

Carnegie Mellon University in Qatar

Entrepreneurship for Computer Science

15-390 - Spring 2020

Problem Set 1

Out: January 20, 2020

Due: January 30, 2020

Problem	Points
Dot-com Bubble	15
What Makes Startups Succeed?	25
Founding Dilemmas	35
Idea Generation Guide	25

Problem I (15 Points): Dot-com Bubble

This problem is about the dot-com bubble, a historic economic bubble that occurred in USA roughly between 1997 and 2001. Answer all the following questions briefly (no answer should exceed 150 words). In addition, include all the sources that you used to answer the questions.

- 1) Define the dot-com bubble and discuss at least two reasons for its occurrence.
- 2) Provide one example of a promising tech company that could not survive the dot-com bubble and discuss at least two reasons that led to its failure.
- 3) Provide one example of a currently famous tech company that survived the dot-com bubble and discuss at least two reasons that made it recover from the bubble.

Problem II (25 Points): What Makes Startups Succeed?

This problem is about companies that pursued similar ideas, but some succeeded and others failed. Research the cases of these companies and answer all the following questions briefly (*hint: you can approach this problem from the perspective of the five elements that lead to successful companies, which we discussed in class*). Lastly, include all the sources that you used to answer the questions.

- 1) **Friendster vs. Facebook**
 - a) Why Facebook was able to prevail over Friendster, although Friendster managed to attract more than 115 million users by 2009? Your answer should not exceed 150 words.
 - b) State at least two lessons that you have learned from the cases of Friendster and Facebook.
- 2) **Instacart vs. Webvan**
 - a) Why was Instacart able to succeed, while Webvan went bankrupt in 2001? Your answer should not exceed 150 words.
 - b) State at least two lessons that you have learned from studying the cases of Webvan and Instacart.

Problem III (35 Points): Founding Dilemmas

- a) This part of the problem is about finding right co-founders. Read the following articles and discuss at least 5 characteristics that you look for in co-founder(s). Your answer should not exceed 250 words.

- McConville, T. (2017, November 29). **Five Ways To Find The Right Co-Founder**. <https://www.forbes.com/sites/forbesagencycouncil/2017/11/08/five-ways-to-find-the-right-co-founder/#5d07b86525a0>
- Fertik, M. (2014, July 23). **How to Pick a Co-Founder**. <https://hbr.org/2011/02/how-to-pick-a-co-founder>
- Kwasaki, G. (2016, October 24). **How to Find a Co-Founder**. <https://guykwasaki.com/how-to-find-a-co-founder/>

- Zwilling, M. (2015, March 27). **10 Steps to Finding the Right Co-Founder.** <https://www.entrepreneur.com/article/244259>
- Eckfeldt, B., & Eckfeldt, B. (2017, October 30). **How to Choose the Right Co-Founder for Your Startup.** <https://www.inc.com/bruce-eckfeldt/7-important-things-to-remember-before-choosing-a-co-founder-for-your-startup.html>

b) When you work with a group of people, you need to learn to deal with conflicts. Think of a time when there was a conflict between you and someone whom you were working with. Discuss the following points (Your answer should not exceed 150 words):

- How did you deal with the conflict at the time?
- What could you have done differently to handle the situation better?

You may find the following article helpful:

Looking for Love in All The Wrong Places - How to Find a Co-founder. (2015, January 29). <https://firstround.com/review/Looking-for-Love-in-All-The-Wrong-Places-How-to-Find-a-Co-Founder/>

c) What are the *relationships, roles, and rewards* that you would like to have in/for your team if you are to found a startup?

Problem IV (25 Points): Idea Generation Guide

This problem involves 3 steps as follows:

Step 1:

This step will assist you in broadening your horizon of technological literacy and enrich your vision for great opportunities that lies ahead. Go to the National Science Foundation (NSF) summary of the 50 discoveries that NSF believes have had the most impact on people's lives (<http://www.nsf.gov/about/history/nifty50/>). You will find breakthrough discoveries such as bar codes, genomics, speech recognition, and much more. Select one of the nifty 50 that interests you the most and conduct some research about it. Report on your findings. Subsequently, identify at least one company that has been founded based on this discovery and discuss its basic idea. Your answer should not exceed 250 words.

Step 2:

Generate a list of as many new venture ideas as possible (no need to submit this full list as part of this assignment!). Start by thinking about any unmet or poorly filled customer need you have observed or experienced yourself. While doing that, try to zoom in to only *one* need that you feel strongly about and discuss it briefly. While considering this need, you should also search for any existing company that attempts to address it. If you find any such company, identify and list its major weaknesses and vulnerabilities. These may render good opportunities for you to exploit in a new venture. If you do not

find any such company, you may have found a unique problem that is looking for a solution! Your answer should not exceed 250 words.

Step 3:

Propose a solution for the problem you defined in step 2 and ask at least 6 people from different segments in life (e.g., teachers, peers, family members, domain experts, etc.,) to look at it and provide you with feedback. You may revise your solution based on their feedback and present only the final revised one. Your answer should not exceed 250 words.