	<ul style="list-style-type: none"> • HW 2 due
Session 12	<ul style="list-style-type: none"> • Student project presentations • Wind up 	<ul style="list-style-type: none"> • Project paper (8-10 pages) and slide deck

Course Readings

For readings before each class, please see [reading list provided on Canvas](#).

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 (10%)
 - b. In-class discussion (10%)
 - c. Pre-class exercises (2% each * 4 = 8%)
2. Google Analytics individual certification—individual (2%)
3. Two group HW assignments—group* (15% each * 2 = 30%)
4. Company analysis presentation—group** (5%)
5. Digital marketing strategy company project—group** (35%)

* Groups for assignments should ideally have three members (two member groups will be allowed). It is preferred but not required that team composition be the same for both assignments.

** Groups for presentation and project should have six members (five member groups will be allowed). Ideally, two groups of three members each, as formed for the group assignments, should combine to make one group of six members for the project.

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 four pre-class exercises you will be asked to complete. These have to be completed individually and submitted before 12:00 PM 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. Our 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.

Google Analytics individual certification—Individual

Google Analytics is free and an industry standard, which makes it the most widely used analytical suite, particularly by small and medium sized businesses. Companies use it to track user behavior, answering questions on how visitors find your website, who they are, what they do when they are there, what pages are most popular, and where they convert to a desired action like a sale. Students will take the qualifying exam to receive the *Google Analytics Individual Certification*, indicating they have mastered basic and advanced concepts including planning, implementation, attribution, and reporting. The exam is free; two study modules take approximately an hour to review, and the timed exam also takes an hour. Detailed information and resources can be found here:

<https://skillshop.exceedlms.com/student/path/2938-google-analytics-individual-qualification>

Homework assignments—Groups of 2–3

There will be two homework assignments. The first will be on measuring causal advertising effectiveness and the second will be on campaign optimization. More details will be provided in the assignments. Each assignment will be for 15% of the course grade.

Digital marketing strategy company project—Groups of 5–6

The Group Project is a critical part of the course and represents the opportunity to truly work with the tools and strategies presented in class. It's worth 35% of your grade. Each team will be assigned a client company selected to provide a full range of digital channels for review. Companies have committed to meet (or conference call) with each team at kickoff and then once monthly to provide ongoing feedback for the project. Each team will be paired with an industry expert mentor who will be an active practitioner of digital marketing. The mentor will periodically guide the team in their project efforts.

There will be multiple mid-way mini report submissions for the project. The end result of the project will be a strategic marketing report. This will include an overview of the company, its goals, and its competitors; a channel-by-channel evaluation and tactical assessment; and a summary strategy with insights and suggested areas for improvement, testing, or exploration. Groups will present their results to the class in the last session, to share and compare their findings across project companies and industries, each with different strategic goals and marketing objectives.

Company analysis project—Groups of 5–6

Each group will pick a company related to digital marketing that is a leader in its “category” and conduct an 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.

Starting from the third session, one or two groups of 5–6 students will make an 8–10-minute company analysis presentation at the start of the session. By the end of the course, all groups will have made one company analysis presentation. The deliverable for the company analysis will be the presentation slides plus one summary slide. When which group presents will be decided through volunteering for particular dates and (the remaining) by random allocation.

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 prominent 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
AdDefend	Ad blocking
WhiteOps	Ad fraud
Kargo	Mobile ad serving
Yext	Online brand management
SEOImage	Search engine optimization
Optimizely	A/B testing
Hootsuite	Social media management

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.

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. Jerath an email (or forward their approval email to Prof. Jerath).

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.

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.

<u>Type</u>	<u>Designation</u>	<u>Grade</u>	<u>Preparation of submission</u>	<u>Discussion of Submission*</u>	<u>Discussion of Concepts**</u>
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.