17-629: Product Management Essentials II (cross-listed with 17-612)

Fall 2025, Mini-2, 6 Units

Class Sessions

Monday and Wednesday, 3:30 p.m. to 4:50 p.m. Eastern Time

- 17-629 Section A2 (Pittsburgh campus students): **Gates Hillman Center, Classroom 4215**
- 17-629 Section D2 (Distance program students): **Zoom room**
- 17-612 (MSE Online students): **Zoom room**

Instruction Team	Email	Office and Office Hours
Jim Berardone	jberardone@cmu.edu	Room 275 at 300 SCR or Zoom, by appointment.
Assoc. Professor of the Practice for Product Management, School of Computer Science, MSE program		
Dennis Grinberg	dennisgrinberg@cmu.edu	
Guest Lecturer, School of Computer Science, MSE program		
Keerthi Raghavendra	kraghave@andrew.cmu.edu	
Teaching Assistant, Integrated Innovation Institute, Master of Science in Software Management,		
Niccolò Bitetto	nbitetto@andrew.cmu.edu	
Teaching Assistant, School of Computer Science, Master of Information Technology Strategy,		

Course Description.

This course focuses on the business-side of product success, building upon students' prior learning and product idea work on the customer-side of product success in 17-619 Product Management Essentials I. Through a hands-on, experiential approach, students will develop a cohesive strategy and financial model for the product idea they explored in 17-619.

Students will learn to make key strategic decisions, including creating a product vision, product and technology strategy, product roadmap, and a go-to-market strategy over multiple stages of a new product's introduction and growth. They will use these decisions to build and analyze a financial model, incorporating revenue, expenses, profitability, and growth projections. Emphasis is placed on understanding how these strategic choices interconnect and impact financial outcomes.

The course culminates in the development of a financially-backed business case to justify further investment in the product idea. By working through real-world scenarios, students will gain practical experience in applying product management concepts and developing the skills needed to build a successful product business.

Learning Objectives. By the end of this course, students will be able to:

- Understand and apply key business concepts and terminology relevant to technology products.
- Develop a cohesive product strategy, vision, and roadmap, along with a supporting technology strategy.
- Understand the Go-To-Market approaches to acquiring, retaining and expanding customer relationships and their impact on product decisions and success.
- Build a financially-supported business case to justify investment in a new technology product idea
- Analyze the impact of product, technology, pricing, and commercial decisions on product quality, performance, and financial outcomes.

Participation.

- Students in 17-629 section A are expected to attend classes in-person (IPE - "In-Person Expected".)
- Students in 17-629 section D and 17-612 are expected to attend class remotely (REO - "Remote Only.") The REO students are provided with remote access to class via Zoom.
- All students will have access to a video-recording class after the video is processed and made accessible on Canvas.

Learning Resources. We will use several learning resources in this course.

1. Readings and Videos
For each class, students are assigned case studies, articles and/or videos to complete. These can be found on Canvas under Post-Class Learning Activities with each class session. The cases are the basis for in-class discussion and some readings are the basis for low-stakes quizzes after the classes of the week.

2. Course Library
In addition, this course provides students with access to a collection of selected, specialized business resources. These subscription-based information resources have been made available for your use at no cost by the CMU Libraries.

- These resources are accessible from this page: https://guides.library.cmu.edu/17-619

3. Class Slides and Recordings
The slides of each class session will be made available on Canvas by the start of the class. For each day of classes, a video-recording is made of the last class session. It is usually available within a few hours after that session. The recordings will be accessible by every student in any section of the course.

- The recordings are not a substitute for attending class. Each class session involves in-class activity such as discussion, application of the course material, and instructor feedback. Each student is expected to attend every class.
- Please note that you are not allowed to share these recordings. This is to protect your FERPA (Family Educational Rights and Privacy Act) rights and those of your fellow students.

Technology Resources. In this course, we will use these technologies:

- Canvas

  Our course utilizes the Canvas software platform. It will be the central place for your assignments, learning materials, and the class slides. <u>Make sure you are setup to receive notifications of announcements and of new and changed assignments.</u>

- Slack
    - We will use the Slack channel for this course to communicate announcements, changes, and guidance with students.
    - Students should use this channel to ask questions outside of the class sessions, too. As many students often have the same or similar questions, it's most helpful to everyone to post these as public questions on Slack.
    - <u>Make sure you accept the Slack invitation and are set up to receive notifications.</u>

- Google Suite
    - We'll provide Google Docs and Forms for you to complete various tasks during some course learning activities.

- Zoom

  We will use a Zoom classroom in our class sessions for students in the remote sections of the course.

Evaluation, Grading and Late Policies.

There are 3 parts to the evaluation and grading system used in this course. A total of 100 points are available for students to earn across these 3 parts.

1. **In-Class Activities (10%).** In most class sessions, there will be a low-stakes learning activity to complete <u>during the class</u>. In some cases, they'll involve reading a case study and answering questions. In others, students will complete an exercise to apply the material just taught.
    - Each activity is worth 1 point.
    - There are 12 classes with an in-class activity and a maximum of 10 points can be earned. The 2 lowest scores will be dropped when determining the score on this part.
    - <u>Late policy: No credit will be given for completing the in-class activity outside of class. There will be no opportunities to make up for an in-class activity that was missed.</u>
    - <u>Students participating remotely using Zoom must have their video ON to get credit.</u>

2. **Short Quizzes (10%).** There are low-stake quizzes that students will <u>complete on Canvas outside of class</u>. These quizzes have closed-end questions (e.g. multiple choice.) They are based on the readings and videos in the required Post-Class Learning Activity(s) for the related class.
    - There are 7 quizzes and a total of 40 questions.
    - Each correctly answered question is worth 1 point.
    - The total quiz score will be converted to 10 points. <u>The system will drop the lowest-scoring quiz based ONE score that is most beneficial to a student's total for the set of quizzes.</u> For example, if a student has a high percentage on a lower-point quiz and a low percentage on a high-point quiz, Canvas will drop the high-point quiz to improve the student's quiz total score.
    - <u>Late policy: No credit will be given for completing a quiz after the deadline. There will be no opportunities to make up for a short-quiz that was missed.</u>
    - <u>A student's lowest score on one of these quizzes will be dropped from the grading.</u>

3. **Product Assignments (80%).** Product Assignments provide students with the opportunity to demonstrate their understanding and skill with applying the course material to their own their product idea. At the end, students will have developed a business case (i.e., justification) investing in the new product idea that considers the strategic product, technology, marketing, sales, and financial aspects of the idea.
    o Grading.
        ▪ There are 4 Product Assignments for a total of 80 points.
        ▪ The assignments and their evaluation criteria/rubrics and available points are provided on the Canvas site.
    o Late Policy.
        ▪ There is a 1-point late penalty for each "late-day" an assignment is submitted.
            • A "late-day" begins one minute after the deadline and ends 24 hours later. A "late day" does include the days of a weekend, a holiday and a university "reading day." If an assignment is submitted 2 minutes late or 23.5 hours late, it is counted as 1 late-day.
        ▪ All students are given up to **3** late-day credits that will be applied automatically when grading a product assignment.
        ▪ Final Assignment:
            • The final assignment is due is 3:30 p.m. on Wednesday, December 11.
            • The late penalty is 1 point per late-day and any remaining late-day credits can be used.
            • However, any assignment submitted after 11:59 p.m. on Saturday December 13 WILL NOT ANY CREDIT.
    o Student Work Product.
        ▪ The norm in this course is to submit your work inside your Product Idea Workbook and upload that FILE to Canvas. If part of your work would be more readable by providing it in a separate file (such as an illustration), then submit that file on Canvas in addition to your workbook, too.
        ▪ Do NOT submit any file that can be changed by you before we start to grade it. Do not include a link to a file, document, site or any other resource in your workbook except for links within citations to sources you are crediting for data or information you used to create your work.
            • If you do, you will be asked to resubmit your assignment and the date/time that the re-submission is received will be considered the submission date/time. This is likely to result in a significant late penalty as we typically won't notice these issues until several days later.

Grade intervals	Earned Points intervals
A+, A, A-	99-100, 93-97, 90-92
B+, B, B-	87-89, 83-86, 80-82
C	70-79
D	60-69
R (F)	59 or below
Final course grades will be calculated to hundredths (two decimal places) and rounded up or down to the nearest integer. For example, a final calculated course grade of 89.45 would be rounded down to 89.	

Course Schedule. The following schedule provides a general overview of topics and assignments. The Canvas site provides the specific dates, assignment instructions and grading criteria.

Week	Class	Topics	Associated Product Assignment
1	1	Course Overview and the Strategic Context of Products	**Product Assignment No. 1**
	2	Product and Tech Strategy – Product Strategy	
2	3	Product and Tech Strategy – Product Vision	**Product Assignment No. 2**
	4	Product and Tech Strategy – Product Goals and Roadmap	
3	5	Product Strategy - Tech Drivers, Technology Strategy, Build vs. Buy	
	6	Go To Market Strategy – Customer Relationships	**Product Assignment No. 3**
4	7	Go To Market Strategy – Market Entry	
	8	Go To Market Strategy – Get to Product-Market Fit	
5	9	Go To Market Strategy – Scale Up	
	10	Product P&L and Revenue	**Product Assignment No. 4**
6	11	Product Expenses – COGS and R&D – and Gross Profit	
	NA	No Class – Thanksgiving Holiday Break	
7	12	Product Expenses – S&M, G&A – and Net Profit	
	13	Financial Analysis and Evaluation, Business Case	

Accommodations for Students Disabilities. If you have a disability and have an accommodations letter from the Disability Resources office, I encourage you to discuss your accommodations and needs with me as early in the semester as possible. I will work with you to ensure that accommodations are provided as appropriate. If you suspect that you may have a disability and would benefit from accommodations but are not yet registered with the Office of Disability Resources, I encourage you to contact them at access@andrew.cmu.edu.

Academic Integrity. Honesty and transparency are important to good scholarship. Plagiarism and cheating, however, are serious academic offenses with serious consequences. If you are discovered engaging in either behavior in this course, you will earn a failing grade on the assignment in question, and further disciplinary action may be taken.

For a clear description of what counts as plagiarism, cheating, and/or the use of unauthorized sources, please see the University's Policy on Academic Integrity.

If you have any questions regarding plagiarism or cheating, please ask me as soon as possible to avoid any misunderstandings. For more information about Carnegie Mellon's standards with respect to academic integrity, you can also check out the Office of Community Standards & Integrity website.

In this course, there are parts of assignments that will ask you to find and capture certain information, as is. In these cases, you can "copy" this information but must cite the source. If you do this, there will not be any academic integrity issue.

Student Wellness. As a student, you may experience a range of challenges that can interfere with learning, such as strained relationships, increased anxiety, substance use, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may diminish your academic performance and/or reduce your ability to participate in daily activities. CMU services are available, and treatment does work. You can learn more about confidential mental health services available on campus at the Counseling and Psychological Services website. Support is always available (24/7) from Counseling and Psychological Services: 412-268-2922.

Respect for Diversity. It is my intent that students from all diverse backgrounds and perspective be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength, and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your suggestions are encouraged and appreciated. Please let me know if any of our class meetings conflict with your religious observations so that I can make alternate arrangements for you.