



NANODEGREE PROGRAM SYLLABUS

# Growth Product Manager



# Overview

This Nanodegree program teaches the foundational skills all growth product managers use, whether they are owning a B2C or B2B product. It is ideal for product managers who want to enhance their capabilities in customer acquisition, activation, and monetization of digital products.

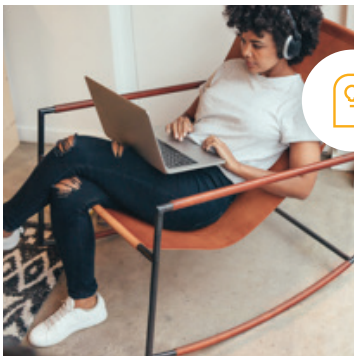
During the Growth Product Manager Nanodegree program, you will learn to build acquisition funnels, identify core customers, and optimize growth loop models. Then, you will learn how to analyze your results and make improvements to your strategies. Next, you will learn activation theories on how to decrease time-to-value and friction for both B2C and B2B product users, as well as retention theories, for creating audiences and increasing engagement. Finally, you will learn the ins and outs of monetization, from designing pricing plans to determining optimal price points using pricing metrics.



**Estimated Time:**  
3 Months at  
10 hours / week



**Prerequisites:**  
Prior experience  
as a Product  
Manager,  
experience  
scoping business  
requirement, and  
data analysis



**Flexible Learning:**  
Self-paced, so  
you can learn on  
the schedule that  
works best for you.



**Need Help?**  
[udacity.com/advisor](https://www.udacity.com/advisor)  
Discuss this program  
with an enrollment  
advisor.

# Course 1: Growth and Acquisition Strategy

Acquisition is the starting point of successful growth. Learn how to build an agile acquisition plan with market-based measurable KPIs which fits well into the overall growth strategy. Define the target market, identify personas, and align them to most efficient acquisition channels. Utilize telemetry, customer feedback, market trends, and competitive landscape data to further optimize the acquisition funnel and/or the growth loop to expand to new target markets and niches. Analyze the customer buying decision process and apply behavioral psychology to improve the product design in order to further boost acquisition. Deploy A/B testing to enrich acquisition efforts through experimentation and data driven decision-making.

## Course Project Unleash Growth “to the Clouds”

In this project, you will act as the growth product manager for a B2B cloud infrastructure offering to build an acquisition strategy to increase signups of the product. Based on a provided dataset of quantitative and qualitative product characteristics, you will define acquisition funnels and corresponding KPIs to measure. Then, you will suggest growth loops to optimize them and increase signup conversion. Lastly, you will formulate a hypothesis, and suggest a related A/B test designed to boost product acquisition.

### LEARNING OUTCOMES

#### LESSON ONE

##### Introduction to Growth and Acquisition Strategy

- Learn the basics of acquisition and growth strategy

#### LESSON TWO

##### Acquisition Funnels and Growth Loops

- Build the initial acquisition strategy using funnels and growth loops
- Learn how to apply various types of growth loops to their acquisition strategy depending on the product/market or model
- Learn how to apply the dynamics of network effects and further boost acquisition leveraging the network effects when/where applicable

**LESSON THREE****Measuring and Optimizing Acquisition Performance**

- Identify key performance indicators critical for the acquisition strategy depending on the product/market/business and ways to measure them
- Perform qualitative and quantitative research and optimize acquisition strategy accordingly
- Learn how to optimize/improve acquisition using product line expansion and layering
- Understand the nuances of market saturation and ways to overcome this challenge

**LESSON FOUR****Defining the Audience and Channel**

- Understand end to end how acquisition strategy fits into the overall growth model and which market/product/channel/model fit is a crucial foundation of a successful acquisition strategy
- Define target audience, develop personas and understand market segmentation principles for successful niche domination
- Define the acquisition channels which work best for the product/business
- Learn how to apply behavioral psychology in customer buying decision process to improve the design and facilitate micro-conversions to increase acquisition, retention and stickiness

**LESSON FIVE****A/B Testing at Scale**

- Understand major building blocks of a successful A/B test and apply A/B testing framework aiming to increase acquisition
- Learn common challenges of A/B tests and ways to address them
- Apply best practices when forming an A/B test hypothesis, performing research, and analyzing the test data to achieve statistically significant results

## Course 2: Activation and Retention Strategy

Without activation, companies are pouring money on leads that don't even get to the aha-moment of their product. Customers skip retention and go straight from acquisition to churn. Learn how to optimize your sign-up flow to ensure you convert as many leads as possible. Guide users through the activation funnel as fast as possible, so they reach your product's aha-moment. Engage your customers by increasing their use-cases, frequency, intensity, and feature-adoption of your product. Analyze retention cohorts to determine which demographics, firmographics, or product-actions lead our users to retain longer. Perform a user lifecycle analysis to view the journey of our user from new customer to activation, retention, dormancy, and resurrection. Deploy experiments to improve the lifetime value (LTV) and decrease the churn rate.

### Course Project Let It Grow

In this project, you will act as the growth product manager for productboard and Slack. At productboard, you will optimize the sign-up flow to ensure conversion of as many users as possible and remove any frictions along the way. At Slack, you will determine the activation funnel, create a retention curve, and perform a churn analysis using the quantitative dataset provided. Lastly, you will suggest experiments to optimize the sign-up flow, activation funnel, retention curve, and churn rate.

### LEARNING OUTCOMES

#### LESSON ONE

##### Optimizing the Sign-up Flow

- Measure click-through percentage and drop-off percentage through the sign-up flow
- Remove unnecessary friction from the sign-up process
- Propose experiments to run using the action, outcome, theory framework
- Apply the ICE framework to prioritize experiments

#### LESSON TWO

##### Defining the Activation Funnel

- Identify if the setup, aha, and habit moment and metric lead the user to long-term activation.
- Calculate the number and percentage of users activated through the funnel
- Conduct different segment analysis to determine which type of audience performs well through the activation funnel

**LESSON THREE****Conducting a Retention Cohort Analysis**

- Increase engagement via use-case, frequency, intensity, and feature adoption
- Determine casual, core and power users
- Create a retention chart to view average retention per cohort over time

**LESSON FOUR****Analyzing Impacts of Churn Rate across the Business**

- Map different lifecycle state of users: resurrected, retained, dormant, and active users
- Calculate Lifetime Value (LTV) based on Churn Rate of user base
- Propose experiments to improve activation and retention to control churn

## Course 3: Monetization Strategy

The archives of Techcrunch are full of companies that grew explosively and yet eventually closed shop. Monetization is the oxygen that sustains a business, and is not just the price you charge for your product. Learn a set of principles that guide the selection of markets in which you play, the persona of buyers that you target, and the outreach channels through which you reach out to potential customers. Leverage practical examples from the industry to cultivate a path to purchase that develops continuously well after a lead has become a customer. Apply best practices of experience design to optimize for a sound monetization strategy. Learn the practical KPIs and scorecards to measure the effectiveness of your monetization strategy. Implement practical quantitative and qualitative methods for defining price and designing price plans.

### Course Project Priceless Penny

In this project, you will apply the skills you have developed in the course to build a monetization model for a post-revenue B2B SaaS business, and then come up with hypotheses about potential changes to the monetization strategy. Using a provided description about the company, its product, pricing scheme, and a dataset of recent customer transactions, you will build monetization models for this business. Based on these models, you will then come up with a couple of hypotheses about changing the pricing metric and pricing plans to optimize the business' monetization strategy. Lastly, you will create an experimentation plan to test these hypotheses.

### LEARNING OUTCOMES

#### LESSON ONE

#### Fundamentals of Monetization

- Learn the parts of a balance sheet that are impacted by product strategy
- Understand concepts and corresponding metrics such as cost of goods sold, gross profit and margin, operating expenses, operating profit and margin
- Understand the goals of a growth monetization strategy
- Learn the basic moves made by any strategy
- Understand the basic blocks for building a monetization strategy
- Learn the scorecards that are used to evaluate the monetization strategy

**LESSON TWO****Buyer Targeting**

- Differentiate between different buyer personas, such as consumer vs professional
- Learn the nuances in motivations of different buyer personas and how that informs the targeting strategy
- Survey the channel mix for acquiring new customers to identify the right channel for each persona and develop tactics suited to each persona and channel combination

**LESSON THREE****Path to Purchase**

- Identify the different stages in the “Path to Purchase” and how it is optimized for paid conversion
- Understand the tradeoff between adoption, conversion, and revenue, to set optimal targets aligned with business goals
- Learn the impact of UX design on the path to purchase and the leverage of buyer psychology on purchase conversion
- Develop the first scorecard for monetization to understand conversion efficiency
- Calculate the KPIs behind user and customer acquisition: cost per acquisition (CPA) and customer acquisition cost (CAC)

**LESSON FOUR****Premium Value**

- Learn methods to identify what constitutes premium value for a buyer persona and how that translates to business value
- Apply tactics to amplify premium value identified for each persona
- Develop the second scorecard for monetization to understand the economic efficiency of acquiring customers using the unit economics model
- Calculate Lifetime Value (LTV), or the value that a new customer brings to the business over their lifetime, and how it further improves new customer acquisition
- Learn how to balance the LTV : CAC ratio, or monetization strategy between spending the right amount to drive new customers and the LTV brought in by that customer
- Understand the importance of recovering the CAC as soon as possible to optimize the payback period



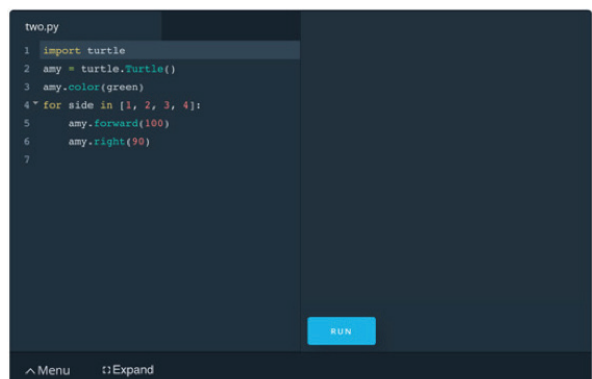
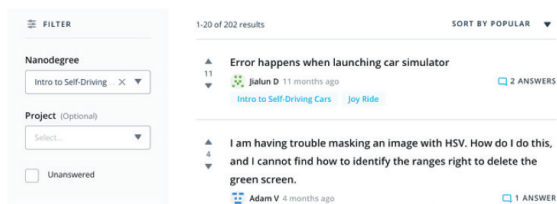
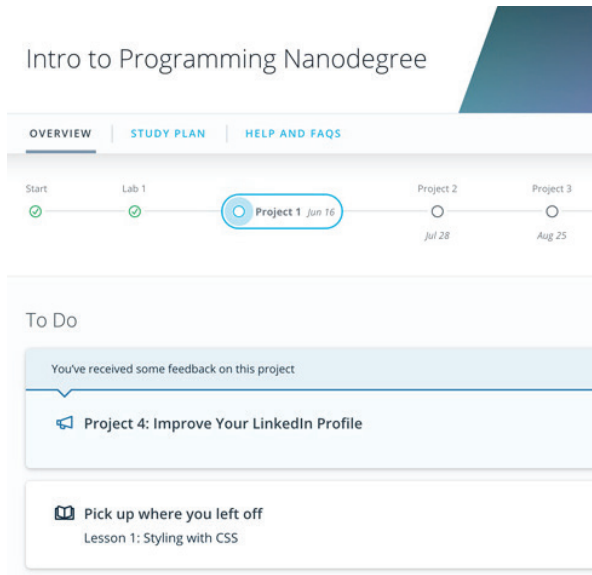
## LESSON FIVE

## Pricing

- Learn what a pricing metric is, how it maps to the customer's premium value and its importance in aligning incentives between buyer and seller
- Distinguish between the different pricing metrics commonly used in tech products, such as usage based, per seat, per active user, and per feature
- Decide an optimal range for the price amount using the Van Westendorp method
- Combine the practical learnings from previous lessons to build a pricing plan that optimize for market share, revenue, profit, retention, and upsell
- Develop the remaining three scorecards for monetization that inform about the growth of the business and help forecast revenue and market share
- Learn how to build a growth accounting model for both customers and revenue.
- Learn how to calculate the KPIs for customer and revenue growth, such as churn rate, quick ratio, net dollar retention, expansion revenue and contraction revenue



# Our Classroom Experience



## REAL-WORLD PROJECTS

Build your skills through industry-relevant projects. Get personalized feedback from our network of 900+ project reviewers. Our simple interface makes it easy to submit your projects as often as you need and receive unlimited feedback on your work.

## KNOWLEDGE

Find answers to your questions with Knowledge, our proprietary wiki. Search questions asked by other students and discover in real-time how to solve the challenges that you encounter.

## STUDENT HUB

Leverage the power of community through a simple, yet powerful chat interface built within the classroom. Use Student Hub to connect with your technical mentor and fellow students in your Nanodegree program.

## WORKSPACES

See your code in action. Check the output and quality of your code by running them on workspaces that are a part of our classroom.

## QUIZZES

Check your understanding of concepts learned in the program by answering simple and auto-graded quizzes. Easily go back to the lessons to brush up on concepts anytime you get an answer wrong.

## CUSTOM STUDY PLANS

Work with a mentor to create a custom study plan to suit your personal needs. Use this plan to keep track of your progress toward your goal.

## PROGRESS TRACKER

Stay on track to complete your Nanodegree program with useful milestone reminders.

## Learn with the Best



### Art Khlobystin

PRODUCT MANAGER LEAD  
AT MICROSOFT

Art has been with Microsoft for over 8 years, driving the growth of the EMEA enterprise project management business, and then Windows 10 release in the US.

Art now leads product management responsible for the growth of the Azure Storage platform.



### Shiv Patel

GROWTH PRODUCT MANAGER  
AT FUNNELGUARD

In the past, Shiv has focused on growth in all aspects from marketing, sales, engineering, to product, spanning companies of all sizes from FunnelGuard, Productboard, WeWork, to Motorola. He enjoys sitting at the intersection of Activation and Retention in B2B SaaS.



### Rizwan Ansary

VP OF PRODUCT & DESIGN AT SENDOSO

Rizwan started as an engineer at Microsoft, which led to a transition into product management. He was previously a Product Lead at Credit Karma, and designed the pricing and subscription model as a Product Lead at Postmates. He has also been the Director of Product at StackShare and HackerRank.

# All Our Nanodegree Programs Include:



## EXPERIENCED PROJECT REVIEWERS

### REVIEWER SERVICES

- Personalized feedback & line by line code reviews
- 1600+ Reviewers with a 4.85/5 average rating
- 3 hour average project review turnaround time
- Unlimited submissions and feedback loops
- Practical tips and industry best practices
- Additional suggested resources to improve



## TECHNICAL MENTOR SUPPORT

### MENTORSHIP SERVICES

- Questions answered quickly by our team of technical mentors
- 1000+ Mentors with a 4.7/5 average rating
- Support for all your technical questions



## PERSONAL CAREER SERVICES

### CAREER COACHING

- Personal assistance in your job search
- Monthly 1-on-1 calls
- Personalized feedback and career guidance
- Access to Udacity Talent Program used by our network of employers to source candidates
- Advice on negotiating job offers
- Interview preparation
- Resume services
- Github portfolio review
- LinkedIn profile optimization





# Frequently Asked Questions

## PROGRAM OVERVIEW

### WHY SHOULD I ENROLL?

Product Manager is a top 5 job on LinkedIn's Most Promising Jobs for 2019, and one of the most coveted roles in large tech enterprises, as well as entrepreneurial startups. While Product Management roles have been growing rapidly for a while, a recent analysis of Google Trends revealed an increase of 425% in average monthly interest about Growth Product Management over the last 5 years.

This program is designed for students who want to assume key leadership roles in product growth in their company. You will learn to build acquisition funnels, identify core customers, and optimize growth loop models. Then, you will learn how to analyze your results and make improvements to your strategies. Next, you will learn activation theories on how to decrease time-to-value and friction for both B2C and B2B product users, as well as retention theories, for creating audiences and increasing engagement. Finally, you will learn the ins and outs of monetization, from designing pricing plans to determining optimal price points using pricing metrics.

### WHAT JOBS WILL THIS PROGRAM PREPARE ME FOR?

This program will equip you with the skills to assume growth product manager roles. You'll learn directly from experienced Product Managers and Growth Product Managers at Microsoft, FunnelGuard, and Sendoso, who have constructed this Nanodegree program to equip you with the most in-demand and relevant industry skills.

### HOW DO I KNOW IF THIS PROGRAM IS RIGHT FOR ME?

This Nanodegree program is perfect for existing Product Managers, Marketing professionals, and Engineers who are already in growth-focused roles and want to further their skillset, as well as those who wish to break into the growth domain and help propel their company and product forward.

Growth Product Managers are essential for growing the user base of an established product, increasing customer engagement, and improving the profitability of the business. With an average base salary of \$109,000, it's an in-demand role in companies like Google, Facebook, Amazon, and more.

### WHAT IS THE DIFFERENCE BETWEEN A GROWTH PRODUCT MANAGER AND A PRODUCT MANAGER?

Growth Product Managers are a further specialization of Product Managers, but while Product Managers tend to focus on the success of the customer, Growth Product Managers focus on the success of the business. While Product Management roles have been growing rapidly for a while, a recent analysis of Google Trends revealed an increase of 425% in average monthly interest about Growth Product Management over the last 5 years.



## FAQs Continued

Even if a company has a great product, they won't be successful if they don't have users. While many companies have been hiring Product Managers over the last decade to focus on delighting customers, nobody has been hired to focus solely on the success and growth of the business. This gap created a vacuum that has been filled by Growth Product Managers.

Like Product Managers, Growth Product Managers love analyzing data in order to develop and improve their strategies. Unlike regular Product Managers, Growth Product Managers are solely focused on growing the company by achieving short-term business goals and driving revenue.

According to the Harvard Business Review, the three main responsibilities for a Growth Product Manager include:

- Define the company's growth plan
- Coordinate and execute growth programs
- Optimize the revenue funnel.

Most companies will often have both Product Managers and Growth Product Managers. Even though Growth Product Managers are mainly focused on the business, and core Product Managers are focused on the customer, the two often work together to drive more value. Core Product Managers think in the long-term about delivering sustained value to the customers. Growth Product Managers think in the short-term by trying to achieve clearly-defined and quantifiable business goals. While these two mindsets can sometimes be at odds, the two often can work together to build long-term success for the company.

### WHAT IS A COURSE? HOW IS IT DIFFERENT FROM A NANODEGREE PROGRAM?

Udacity's Nanodegree programs are comprised of a series of courses. Each course is a distinct unit of learning, typically ending in a project where students demonstrate mastery of the skills covered. The Growth Product Manager Nanodegree Program consists of three courses, outlined in the above syllabus. With the Growth and Acquisition course, you are getting early access to the first course of the Growth Product Manager Nanodegree program.

Students who enroll in a paid course will receive all the same support and services as students in Udacity's Nanodegree programs. The main difference is that a course is a smaller unit of material - a typical Nanodegree program is comprised of 3 or 4 courses.



## FAQs Continued

Every course includes career services including a personal career coach, project reviews from industry professionals, technical mentor support so you can get help when you need it, and a flexible learning plan so you can learn at your own pace.

### ENROLLMENT AND ADMISSION

#### DO I NEED TO APPLY? WHAT ARE THE ADMISSION CRITERIA?

There is no application. This Nanodegree program accepts everyone, regardless of experience and specific background.

#### WHAT ARE THE PREREQUISITES FOR ENROLLMENT?

To optimize for success in this program, you should have:

- Previous experience as a Product Manager
- Experience scoping business requirements and defining basic KPIs to track progress/measure success.
- Experience performing arithmetic and data analytics using Excel or any other tool of choice (i.e. creating pivot tables, performing statistical analysis such as identifying average values, standard deviation, etc.).

#### IF I DO NOT MEET THE REQUIREMENTS TO ENROLL, WHAT SHOULD I DO?

For aspiring Growth Product Managers who currently have a limited background in product management, the **Product Manager Nanodegree program** will prepare you to excel in the Growth Product Manager Nanodegree program.

### TUITION AND TERM OF PROGRAM

#### HOW IS THIS NANODEGREE PROGRAM STRUCTURED?

The Growth Product Manager Nanodegree program is comprised of content and curriculum to support three projects. Once you subscribe to a Nanodegree program, you will have access to the content and services for the length of time specified by your subscription. We estimate that students can complete the program in three months, working 10 hours per week.

Each project will be reviewed by the Udacity reviewer network. Feedback will be provided and if you do not pass the project, you will be asked to resubmit the project until it passes.

#### HOW LONG IS THIS NANODEGREE PROGRAM?

Access to this Nanodegree program runs for the length of time specified in the payment card above. If you do not graduate within that time period, you will continue learning with month to month payments. See the **Terms of Use** and **FAQs** for other policies regarding the terms of access to our Nanodegree programs.



## FAQs Continued

### HOW LONG IS THE GROWTH AND ACQUISITION STRATEGY COURSE?

The Growth and Acquisition Strategy course, the first course in the Growth Product Manager Nanodegree program, is comprised of content and curriculum to support one project. Once you subscribe to a course, you will have access to the content and services for the length of time specified by your subscription. We estimate that students can complete the program in one (1) month, working 10 hours per week.

Each project will be reviewed by the Udacity reviewer network. Feedback will be provided and if you do not pass the project, you will be asked to resubmit the project until it passes.

### CAN I SWITCH MY START DATE? CAN I GET A REFUND?

Please see the Udacity Nanodegree program [FAQs](#) for policies on enrollment in our programs.



## SOFTWARE AND HARDWARE

### WHAT SOFTWARE AND VERSIONS WILL I NEED IN THIS PROGRAM?

You will need to use Google Sheets or Microsoft Excel, as well as access to the internet and a 64-bit computer. You will also need access to a computer for which the requirements are:

Minimum browser requirements are:

- Chrome 49+
- Firefox 57+
- Safari 10.1+ (Apple - macOS)
- Edge 14+ (Windows)

Minimum operating system (OS) requirements are:

- Windows 8.1 or later
- Apple MacOS 10.10 (Yosemite) and later
- Any Linux OS that supports the browsers mentioned above
- Any Chrome OS that supports the browsers mentioned above