

Computing Innovation for Technology Entrepreneurship Information and Communications Technology Entrepreneurship



Product Management

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Agenda

- Brainstorming
- Product Development Process
- Product Idea
- Find your market
- Understand your audience
- Testing the idea
- Wireframing
- User Stories
- Product Management





Brainstorming [1]







Brainstorming [2]

- Set a time limit
- Begin with a target problem/brief
- Refrain from judgment/criticism
- Encourage weird and wacky ideas
- Aim for quantity
- Build on others' ideas
- Stay visual
- Allow one conversation at a time





Brainstorming [3]

- Mindset of a Millionaire
 - Think like a rich person
- Mindset of a Beggar
 - You have limited Ressources
- Mindset of a Monk
 - Only certain things are important





Brainstorming [4]

Let's work together

- 1. Choose an industry (Travel, Food, Education etc.)
- 2. Brainstorm for problems
- Brainstorm for solutions





Brainstorming/Brainwriting [5]

Brainwriting Worksheet: The Local Bus Co.

Date: August 18

Focus: How can we get more people to use our app and increase its value to passengers.

	ldea 1	ldea 2	idea 3
Round 1	Redesign the icon to make it easier to find.	Include simple games for people to play during journeys.	Link the app to traffic news, to offer real time travel advice.
Round 2	Make the new Icon look like a bus!	Could some of these games relate to local information?	Could we link the app to our bus-tracking system to let people see exactly where their bus is?
Round 3	Ensure that some parts or all of the app can work without internet.	Connect the app to GPS, to give personalized information and to track journeys.	Maybe also link to in-bus cameras, to show how busy a particular bus is?
Round 4	For the new icon, use the letter O from our company name as one of the bus wheels!	Use data to find out what the most popular journeys are – then use this to give more personalized suggestions and advice.	Could passengers use the app to report any issues during their journey?
Round 5	Allow users to read the content on our app in different languages.	Give people the options to store data about the number of journeys taken, distance traveled, etc.	Convert journey data into environmental information, e.g. amount of carbon saved.
Round 6	Use text-to-speech to help people with sight difficulties, too.	Allow users to buy and send travel vouchers as gifts via the app.	Gamify journeys and app usage. Award "green points" to users, which accumulate to earn rewards.

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Brainstorming/Mindmapping [6]







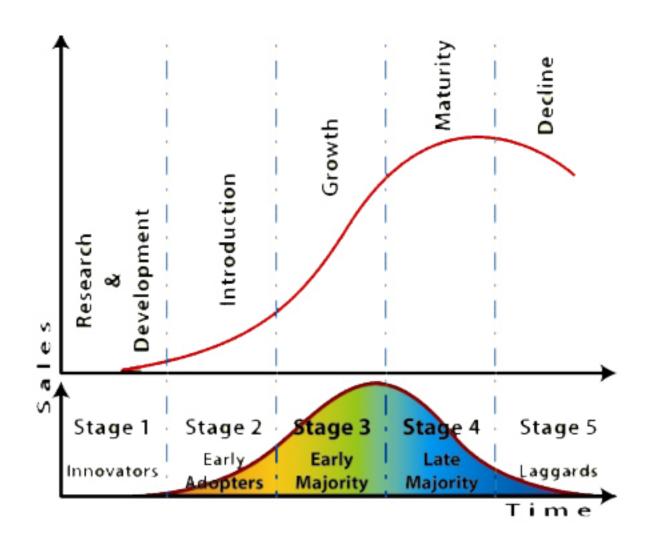
Brainstorming [7]

- https://www.interactiondesign.org/literature/topics/brainstorming
- https://www.smashingmagazine.com/2016/06/aframework-for-brainstorming-products/
- https://lucidspark.com/landing/solutions/brainst orm-software
- https://www.mindtools.com/brainstm.html
- https://workflowy.com/
- https://www.ayoa.com/previously-imindmap/





Product Development Process/ PLC [1]







Product Development Process / PLC [2]

Individual work:

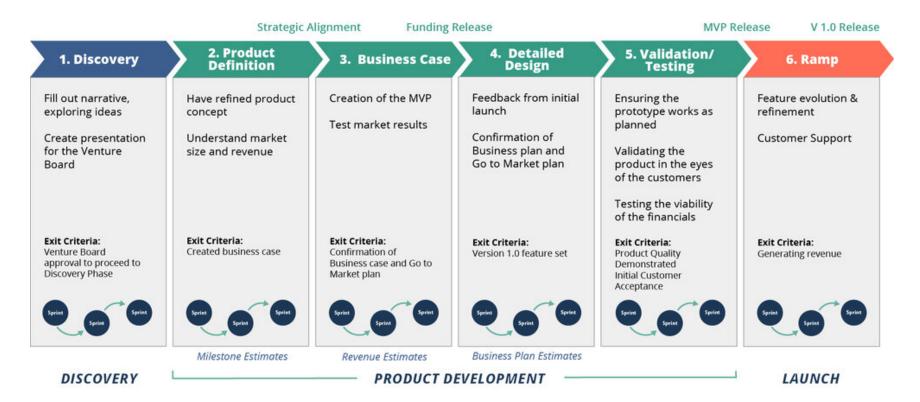
 Give examples of activities for every stage of Product Life Cycle.





Product Development Process [3]

Product development process steps (Traditional)







Product Development Process [4]

Product development process steps (Minimum Viable Process)

Strategic Alignment **Funding Release MVP** Release 1. Product 2. Business Case 3. Development **Definition** Creation of the MVP Feedback from initial Have refined product launch concept Test market results Confirmation of Understand market Business plan and size and revenue Go to Market plan **Exit Criteria: Exit Criteria: Exit Criteria:** Created business case Confirmation of Version 1.0 feature set Business case and Go to Market plan Milestone Estimates Revenue Estimates **Business Plan Estimates**

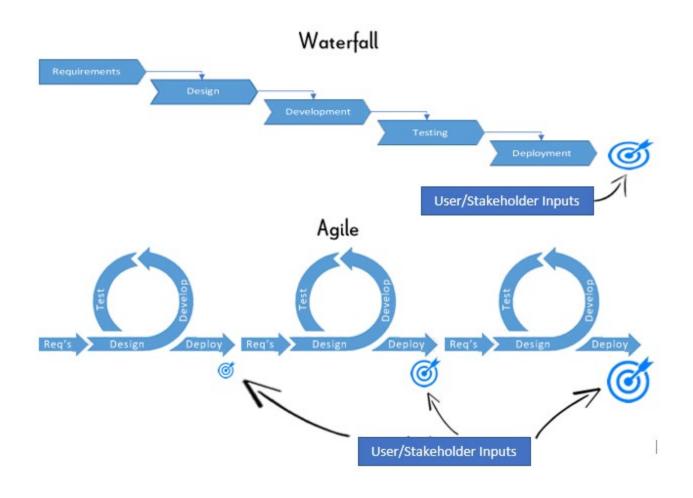
PRODUCT DEVELOPMENT

Product Management





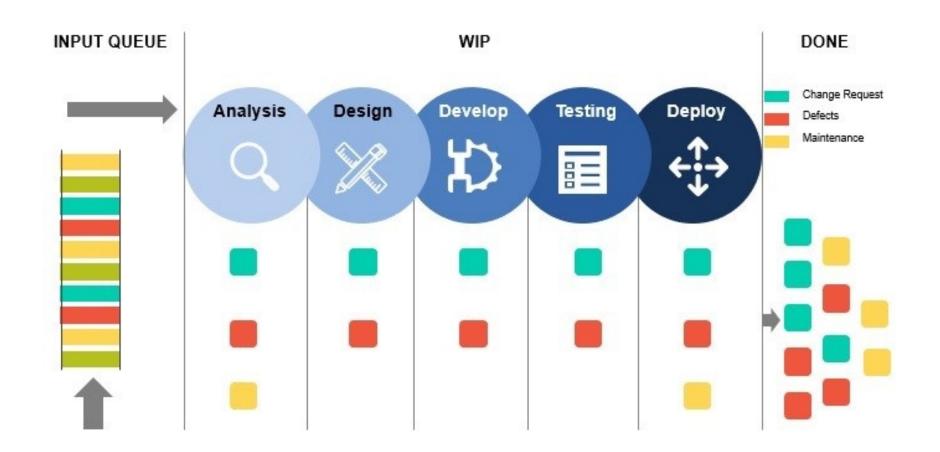
Product Development Process [5]







Product Development Process [6]







Product Development Process [7]

- https://kanbanflow.com/
- https://www.atlassian.com/software/jira





Product Idea/ Why Product Launches fail? [1]

- Flaw 1: The company can't support fast growth
 - The Lesson: Have a plan to ramp up quickly if the product takes off.
 - Example: Mosquito Magnet
- Flaw 2: The product falls short of claims and gets bashed
 - The Lesson: Delay your launch until the product is really ready.
 - Example: Microsoft Windows Vista
- Flaw 3: The new item exists in "product limbo."
 - The Lesson: Test the product to make sure its differences will sway buyers.
 - Example: Coca-Cola C2





Product Idea/ Why Product Launches fail? [2]

- Flaw 4: The product defines a new category and requires substantial consumer education—but doesn't get it.
 - The Lesson: If consumers can't quickly grasp how to use your product, it's toast.
 - Example: Febreze Scentstories
- Flaw 5: The product is revolutionary, but there's no market for it.
 - The Lesson: Don't gloss over the basic questions "Who will buy this and at what price?"
 - Example: Segway





Product Idea [3]

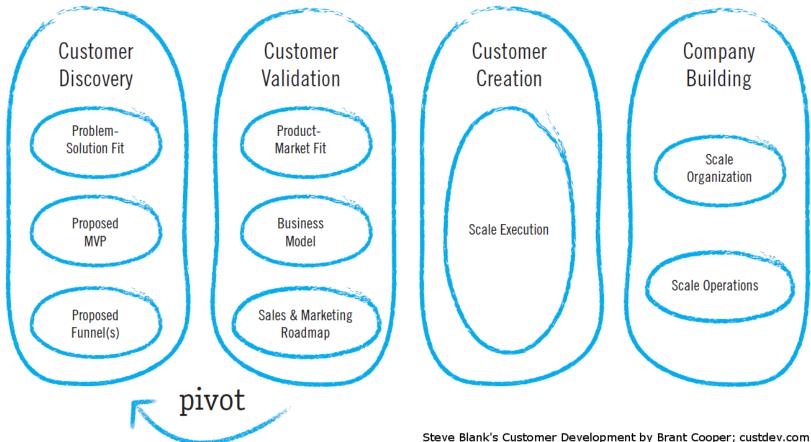
- Your product must solve a problem
- Don't find clients for your products, build products for your clients
- Give examples of failed products, and explain why do you think they've failed.





Product Idea [4]

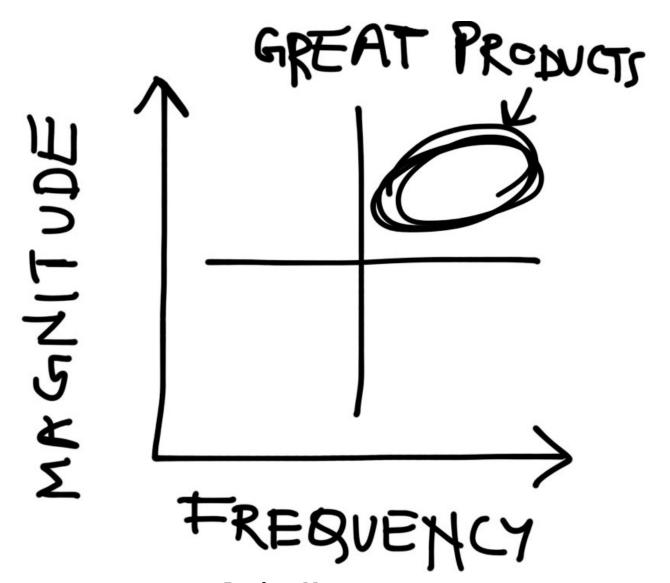
Customer Development







Product Idea/ Pain: Magnitude & Frequency







Product Idea [6]

Needs	Features	Benefits
The "void"	The "what"	The "so what"

Idea #1

Needs	Features	Benefits

Idea #2

Needs	Features	Benefits

Idea #3

Needs	Features	Benefits





Product Idea/ Interview Users

- Build a list of interview questions
- Interview your users (3 users/ idea)
- Update needs, features, benefits table





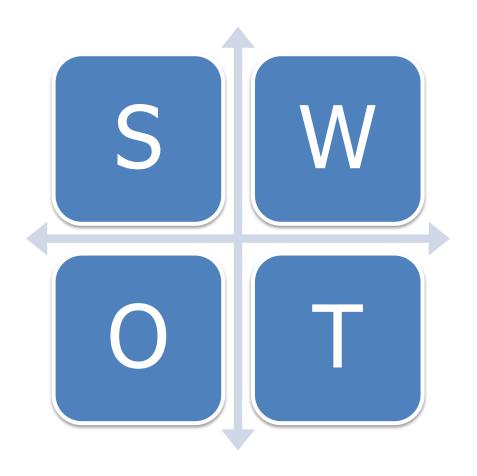
Find your market/ SWOT [1]

	Strengths	Weaknesses
Internal	 Your specialist marketing expertise. A new, innovative product or service. Location of your business. Quality processes and procedures. Any other aspect of your business that adds value to your product or service. 	 ✓ Lack of marketing expertise. ✓ Undifferentiated products or services (i.e. in relation to your competitors). ✓ Location of your business. ✓ Poor quality goods or services. ✓ Damaged reputation.
	Opportunities	Threats
External	 A developing market such as the Internet. Mergers, joint ventures or strategic alliances. Moving into new market segments that offer improved profits. A new international market. A market vacated by an ineffective competitor. 	 ✓ A new competitor in your home market. ✓ Price wars with competitors. ✓ A competitor has a new, innovative product or service. ✓ Competitors have superior access to channels of distribution. ✓ Taxation is introduced on your product or service.





Find your market/ SWOT [2]



Build a SWOT
 Analysis for a product of your choice.





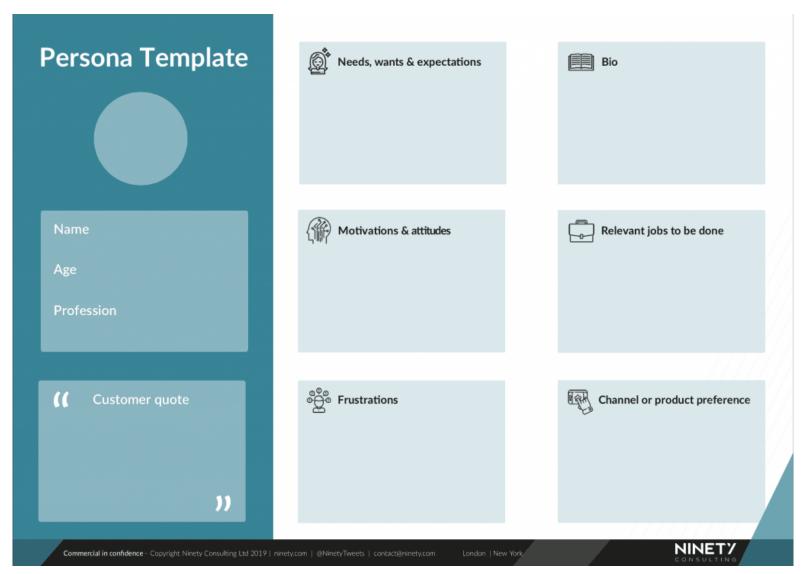
Find your market/ Competition [3]

Competitive Analysis Template AdRoll YOUR COMPANY **COMPETITOR 1 COMPETITOR 2 COMPETITOR 3** YOUR COMPETITORS **Number of Employees** Annual Revenue Location # of Years in Business Other **COMPETITOR AUDIENCE** COMPETITOR MESSAGING Words/Phrases Used Tone of Voice Easy to Understand (Y/N?) USER EXPERIENCE Easy to Find Info? Easy to Get Help? Clear CTAs?





Understand your audience/ Persona [1]







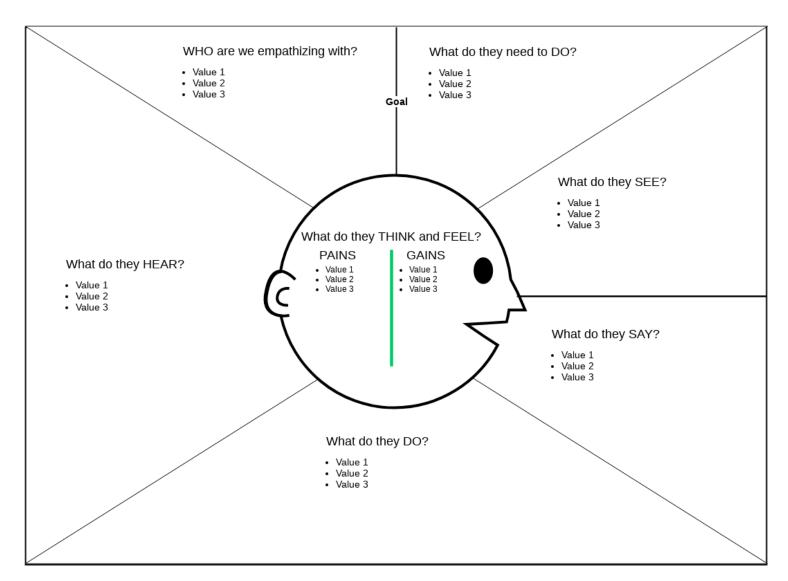
Understand your audience/ Persona [2]







Understand your audience/ Empathy map







Understand your audience

- https://www.interactiondesign.org/literature/article/empathy-map-why-and-howto-use-it
- https://miro.com/templates/empathy-map/
- https://online.visualparadigm.com/diagrams/features/empathy-maptemplate/





Testing the idea [1]

- Get Feedback from Friends and Family
- Try Raising Money via Crowdfunding
- Start an Email List to Gauge Interest
- Run a Consumer Survey
- Test the Waters With Social Media and PPC Advertising
- Launch Lean With a Simple Store





Testing the idea [2]

You're holding a field guide for rapid experimentation. Use the 44 experiments inside to find your path to scale. Systematically win big with small bets by...







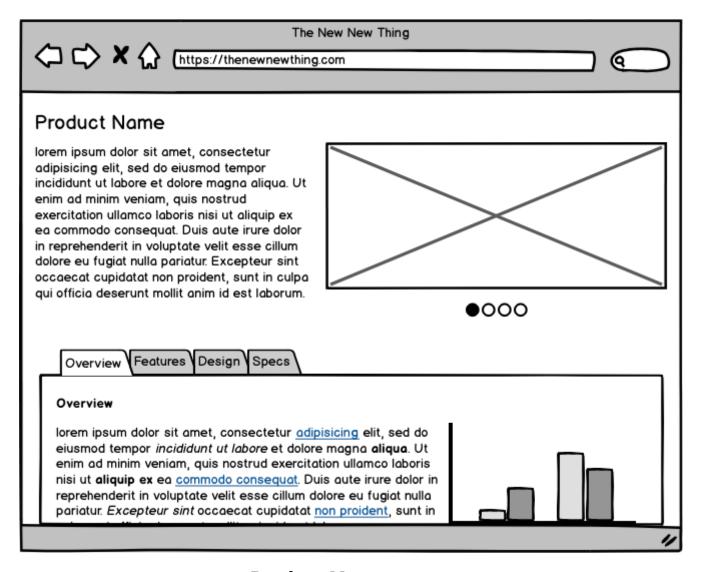
Wireframing/ Benefits [1]

- A Centralized Vision
- Better Development
- Saving Money
- Easier Handoff
- Improved User Experience





Wireframing using Balsamiq [2]







Wireframing [3]

- https://balsamiq.com/
- https://www.youtube.com/watch?v=6ec8YIrfbhk





User Stories / How to write US [1]

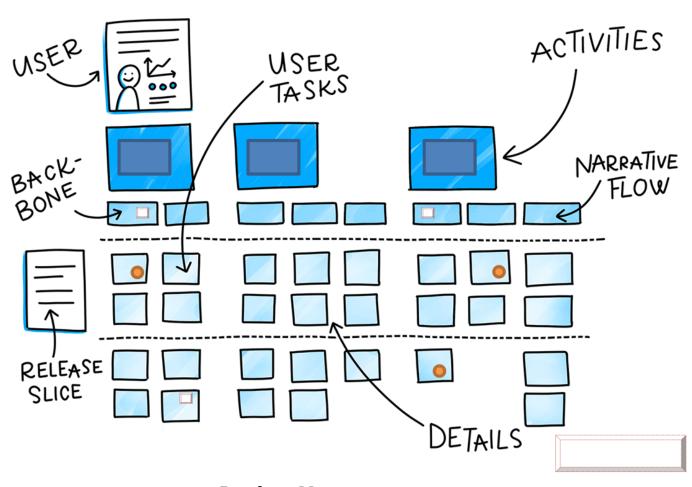
- Definition of "Done"
- Outline subtasks or tasks
- User personas
- Ordered Steps
- Listen to feedback
- Time
- Example: "As a [persona], I [want to], [so that]."





User Stories [2]

USER STORY MAPPING







User Stories [3]

- https://www.pivotaltracker.com/
- https://www.visual-paradigm.com/guide/agile-softwaredevelopment/what-is-user-story/
- https://www.romanpichler.com/blog/10-tips-writinggood-user-stories/
- https://www.atlassian.com/agile/projectmanagement/user-stories





Product Manager

Product Management: The Buck Stops Here

- Central point of communication
- Whole product
- Define product strategy
- Define go-to-market strategy
- Gather requirements
- Guide engineering
- Guide sales and marketing





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Thank you for your attention!