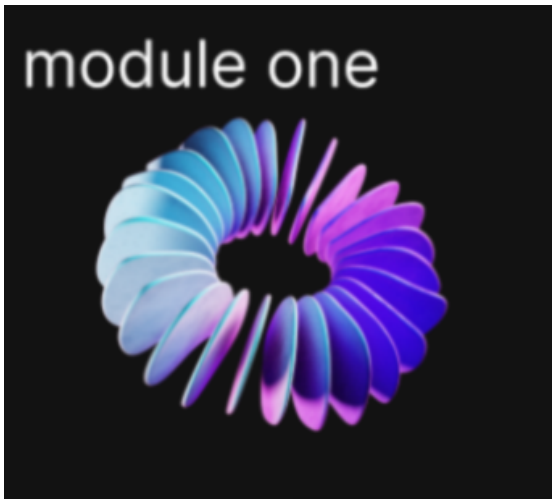
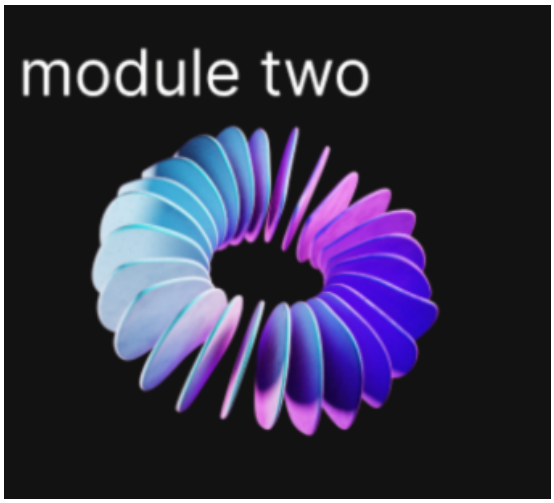
Module Nine: Designing Business Models

Please click on the numbers below to access open modules. Please note that future modules might not



(https://canvas.vt.edu/courses/172719/pages/module-one-technology-based-entrepreneurship-in-the-age-of-artificial-intelligence-part-one)



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Overview

Welcome to Module 9! This module will last from Monday, July 17 @ 12:01 AM to Sunday, July 23 @ 11:59 PM. This module transitions to our third and final set of modules on business model design.

One of the major challenges we will discuss in this unit centers on the major challenges of scaling AI-powered business models. Once a startup has validated product-market fit between the MVP and the core needs, wants, and JTBDs of the target customer segments, addressing scaling challenges is one of the most difficult problems facing startup companies once they have validated their MVPs.

IBM Watson Chief on Scalability Challenges of AI (https://www.youtube.com/watch?v=LUWXylWeADk)

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Effective business model design requires new ventures to manage both external, customer-facing dimensions of the BMC, with internal, operating model considerations in order to balance both value creation and value capture elements. There are several key ideas that are important to understand in order to address some of the problems of effective business model design: customer acquisition costs, unit economics, and operating leverage. Each of these concepts illuminates important facets of the overall logic of the BMC.

Scaling AI: The Roadmap (Accenture) (https://www.youtube.com/watch?v=4gvLDc4N-Bg)

We will discuss the impact of using AI-powered technologies such as machine learning, blockchain, and other related digital technologies on these key elements of the BMC. Although these digital technologies provide powerful new tools for creating value for customers, there are several important challenges that companies face in building scalable business models. Towards this end, we will explore not only how to commercialize new AI-powered technologies but also how AI tools will transform the business venturing process by providing new tools for solving important problems entrepreneurs face when creating and scaling new ventures.

Designing Revenue Models (Important video to watch to understand basic concepts) (https://www.youtube.com/watch?v=vi8RURc1MWg)

This will be a fun week where we dive deep into some key concepts regarding the financial/economics of building scalable business models. Enjoy!

Objectives

Upon completion of this module, students will be able to:

- Understand the key challenges of building scalable business models using AI
- Analyze the customer acquisition costs, unit economics, and operating leverage

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Readings (2 hours)

Required:

- Read the overview for Module 9
- The Innovator's Method (IM): Chapter 6-7
- Getting to Plan B: Chapter 3

Optional:

- The New Business of AI (and How It's Different from Traditional Software) -- Andreesen Horowitz (https://a16z.com/2020/02/16/the-new-business-of-ai-and-how-its-different-from-traditional-software/)
- How to Calculate Customer Acquisition Costs (https://neilpatel.com/blog/customer-acquisition-cost/)
- Types of Revenue Models in Startup Ventures (https://www.altexsoft.com/blog/revenue-model-types/)

Watch (20 minutes)

These short videos provide an overview of the key principles and concepts we are covering in the course.

- Framing Lecture 9:
  - Business Model Design in the Age of AI: Designing Revenue Models (Watch Video) (https://youtu.be/1k56eUXQrzM)
  - Slide Deck for Framing Lecture 9 (https://canvas.vt.edu/courses/172719/files/28469613?wrap=1)

Class Activities

These activities list the material, assignments, and resources covered throughout this module and are intended to provide you with a "checklist" of activities you will complete each week.

- Read Overview for Module Nine
- **Quiz #9 (https://canvas.vt.edu/courses/172719/quizzes/444677)**
- Complete Assigned Readings
- Watch Framing Lecture 9
- **Begin Work on Milestone #3 (Will be released Monday evening) (https://canvas.vt.edu/courses/172719/assignments/1776583)**

Assignment (5 hours)

Summary List of Weekly Assignments.

- **Quiz #9 (https://canvas.vt.edu/courses/172719/quizzes/444677)**
- **Begin Work on Milestone #3 (Will be released Monday evening) (https://canvas.vt.edu/courses/172719/assignments/1776583)**

Synchronous Class Sessions (Optional: 90 mins)

s to allow you to work on the weekly class assignments during the scheduled time. These sessions will be recorded and posted to Canvas under the Course Gallery to your left. ***Note:*** *these videos take a bit of time to post so they might not be visible until late Friday).*

- **https://virginiatech.zoom.us/j/89902508851 (https://virginiatech.zoom.us/j/89902508851)**
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Optional Materials

Please find the following optional materials for the module.

- **Brian Chesky: AirBnB and the Challenges of Scaling (https://www.youtube.com/watch?v=W608u6sBFpo)**
- **Designing Revenue Models (https://www.youtube.com/watch?v=yzZqnMbzWXw)**