Columbia Business School
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PRODUCT MANAGEMENT
MRKTB8636
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INSTRUCTORS

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Office Hours and Communication Preferences

- Please request a meeting (virtual or in-person) via link posted to Canvass during semester
- Communications from the professor and teaching assistant about the course will take place through Canvas. Students should make sure they regularly check for announcements and messaging notifications.

COURSE DESCRIPTION

Product management is a fast growing field born out of the need for a single person or small team of people within an organization to own the entirety of the end-to-end product development cycle, while also understanding and reconciling product decisions with business needs. This course focuses specifically on **digital product management** and is intended as a primer for those interested in a product management career or those with a general interest in how **technology products** are made. Those who want to play at the intersection of technology, business, and management are often well-suited for product management, a role that is often referred to as “CEO of the product” but without direct control of most of the resources required to build and launch a successful product. Product managers must be proficient in a broad range of capabilities, and must lead through influence, not authority.

This is an **introductory** course aimed at students who are new to product management and do not have a strong technical background and want to develop the knowledge and skills to get a leg up when joining a technology company. This course is geared toward students that aim to work at medium to large sized companies as a product manager or leader, where firms are expected to innovate and launch new products and features as a means of ensuring they retain market relevance or expand into new markets based on current capabilities. We will cover the product development cycle from ideation to

commercialization in that context. This course is not geared toward start-ups or new ventures, even if some of the concepts are applicable.

Students will get a strong understanding of what it means to be a product manager and its role in the organization. For those students who decide to put the skills learned from this class into practice, CBS offers a Digital Product Management Lab, a team based experiential class that partners with member companies to address "Problems to be Solved" that require fresh product development thinking. For those students that decide against moving into PM as a career, many of the concepts and approaches covered in this class will help students in whatever path they choose.

STUDENT LEARNING OUTCOMES

The discipline of Product Management is evolving, as evidenced by the plethora of blogs, articles, books and opinions from some of the most accomplished product managers and consultancies. The PM curriculum at CBS, including this introductory Product Management course, curates, organizes, and delivers the latest thinking as a foundation for students who aim to pursue careers in Product Management at medium to larger sized established firms. This curriculum is organized (roughly) to follow the timeline of the product development cycle. The specific topics we will cover include:

- **THE ROLE OF A PRODUCT MANAGER AND PRODUCT IN A DIGITAL CONTEXT.** Products that leverage the underlying Internet infrastructure as a core delivery mechanism of their value proposition have unique characteristics. We start by exploring what is a product versus a feature, what are the common product development related roles in tech firms and what role does the product manager play in setting strategy and driving execution:
    - Defining a digital product and feature
    - Defining Product Management
    - Understanding Product Management adjacent roles (e.g. project management, product marketing, program management)
    - Defining product strategy
    - Managing the product across the full product lifecycle
    - Introduction to 'Agile' product management techniques emphasizing iterative and incremental development including delivering working software frequently, collaborating with cross-functional teams, and responding to change
    - Exploring the attributes of great PMs

- **CUSTOMER DISCOVERY IN DIGITAL MARKETS:** Creating a new web/app based business is becoming easier and easier as development and distribution costs shrink every year. But most don't make it. The ones that do have a common characteristic: *they solve a clear user problem that is willing to pay (in one way or another)*. Over the course of the first few weeks we will explore frameworks and best practices for finding product-market fit in digital products, generating ideas and making good decisions.

  - Assessing digital product opportunities to find Product/Market fit
    - Frameworks to help define customer needs (Jobs to Be Done, Personas and Journey Mapping)
    - Customer discovery as iterative process
    - Lean qualitative and quantitative market research tactics for getting customer feedback
  - Frameworks for leading teams to think expansively and seek a broad range of potential solutions before coding begins
  - Frameworks for prioritizing features and defining minimum viable products (MVPs)
  - Validating MVPs with prototyping and low code/no code solutions

- **BUILDING DIGITAL PRODUCTS:** Hardware and software is at the center of every web based product. Yet, in most cases, Product Managers need not be computer scientists nor design experts to be effective. However, it is critical they have a baseline understanding for, and appreciation of, how those teams operate, and be able to be a thought partner and leader during the development cycle. Now we turn our focus to the role a Product Manager plays in developing products in partnership with engineering and UX teams.
  - Explore the basics of User Experience design principles to ensure products meet user needs and expectations
  - Develop a basic understanding of how software is developed in order to contribute to technical discussions with engineering teams, including concepts like front-end and back-end development, programming languages, database management, as examples.
  - Develop a working knowledge of the software and systems architecture that the engineering team is managing
  - Explore how emerging tech product trends (AI, blockchain, VR/AR) and how they could be deployed
  - Learn the basics of the iterative development process (Agile, Kanban) and have a working knowledge of how they are deployed in tech firms
  - Be exposed to common product development tools of the trade

- **COMMERCIALIZING TECHNOLOGY PRODUCTS:** As the product is being built, “Go-To-Market” teams are responsible for deciding how the product will be priced, which customer segments to focus on and when and how to prepare the sales and marketing teams for readiness, among other things.
  - Understand the strategic considerations unique to launching (and growing) **DIGITAL** products, the prominent business models in **TECH** firms and how to set goals, and the role the PM plays in **managing x-functional** teams against those goals, as many tech firms are organized functionally where the PM doesn't have control over the resources required to build and sell the product.
  - Explore the strategic considerations unique to Digital First businesses; the most valuable tech firms are digital platforms, a specific type of company that brings together multiple sides of a marketplace that leverage network effects to efficiently clear transactions

  - Understand the business models deployed by technology firms
  - Working with cross-functional go-to-market teams across alpha, beta and general availability stages of the product life cycle to identify segments, channel strategies and pricing models to optimize for product launch success
  - Explore methods for evaluating progress by setting goals via OKRs, KPIs and other relevant metrics.
  - Understand the process for continuous improvement and iteration, conducting tests and gathering feedback, analyzing product metrics and user feedback
  - Strategies for influencing without authority and selling the plan & managing cross-functional teams in large organizations

- **ETHICAL AND POLITICAL CONSIDERATIONS WHEN BUILDING TECHNOLOGY PRODUCTS:** Several prominent technologies have become so intertwined with our day-to-day they are shaping how society evolves. Misinformation, social-media addiction, access and use of private data are just a few of the challenges faced by society. In these sessions, we will discuss the unique considerations a PM must consider when building products with so much scale the influence how we evolve as citizens of the world.
  - Regulatory considerations for technology firms
  - Ethical considerations in the digital economy

CLASSROOM NORMS AND EXPECTATIONS

Core Culture

Students are expected to adhere to CBS Core Culture in this class by being Present, Prepared, Participating.

Inclusion, Accommodation, and Support for Students

At Columbia Business School we believe diversity strengthens any community or business model and brings it greater success. The School is committed to providing all students with 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.

Students with documented disabilities may receive reasonable accommodations. Students are encouraged to contact the Columbia University's Office of Disability Services for information about registration.

Columbia Business School adheres to all community, state, and federal regulations as relate to Title IX and student safety. Read more about CBS' policies to support Inclusion, Accommodations and Support for Students here.

Honor Code and Academic Integrity

The Columbia Business School Honor Code calls on all members of the School community to adhere to and uphold the notions of truth, integrity, and respect both during their time in school, and throughout their careers as productive, moral, and caring participants in their companies and communities around the world. All students are subject to the Honor Code for all of their academic work. Failure to comply with the Honor Code may result in Dean's Discipline. Here you can review examples of Academic Misconduct which may result in discipline.

Course Attendance Policies

Students from all programs should review and be familiar with the MBA Core attendance policy here. Students are expected to be present in all class sessions. Failure to attend class will negatively impact participation grade.

METHOD OF EVALUATION

Your overall grade will depend on the mix of individual and team assignments according to the following percentages:

Course Team Project (Breakdown of specific deliverables and grade weighting will be listed in Canvas)	**50%**
Individual Case Write Ups • Case 1 (TBD) • Case 2 (TBD) • Case 3 (TBD)	**30%** *10%* *10%* *10%*
Individual In-Class Participation	**20%**

Letter grades for the course will be assigned in accordance with Columbia Business School's recommended grade distribution for elective courses. There will be several "deliverables" to be turned in at various points in the course, but the class discussions and activities in the course and in discussion forums are very important aspects of the course and the learning experience. Thus, grades will be based both on assignments that are turned in and on your performance in the classroom and off-site discussions. I will try to get feedback to you regarding your write ups as quickly as possible, so it is important that these deliverables be submitted on time and late submissions will impact grades.