Foundations of Digital Product Management

University of Texas at Dallas
Spring 2022: MIS 6393

Course Overview

This class covers topics associated with developing and managing software as a digital product. Topics include digital strategy, marketing, and branding of digital products, software development methods, design thinking, innovation, and data-driven decision making. Traditional consumer-based digital products will be examined along with the management of digital products.

My goals

I would like each of you to walk away with a practical knowledge of digital product development in the real world, and if you want to become a product manager down the road, how you will get yourself there from where you are right now. If you don't want to become a product manager, then these skills will still be helpful to you in your business career as it will help you understand product strategy, development and marketing.

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Learning Objectives

1 Understand and be able to describe digital product management and the role of a digital product manager.

3 Analyze and evaluate product/market fit.

2 Complete two projects:
- new product development
- existing product roadmaps.

4 Perform user-centric analysis and research to drive product development.

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Modules by Week

1   Overview: Course
        The Role of Digital Product Management

2   Product Strategy and
    Product/Market Fit

3   New Product Development vs
    Product Roadmap for Existing
    Products

4   Innovation and Value Creation

5   Lean, Agile and MVP Development

6   Customer Centric Design

7   Product Launch Workshop

8   Mid-Term Project

9   Product Marketing

10 User Experience

11 Scaling Product

12 SAAS - Digital Models for Digital
    Products

13 Understanding Cloud Computing

14 The Importance of Data and
    Metrics

15 Final Project

Grading

Student Grading
- Team projects will be graded as a team
- However, a peer survey will also be given for team assignments and projects and will be taken into consideration to consider teamwork into the grade
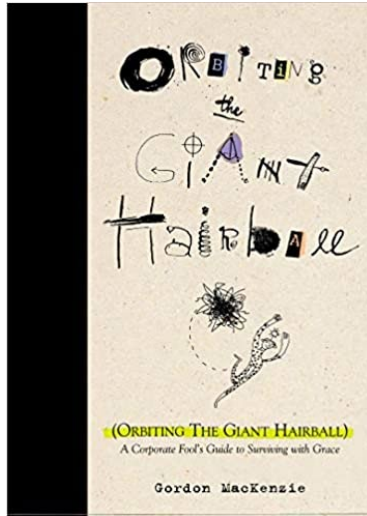
Professor Grading

Category	Weight
Class Participation	25%
Assignments	25%
Mid-Term Project	25%
Final Project	25%
Total	100%

Suggested Course Materials

- Growth IQ, Tiffani Bova

- Powerful, Patty McCord

- That will never work, Marc Randolph

- Subscribed, Tien Tzou

- Orbiting the Giant Hairball, Gordon MacKenzie

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https://redefineschool.com/gordon-mackenzie/

https://www.fastcompany.com/32950/how-your-company-giant-hairball

https://www.bizjournals.com/kansascity/stories/1999/08/09/tidbits.html

https://www.thepitchkc.com/hallmarks-hairball-a-former-artist-told-how-he-didnt-get-sucked-down-its-drain/

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https://www.tiffanibova.com/biography/

https://www.marketingjournal.org/growth-iq-the-10-paths-to-growth-an-interview-with-tiffani-bova/

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https://www.indexventures.com/perspectives/this-man-created-the-subscription-economy/

https://www.boldbusiness.com/digital/bold-leader-spotlight-tien-tzuo-zuora-founder-ceo/

https://www.visualsynopsis.com/

https://www.boldbusiness.com/digital/bold-leader-spotlight-tien-tzuo-zuora-founder-ceo/

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Netflix Culture:
Freedom & Responsibility

https://pattymccord.com/about-patty/

https://hbr.org/2014/01/how-netflix-reinvented-hr
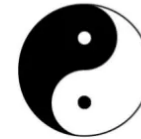
Teams

- Please form teams of 3 – 5 people
- Name your team, create a group in Teams for your team
- Teams will work together on the two projects : the mid-term and final project
- Try to team with people you do not know well and have different experiences from you
- Meet at least once a week as a team
- Be prepared for your team meeting so you can contribute to your team
- If meeting virtually turn on your video so you can see your expressions and faces
- Get to know each other… if you get nothing else out of this class let it be this

Projects

New Product Development

- Ideate a new product
- Survey potential customers
- Analyze potential market needs
- Formulate your solution
- Prepare a launch plan

Existing Product Roadmap

- Pick an existing product
- Perform customer studies to understand pain points and features
- Perform competitive analysis of competing products
- Prepare High Level Product Roadmap

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Typical Class Structure

Agenda

- 1:00 - 1:15 Introduction / Prior Class Q&A
- 1:15 - 2:15 Lecture / Speaker
- 2:15 - 2:30 Break
- 2:30 - 3:30 Case Study / Workshop
- 3:30 - 3:45 Q&A / Assignments

All classes will have a lecture section and a case study / discussion / workshop section where you will participate actively. Some classes will have a speaker from the industry.

Class Rules

- Raise your hand to talk if someone else is talking; I will call on you
- If no one is talking you can speak up without raising your hand
- Participate in class
- Maintain social distancing if in class

I encourage you to wear a mask and take advantage of the vaccination clinics provided by UTD

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Week 1: Overview - The Role of Digital Product Management

Agenda:
1:00 - 1:15 Course Overview
1:15 - 2:15 The Role of Digital Product Management
2:15 - 2:30 Break
2:30 - 3:30 Case Study & Discussion
3:30 - 3:45 Q&A

Pre-Class Reading/Prep: None

What is Product Management?

Product Management

- Screening and analyzing ideas for new products (or product extensions / evolution)
- Development of new product / features
- Forecasting sales and demand
- Pricing
- Product launch and marketing

Digital: For digital products

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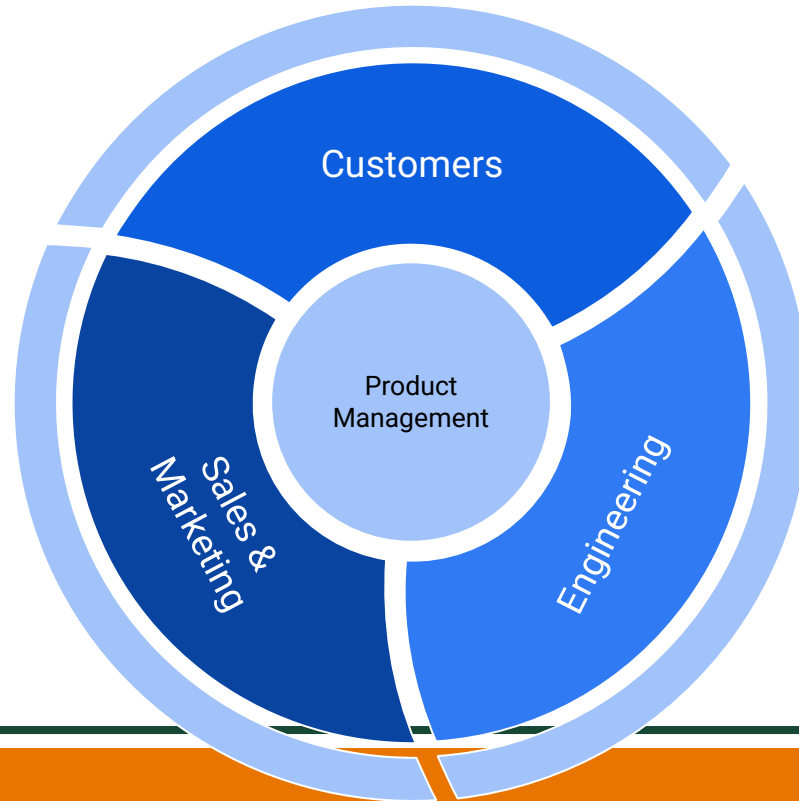
Who needs product management?

Every company, whether it is a 100 year old company or a brand new startup, sells a **product** to a **buyer**.

Every company needs product management.

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The role of a product manager: Understand the customer
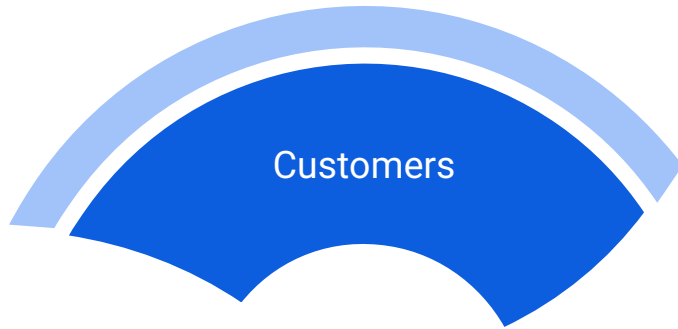
Customers

- Understand markets and customers
- Talk to customers
  - Understand their pain points
  - Understand how they interact with the product
- Advocate for the customer

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The role of a Product Manager:
Know and leverage your capabilities

- Work with engineering
- "Translate" between customer needs and how engineering needs to hear it
- Develop product roadmaps

You have to know just enough to know what the dev-stack and the dev-team can do...

Engineering

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The role of a Product Manager:
Product built… next comes Pricing, Positioning

Sales & Marketing

- Develop product launch and marketing plans
- Pricing
- Positioning and branding
- Sales and distribution

Developing a Marketing Strategy: 3C|4P Model

Customer

Competition

Company

Product

Pricing

Promotion

Place*

*Distribution

3C/4P for Digital Product Management

Customer

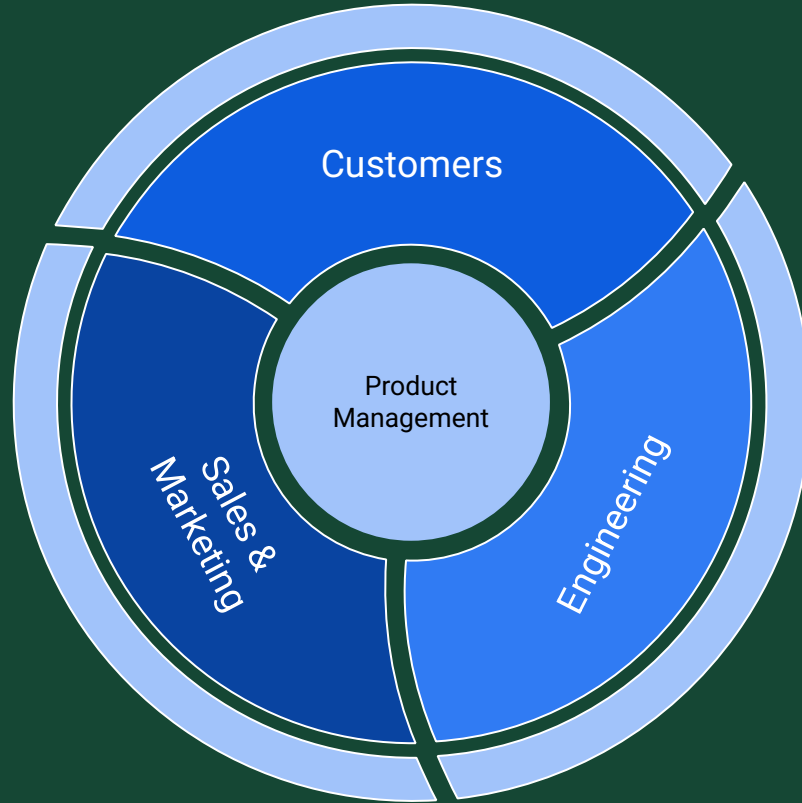Product

Pricing
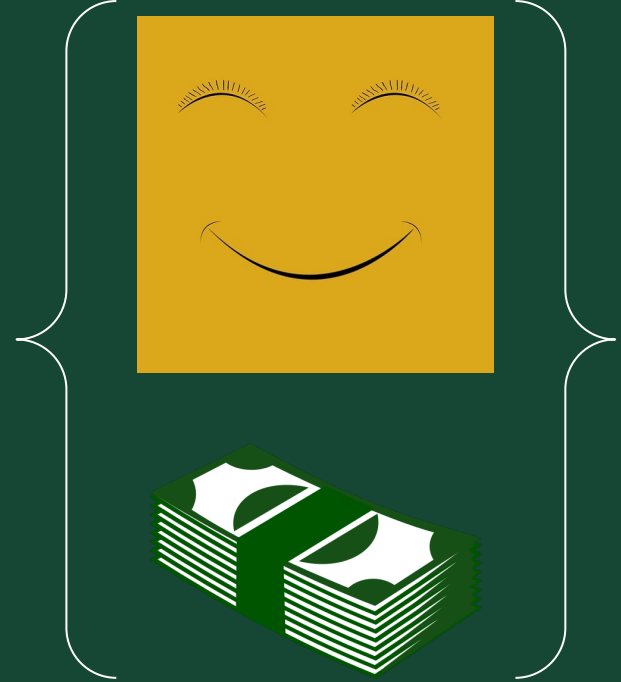
Competition

Promotion

Company

Place*

Analyze

Build

Launch

What are the constraints?

- People
- Time
- Money

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How do we mitigate some of these constraints?

Getting to know people

Many small conversations

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The good news is that...

3C/4P for Digital Product Management

Customer

Competition

Company

Product

Place*

Pricing

Promotion

Analyze

Build

Launch

Data

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It is not linear

Build

Customer

Ideate

Launch

Analyze

Measure

Build a feedback loop

It is not a flat land-scape

Competition / Market

Build

Customer

Launch

Measure

Company

Analyze
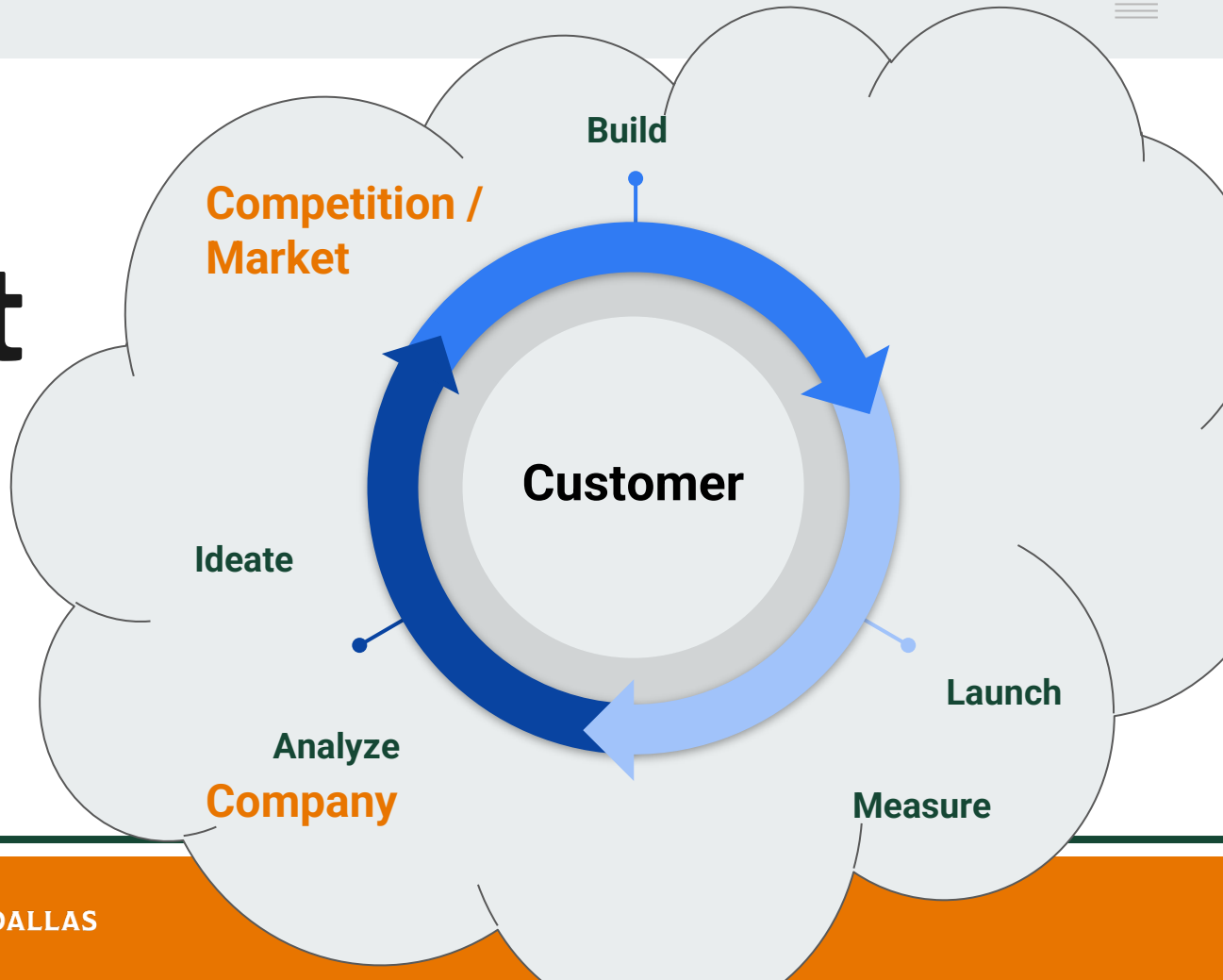
Ideate

Understand the underlying instability of your system
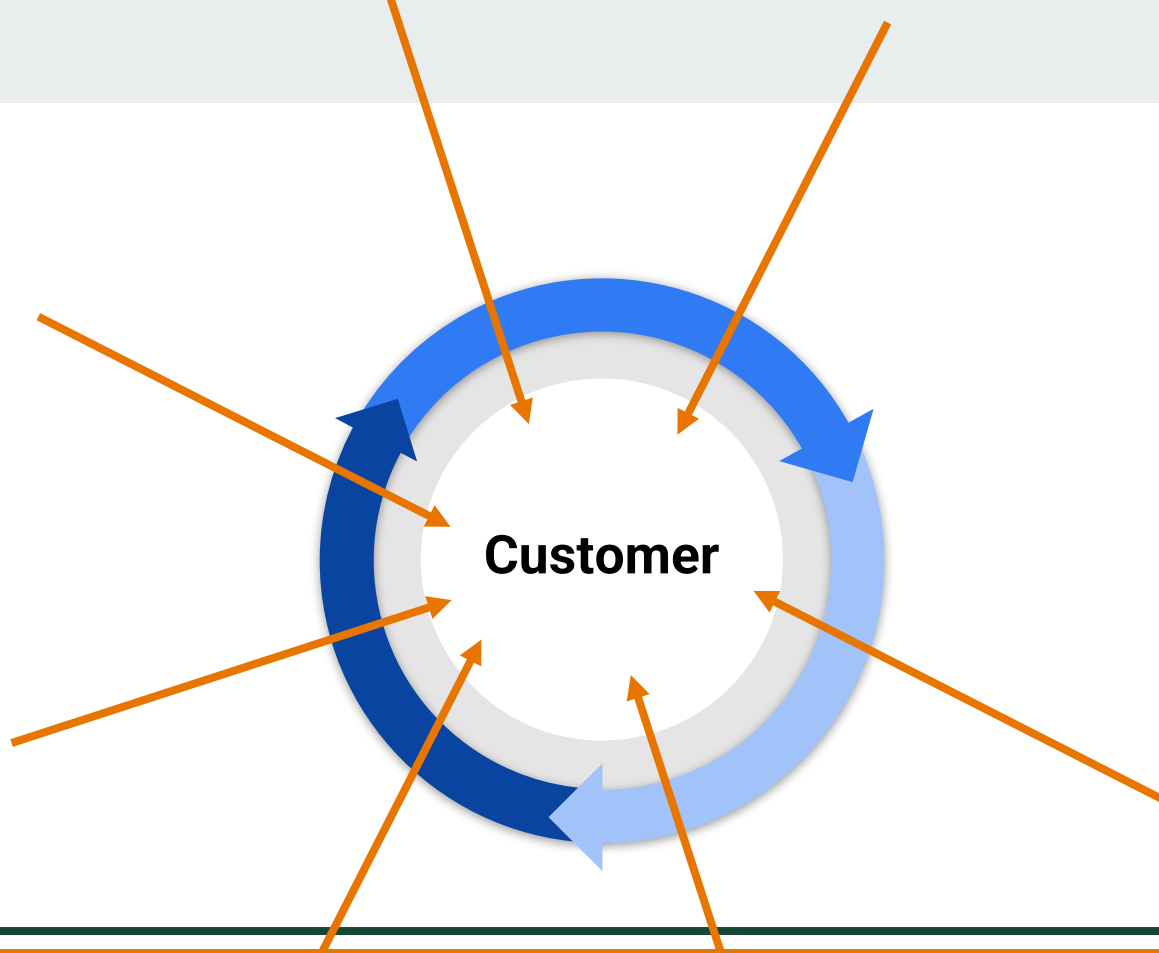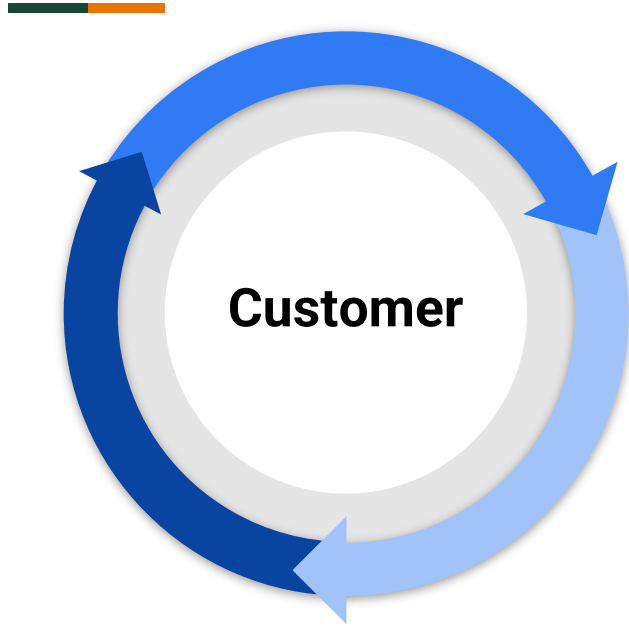
Customer

Customer

Customer

A customer is a person, who is someone's

- Aunt
- Dad
- Wife
- Child

Product Manager

A product manager is a person who gets to make that person's life better.

Case Study NETFLIX

1 : Ideation

2: Product Strategy and Product / Market Fit

3: New Product Development vs Existing Product Roadmap

Ideation

Random walk

Tools & Frameworks only do so much

Timing is key, market must be ready (DVDs)

Luck is a huge factor

Connections matter

https://interestingengineering.com/the-fascinating-history-of-netflix

Chap 1-3 That will never work, Marc Randolph

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Netflix Origin Story

Commuting (Marc Randolph, Reed Hastings)

Brainstorming (Christina Kish, Te Smith, Marc Randolph)

Investor standing by (Reed Hastings)

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Netflix Origin Story

Random walk, luck, timing
- Idea notebook... 100s of ideas
- Commuting (Marc Randolph, Reed Hastings)
- Brainstorming (Christina Kish, Te Smith, Marc Randolph)
- Investor standing by (Reed Hastings)
- DVDs launch in the US by March 1997
- Studios plan to release on DVDs for $15-$20

Some ideas
- Personalized Shampoo by Mail
- Food custom blended for your pet
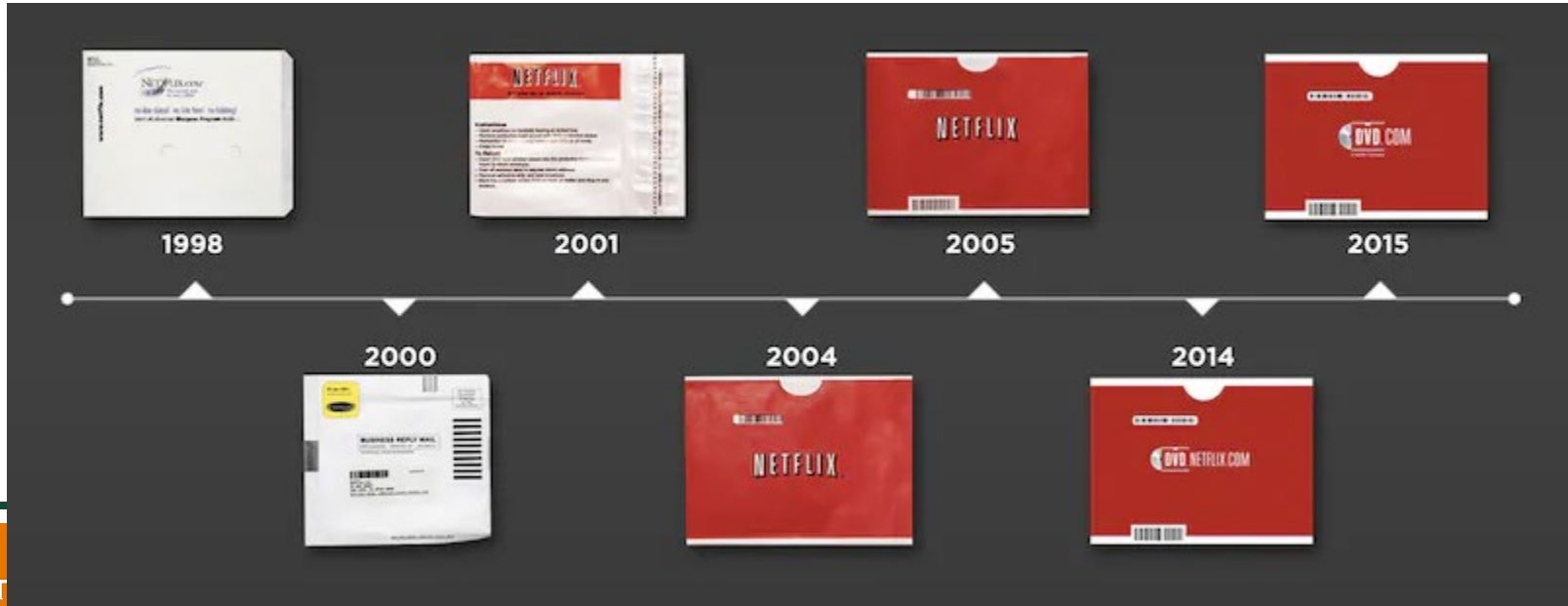- VHS tapes by mail (cost $70-$80 + shipping)
- DVDs by mail!

Blockbuster?

The ideation process did not start from identifying the gaps Blockbuster left in the market.

Reed Hasting's frustration with late fees helped solidify the idea that the idea was a good one or at least one worth pursuing.

Netflix History

https://www.dailydot.com/debug/netflix-dvd-plans-cost-features/

Netflix : Great Product creates Great Value

- May 24, 2002, IPO at $16.75 a share
- Feb 12, 2004, stock split 2 for 1
- Jul 15, 2015, stock split again 7 for 1
- Today $560.44 a share

So, if you had bought 100 shares of NFLX in 2002 for $1,675. Today you would have 1,400 shares of NFLX worth about $784,000

NFLX · NASDAQ
Netflix Inc

$560.44   ↑ 46,217.36%   +559.23 MAX
Aug 27, 10:29:45 AM UTC-4 · USD · NASDAQ · Disclaimer

1D   5D   1M   6M   YTD   1Y   5Y   **MAX**

+ Jobs, creative freedom, and entertainment for millions of people...

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Netflix:

- 10,000+ employees
- Numerous creators signed
- 209 million customers

Netflix is ranked #2 in Global Top 100 Brands

88%
Customer Loyalty

4.4/5 ★★★★☆
Product Quality

4/5 ★★★★☆
Pricing

4.1/5 ★★★★☆
Customer Service

https://www.comparably.com/brands/netflix

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Assignments

1.1 Form a team and meet in person or on video conference at least once

1.2 Prepare a slide deck with a team name, and an introduction slide for each person on the team Add an initial proposal for both projects in the form of a one-pager

General instructions: Use large font, pictures, shapes, colors, etc. Check for spelling and grammar.

Submit via Teams before start of next class

Assignment Instructions

1.1 Form a team and meet in person or on video conference at least once

- 3-5 student per team
- Meet at least once a week by video conference
- Talk 1 on 1 with each member of your team -- the objective is to really get to know one another and form a strong network
- Understand each other's backgrounds, strengths and weaknesses

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Assignment Instructions

1.2 Prepare a slide deck with a team name, and an introduction slide for each person on the team; add an initial proposal for both projects

- Slide deck can be on Google Slides or Powerpoint, the deck will consist of:
  - ○ Title slide with a logo and a team name
  - ○ Introduction slide with team name and motto/vision/mission statement
  - ○ A slide for each team member with an introduction of the team member
- One person should email it to me and copy their team-mates on the email, but everyone should work on it together
- Together:
  - ○ Decide on platform, and format of slide deck and of the individual about me slide
  - ○ Decide on look and feel -- remember design and UX matters
- Individually:
  - ○ Write your own about me page

- Proposals:
  - ○ New Product
  - ○ Existing Product
- Each Slide should contain these sections:
  - ○ Customer
  - ○ Customer's Problem
  - ○ Your Solution [New Product or New Feature for Existing Product]
  - ○ Market and Competition [Without your solution, how does the customer solve this problem now?]

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9   Product Marketing

10   User Experience

11   Scaling Product

12   SAAS - Digital Models for Digital Products

13   Understanding Cloud Computing

14   The Importance of Data and Metrics

15   Final Project

Thank you.