

Assignment 4. Final Project
Big Data, Education, and Society
Spring 2018

Submit by email to ryanshaunbaker@gmail.com

Due Tuesday, May 8 1159pm

In this project, you will submit a bid for funding for your project. This bid should be submitted with the content expected for an NSF Small Business Innovation Research (SBIR) proposal Project Description. You should do this assignment in the same group you worked with in the first assignment (or you should do this assignment alone, if you did that assignment alone).

Your proposal should consist of the following elements, an abbreviated and edited version of the NSF's actual requirements, drawn from <https://www.nsf.gov/pubs/2018/nsf18550/nsf18550.htm> with redactions and edits. Your professor does not claim either to own these materials or that they are represented in their original form – these materials are used under Fair Use for educational purposes.

Elevator Pitch (20/100)

- The Customer. Describe the expected customer for the innovation. What customer needs or market pain points are you addressing?
- The Value Proposition. What are the benefits to the customer of your proposed innovation? What is the key differentiator of your company or technology? What is the potential societal value of your innovation?
- The Innovation: Succinctly describe your innovation. What aspects are original, unusual, novel, disruptive, or transformative compared to the current state of the art?

The Commercial Opportunity (20/100)

- Is there a broader societal need you are trying to address with this commercial opportunity? Please describe.
- Describe the market and addressable market for the innovation. Discuss the business economics and market drivers in the target industry.
- Describe your customers and your basic business model.
- Describe the competition.
- What are the key risks in bringing your innovation to market?
- Describe your commercialization approach.
- Describe your plan and expected timeline for developing, refining, and (as appropriate) testing your innovation.

The Innovation (20/100)

- Briefly describe the innovation. At what stage of technical development is the innovation?

- Describe the key technical challenges and risks in bringing the innovation to market. Which of these will be your focus in the proposed Phase I project?

The Company/Team (20/100)

- Describe the company founders or key team members in this proposed project. [You may include both yourselves and additional key members who you could realistically bring onto your team].

Writing and Clarity (20/100)

You do **not** need to adhere to the length guidelines for NSF; your submission may be any length you find appropriate, and may have as many or few tables or graphs as desired. You may write your paper either as prose or as an outline – as responses to each item – if you wish.

You may write the proposal as if you were proposing this system today, or as if you were proposing it at some future time of your choice (2023? 2028? 2044?). Please state what your future time is, however, if you choose a future time. Do so at the top of your assignment.

Submit this assignment by email.

No citations are required for this assignment.

You are not required to provide feedback on your classmates' assignments.

Late Submissions. Late submissions are allowed at no penalty, but will result in receiving an incomplete for the class. Do you really want that?