1. Venture Information

Thank you for your interest in applying to the Venture Incubation Program (VIP) & becoming a semi-finalist in the 2019 President's Innovation Challenge (PIC)!

Please fill out this application carefully and honestly. We're not looking for perfection, but we're looking for evidence of deep thinking, thoughtful planning, and passion to make an impact!

Question number

(1). Venture Name*

We require that you also use this name for your SlideRoom account. Please go to "Account Information" at top right and choose "Registered As" > Organization/Group. Write your Venture Name under "Organization Name." This makes the application review process much easier for our panel (and shows that you can follow instructions). Thank you!

Harvard Data Entrepreneurship Club

(2). High-concept pitch. In one line, briefly describe what your venture does in an easy-to-understand way.*

Hint: avoid buzzwords. Write as if you were telling a friend. If accepted, we'll use this description for your venture profile on our website, which you can change at any time.

Character limit is one hundred fifty.

Medata: An AI/deep learning-powered web and mobile platform for sharing data profits, to help medical research.

111 of 150 characters

(3). What is the primary industry of your venture?*

Healthcare

(4). What is the secondary industry of your venture?*

Services

(5). Which technologies does your venture utilize or which are you building?*

Artificial Intelligence, Blockchain, Developer Tools, Machine Learning, Mobile App, Software/Platform as a Service, Web App

Choose as many as applicable.
Our VIP teams are grouped into Advising Cohorts by common industry or venture focus. If your team is accepted, which Advising Cohort do you think would be the best fit for you?*

Hint: if you're struggling the most with how to reach customers, you should select the Consumer cohort. If you're struggling the most with how to build your tech, select the High Tech cohort. If your struggles are particular to your industry, you may fall into the Health & Sciences cohort or the Social Impact/Education/Cultural cohort. (If your venture is admitted, the Staff Advisors may switch your assignment based on their understanding of your needs.)

Health & Sciences --- incl. global health, life sciences, wellness, medical devices, etc.

(7). Website (optional)

https://projects.iq.harvard.edu/hde/medata

(8). Application video (recommended)

We encourage you to record a short video (keep it under 2 minutes) that describes your team, the problem you're addressing, your proposed solution, and why you're applying.

We don't care about production quality; we just want to get to know you! Feel free to record on your phone and upload to a video hosting site like YouTube or Vimeo, or to a shared Google Drive folder.

Insert URL here: https://youtu.be/GyGLOiqArF8

(9). Video password

If you submit a video, please make sure that we are able to view it. If a password or other instructions are required, enter those here: N/A
2. Team Origin & Expertise

We'd like to know your origin story. Please tell us about your team and venture formation, along with which areas of expertise you have, and which you still need.

(1). How did you and your cofounders/team meet?*

If you are a solo founder, who has advised or helped you with this idea?

Character limit is six hundred.

Most of us come from the Harvard Data Entrepreneurship Club, which is a student & fellow organization affiliated with Harvard Medical School and Harvard School of Dental Medicine. The club aims to bring business innovations from emerging data technologies based on our research. So, we have some opportunities to get to know like-minded people at science or industry events, and then to brainstorm with them. One of the founders, Chia-Shih Yoh is the one. Also, we invited some advisors to give us suggestions related to such a brainstorm.

525 of 600 characters

(2). Whose idea was this venture, and how did you come up with it?*

Character limit is six hundred.

Chunlei Tang’s idea created this venture. Our original want is to help healthcare researchers to get their desired data easily. However, it is difficult because individuals are not willing to sell their personal data for little money. There exists the fact is that personal data is spread on the Internet whose data owner has no idea about whom is making money from it. Also, making digital health data (EMR/EHR) useful to patients via accessible APIs (application programming interfaces) is meaningful. So, we are inspired to create a platform for sharing both the data and its profits.

587 of 600 characters

(3).

What makes your team well-qualified to tackle this problem?*

What do you know about this domain that others do not? What special skills or types of expertise do members of your team possess? Why did you choose to work on this problem?

Character limit is six hundred.

We think our team is well-qualified to tackle this problem. Our advantages are as follows. We all have experience in healthcare, precisely one of the advisors David W. Bates. The team leader Chunlei Tang is a domain data scientist and the author of the author of The Data Industry: The Business and Economics of Information and Big Data. One of the founders, Chia-Shih Yoh is an entrepreneur & visionary. He has
nearly 20 years of experience in software development including healthcare system in the state of Oregon. Also, he helped us design a novel business model related to this venture.

591 of 600 characters

(4). What areas of expertise could your team use help with?*

Operations, Marketing, Fundraising, Team, Product, Business, Legal, Medical/Science, Specific Market Expertise
3. Idea & Plan

We’re not looking for the perfect business plan, but rather we want to see that you’ve put some serious thought into the problem that you’re trying to solve, and how you’ll solve it.

(1). What’s the problem you are looking to solve? Describe the market need and venture opportunity.*

We’re looking for teams that have a great idea for a real problem that they want to solve, and a plan for how to solve it. We don’t expect our applicants to have fully formed ventures yet, but we want to see that you’ve done some thinking beyond just “wouldn’t this be a cool idea...” Show us that you have a plan that could really work.

Be as specific as possible. How do you know that this is really a problem or essential need for the target customer/user? How do you know that it’s a big enough problem to support a viable business or enterprise?

Character limit is eight hundred.

The starting question we want to solve is to help healthcare researchers to get their desired data easily. While existing vast amounts of data that are open access allowed them to apply, the data required by medical researchers that often targets specific individuals is too purposeful to be collected. For example, pharmaceutical researchers need genetic data for a particular disease. Paying the fee to the data owner is a possible solution. However, on the one hand, the increasing gap between healthcare costs and outcomes is one of the most critical issues; on the other hand, individuals are not willing to sell their data for little money. Also, people cannot get any profit via data ownership because some bad data brokers are making money with their personal data spread on the Internet.

796 of 800 characters

(2). Describe your solution to the problem you have specified: What will you make or do? Why will it be effective?*

Explain why you believe your solution really does solve the problem. Share specific examples if possible.

Character limit is eight hundred.

We aim to create a machine intelligence (MI) based global leading health data platform to share data, profit, and economy, to help medical research. So far, we have two core data techniques: (1) data self-governance that is considering applying for a patent and was invited to give a poster at the first Harvard Data Science Initiative Conference in November 2018; (2) visual data mining process that is our previous research work. We will optimize the platform using the blockchain technique to connect (possibly) heterogeneous existing systems. Also, we propose an advanced concept related to this venture that is “no raw data in the transaction.” That is to say, the individuals or institution can enjoy risk-free profits only depend on data ownership without responsibility.

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(3). Who is your target customer/user for this solution?*
Our target potential customers can be divided into two classes of buyers and sellers. The purpose of the buyers is for medical research, involving medical schools (with their departments), hospitals, insurance companies, medical suppliers, and drug companies. Most of the sellers are individuals who are willing to authorize us to help them (1) find their data through search engine we offered, and (2) obtain their own EMR/EHR data using our services via hospitals’ open APIs. Also, we will provide free data tools to hospitals/the others to mine their data for research or administrative purposes.

Character limit is six hundred.

How are your existing competitors, and who might become a competitor? What makes your venture a better option?*

(4). Who are your existing competitors, and who might become a competitor? What makes your venture a better option?*

If you don’t think you have competitors, how is the problem being addressed currently?

We did marketing research in 2017 to list several existing competitors, and they are: Covance that took 46-50% market share with 10.2 billion USD, iQVIA that took 36-40% market share with 8 billion USD, and the others (e.g., Hu-umannity, Optum, IMS, and Symphony) that made the rest market share around 1-2 billion USD. However, the data they provided is also without a target. So, they need to collect and store data in advance accounted for a large part of the cost. We will collect data according to customer demand to reduce data inventory, and offer more affordable and precision.

Character limit is six hundred.

How do you plan to go to market?*

(5). How do you plan to go to market?*

How are you thinking about piloting your venture? Acquiring initial customers? Partnering? Achieving financial sustainability? We’re not looking for detailed financial models or spreadsheets; we just want to see how you’re thinking about the general dollars-and-cents realities of your venture.

Character limit is six hundred.

We step-by-step segment our business goal by multiple minimum viable products (MVPs) to pilot our venture. First, we designed the platform interface that adapts multi-user interfaces to meet customer needs including data sellers and buyers. Secondly, we defined all business modules. Thirdly, we launched a sample webpage of data ownership claim, which helps the individuals or institution to find and claim/deny their data on the Internet. Also, we are achieving an enhanced function of data ownership service, which is privacy service to hide negative links corresponding to customer request.
4. Traction & Progress

This is where you show us that not only do you have an idea, you've actually started working toward making it a real venture. We don't expect you to be very far along, but we do want to see the initial work you've put in so far.

(1). How far along is your venture?*

How would you describe the progress you've made on the entrepreneurial spectrum from “just the glimmer of an idea” to “a fully-formed, brilliantly successful, world-changing business / nonprofit”?

Character limit is six hundred.

This solution we purposed could deal with two problems. One is how to construct a greater health system. Even the world’s best health systems are fragmented. We envision sharing data, and data mining results will make it possible to form economic cluster effects within the greater health care system. Secondly, data-rich profits can come from some sources – personal, private, or third-party – but each stakeholder may not share equitably in the profit return. We offered an advanced concept of driving data profits return data ownership. So, we believe it will be a world-changing business.

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(2). Which of the following stages has your venture reached at this point?*

Problem identified, Solution envisioned, Solution mockups/sketches/renderings created, Prototype/alpha solution (MVP) built, Prototype solution tested with potential customers (pilots)

(3). Describe the process you have used to reach your current stage of development.*

If you’ve talked to potential customers/partners/users: who, and what did you learn? If you conducted market research, what data did you collect and how? Here's where you can get more granular about the steps you’ve taken.

Character limit is eight hundred.

We built a forum to collect comments from potential customers/user. Also, our club worked with the Harvard Graduate Commons to host a Data Science Panel to show our multiple MVPs including the derivative product of the review summary. We collected comments from more than 50 people involving friends, colleagues, VCs (e.g., ChinaRock), medical outsiders, and strangers. The majority of them are very excited and Looking forward to our products coming online as soon as possible. Someone even used Kevin Kelly's sentence to comment on our product as "the Future of Business Relies on the Big Data of Today." Some real comments are as blew: great product that saves time on research; would like to see data tool comparison.

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5. Milestones & Contributions

We’re looking for teams who want to move further, faster by setting specific, realistic, measurable milestones for the upcoming term.

These can cover (but are not limited to): interviewing customers; launching websites; getting a first customer; designing prototypes; testing solutions on potential users; recruiting new team members; pitching to investors / applying for grants; launching 2.0 product; etc.

(1). Milestone #1*

Please list the first milestone (or most critical initial milestone) that your venture hopes to achieve by the end of the term.

pitching to investors about the issues of HIPPA, Privacy law, business model, and so forth

(2). Milestone #2*

Please list one more milestone that you hope to achieve during the upcoming term. If you don't have five total, break down one milestone into five actionable, achievable steps.

designing a prototype of how to accept an individual's authorization to obtain EHRs via open APIs

(3). Milestone #3*

Please list one more milestone that you hope to achieve during the upcoming term. If you don't have five total, break down one milestone into five actionable, achievable steps.

recruiting new full-time team members (e.g., artist, coding staff) to combine all MVPs

(4). Milestone #4*

Please list one more milestone that you hope to achieve during the upcoming term. If you don't have five total, break down one milestone into five actionable, achievable steps.

launching 1.0 product to get 1-2 client of data buyers (e.g., from pharmaceutical research)

(5). Milestone #5*

Please list one more milestone that you hope to achieve during the upcoming term. If you don't have five total, break down one milestone into five actionable, achievable steps.

applying for next round funding to hire more professional staff (e.g., manager, marketing staff)

(6). What does being part of the community mean to you?

Being an entrepreneur can be lonely and isolating. We believe that the experience is much better — and more successful — when entrepreneurs can form a community to learn from each other and help each
other on the innovation journey. Please describe how being part of this community will take you further, faster.

Character limit is four hundred.

One of our advisor members, Eugene W. Mont, comes from the Harvard Graduate Commons parted of Harvard Housing. Under his help, we talked to many people (e.g., students, fellows, researchers, professors) about our venture. Also, we collected a lot of comments related to our MVPs from the greater Harvard community. We believe the entrepreneurial process is also a process of growth.

382 of 400 characters

(7). What learnings could you share with other teams? How have you engaged in the i-lab community thus far?*

Our expectation is for VIP/PIC teams to be community leaders. Throughout the term, we may call on you to mentor your fellow teams or current Harvard students on a topic, lead a peer-to-peer roundtable session, or share your "highs and learns" from your experience. What have you already learned or shared with other teams?

Character limit is four hundred.

Our team may share a bit about our innovative idea with data techniques and stories heralding big data as the currency of innovation for healthcare or other domains.

166 of 400 characters

(8). Is there anything else you’d like to tell us?

Character limit is four hundred.

Our derivative product of the review summary is also pretty great. We showed two hospitals’ service review (e.g., BWH and Dana-Farber) related to our core data technique – visual data mining process and analyzed two Dyson’s produce review to illustrate data mining traceably. We share it in our community. Many of them were impressed and wanted to see more.

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6. Team Members Information

Designate one founder as the Team Lead (primary contact person). This person must be a current, full-time, degree-seeking student at Harvard. For the Summer, the Team Lead may have finished their degree during the Spring term.

(If your team is accepted, the team members listed below will be added to our weekly internal newsletter mailing list, and to the Security Access list. Additional team members may be added during the term.)

(1). Chunlei Tang, Founder, Harvard Medical School
(2). Chia Yoh, Co-founder, Composite App
(3). Joseph M. Plask, Team Member, Brigham and Women’s Hospital
(4). David W. Bates, Advising Team Member, Harvard Medical School
(5). Eugene W. Mont, Advising Team Member, Harvard Graduate Commons
(6). Meihan Wan, Intern, Fudan University
(7). Li Zhou, Advising Team Member, Harvard Medical School