

Restructuring The Challenge and Developing a Unified Platform



Executive Summary



Opportunity

- The high barrier of entry for major prizes limit potential applicants to enter
- The lack of security for entering the prizes limit teams (commonly university/student teams) to enter
- The vacant community platform can be used to form the XPRIZE spirit



Solution

- Creating a separate ideation phase to attract more applicants
- Adding VC spitch/company interview opportunities as a part of the final prize
- Creating a platform where all resources and guidance for participants can be found in one place



Vision

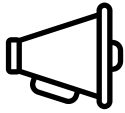
- An increased number of potential applicants will apply to join the challenge
- Greater global impact as an result of additional opportunity prizes
- The creation of a community of bright-minded, innovative people who can collaborate to solve global problems



PROBLEM

Participants in the XPRIZE challenge face difficulties in terms of 1) obtaining the adequate amount of capital to advance forward 2) time commitment

Pain Points Of Potential Applicants



Awareness of the Prize

The applicants become aware of the existence of the prize and develop can interest to join the prize



Time Commitment Restraints

The 4-5 year long prizes requires an excessive amount of time and dedication that not all qualifying potential applicants are able to spend, especially university students



Lack of Starting Capital

Applicants, most commonly student researchers and early-stage startups lack capital to continue iterating their product as they are advancing through the competition, leading to drop-outs

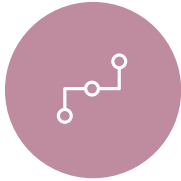


Fear for Future Security

Risk in terms of the amount of time and dedication required to participate in the challenge with no guaranteed outcome creates a sense of insecurity

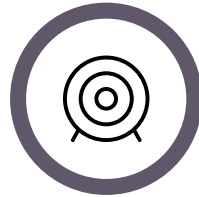
Solution Overview

Our solution consists of 3 main recommendations covering the challenge, the prize and the community. Each solution targets different issues with the current XPRIZE model in order to increase applicants from a wide variety backgrounds



Restructuring Challenge

Splitting and adding new challenges with the goal to increase applicant awareness and variety



Increasing Variety of Prizes

Redistribution of the prize purse among new challenges and adding new prizes to increase attractiveness and incentive to apply



Developing a Unified Platform

Compiling all that XPRIZE offers in one unified, central platform to appeal to a wider variety of teams



SOLUTION

RESTRUCTURING CHALLENGE

Adding New Challenges While Adding New Prizes To Appeal to Appeal to a
Wider Selection of Teams

Current Competition Structure

One Main Challenge

A lack of variety in challenge type choices results in a lack in diversity of teams and an average of only ~68 teams applying per challenge



Problems

Difficult For Teams To Acquire Funding

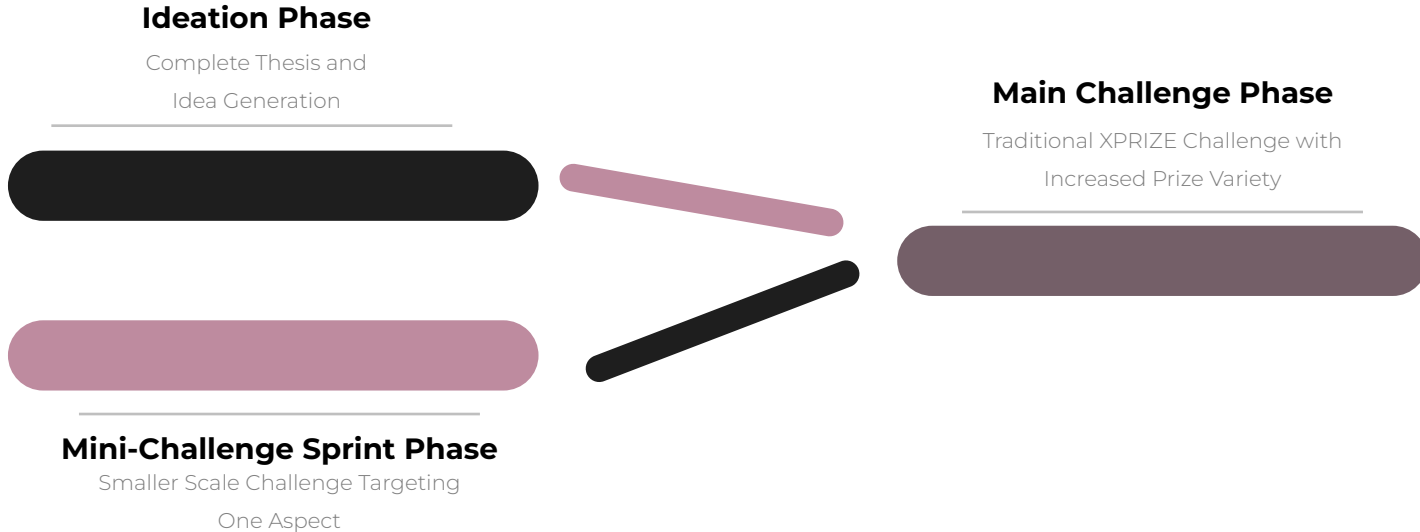
XPRIZE gives competing teams insufficient help with acquiring outside funding or partnerships, and although teams have strong solutions, struggle to acquire funding

High Barrier to Entry

Teams that lack sufficient time or funding are less likely to participate due to the high level of funding and time required to develop a solution

Re-Structuring The Challenge

Splitting The Current Challenge To Target a Variety of Teams



Prize money currently used in the Main Challenge will be distributed across all stages

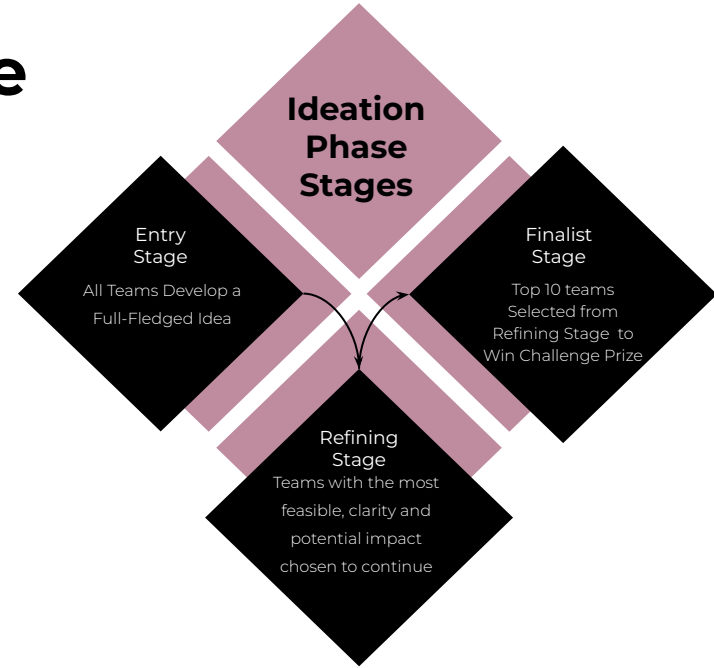
Target: High Schoolers and College Students

Ideation Phase

The **Ideation Phase** will be the first phase of the competition. The phase is designed towards teams which lack significant time or funding to build a prototype/working product.

Registered teams will pass through 3 Stages: **Entry**, **Refining** and **Finalists** stages.

After each stage, prize money will be awarded. Teams who pass the entry stage will have their idea added to a pool of ideas(if choose to not enter the prize) for use by teams in the Main challenge looking for inspiration



➤ End Deliverable

- ➔ Fully Developed Idea which can be applied to the Main Challenge

➤ Commitment

- ➔ Phase will last 1-2 months and requires little to no funding to develop a fully viable solution

➤ Incentive

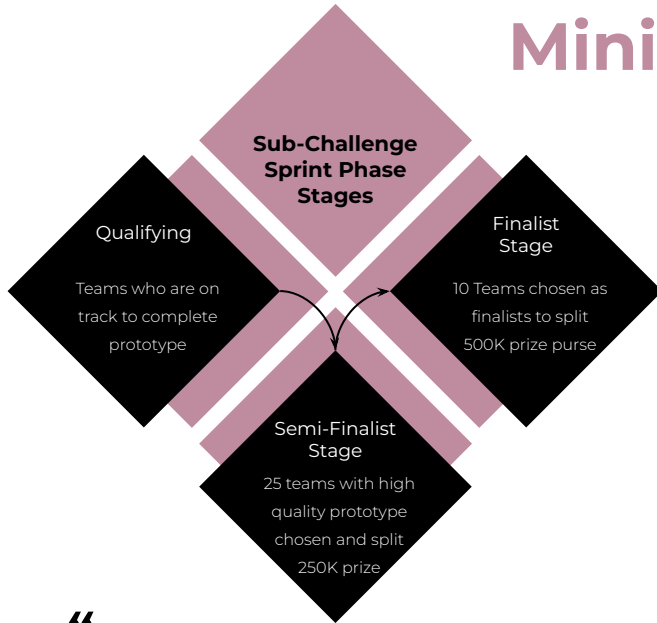
- ➔ \$50-100 Prize incentive given to each team in the refining stage
- ➔ \$20,000 prize purse split among finalist teams
- ➔ Potential \$1000 reward paid by team for idea usage in main challenge

“Coming from a student team from a university that provided us limited resources and funding, having different milestones with incentives would be beneficial to our team”

- Amogh, XPRIZE Global Learning Challenge Finalist

Target: College Students and Young Startups

Mini-Challenge Sprint Phase



“Speaking from the perspective of a full-time university student, having smaller, preliminary sprints would be something I’d participate in. It allows us to foster innovation while eliminating barriers we experienced.”

- Michael, XPRIZE Women’s Safety Challenge Finalist

The **Mini-Challenge Sprint Phase** will occur simultaneously alongside the Ideation Phase. Modelled after the current “challenges” such as the “Next-Gen Mask Challenge”, this phase consists of a **smaller**, less time and monetary intensive deliverable.

The phase will consist of qualifying, semifinalist and finalist stages with teams who pass the semifinalist phase receiving milestone prizes



End Deliverable

- Teams will develop a functioning solution for one aspect of the main challenge goal



Commitment

- Phase will be a 6 month sprint where some monetary funding will be required to develop a high quality solution
- Designed for High School, College and Startup teams who typically have less access to money and are more time restricted



Incentive

- 500K prize purse awarded to finalists
- 250K prize purse as milestone awards

Ideation Phase

A Brief Case Study Into

OPENIDEO

- Idea based competitions
- 2-3 month long sprints
- Funding for winners to implement idea
- Large variety of participants - Small to Large companies, Youth Org., Government Org., NGO, etc.
- On average 200-500 ideas generated per challenge - most teams submit 1 idea

A purely ideation based challenge with a low barrier to entry that is prize incentivized will increase applications from those who feel the current XPRIZE challenges are too time and funding intensive. It is attractive due to its low capital and time requirement. For XPRIZE, we have found that this group tends to be high schoolers, college students and general hobbyists who often don't have the skills to acquire funding.

Thus, by providing this challenge, teams which would otherwise not apply have the opportunity to receive monetary prizes while still giving value in the form of a fully developed idea or thesis. In addition, the increase in participants will drive more teams to participate in the main challenge

Mini-Challenge Phase

A Brief Case Study Into

XPRIZE Next Gen Mask Challenge

- Smaller 6 month sprint
- Smaller prize purse of 1 million
- Competition limited to 15-24 year olds - younger competitive teams
- 992 applicant teams from 76 countries - 1460% increase in teams compared to prize challenge avg of ~68

A smaller, shorter challenge with a more achievable final product gives teams that don't have the extent of funding capabilities or time to participate in the full main challenge a method of participation. For XPRIZE, we have found that this group tends to be high schoolers, college students and startups.

The sub-challenge will allow teams to develop a fully working solution related to the main challenge in a short period of time while raising a limited amount of funding, making it attractive due to its less capital intensive nature. In addition, the increase in participants will drive more teams to participate in the main challenge

Main Challenge Phase

VC/Company Partnership Pitch for Finalists

In addition to a money prize pool, we recommend granting all finalists the opportunity to get funded by a top investment firm or license their product to a large industry player. To enable this opportunity, XPRIZE will partner with a top investing firm or company for the challenge



Angel/VC Funding

- All finalist teams will be guaranteed a pitch to a top VC firm partnered with XPRIZE to gain funding to continue building out their company and product.
- We have found many team's goals are to gain funding to continue their company once XPRIZE is over. By guaranteeing a pitch to a VC firm, teams are enticed into joining the competition.



Licensing/Acquiring Teams

- All finalist teams will be guaranteed a pitch to a sponsor/partner of the challenge to initiate talks about acquisitions or licensing
- We have found that teams desire to license their product or be acquired post-XPRIZE. By guaranteeing a pitch to a company which has expressed interest in acquiring or licensing the technology, teams will be motivated to apply



“For us, gaining those other tools of progression besides funding like having the opportunity to pitch to VCs in addition to the funding prizes would be extremely useful for us”

- Wilson, XPRIZE NRG Carbon Challenge Finalist

“It was an enormous gamble for us. If we had at least an idea at the end of it that there would be a potential buyer waiting, that would have made an enormous difference. That would be the biggest single change that could be made”

- Robert, Qualcomm Tricorder XPRIZE

Application For XPRIZE Carbon Removal Prize

An example of restructuring the competition

VC Partner

XPRIZE partners with an investment firm in the climate space for potential funding for finalist teams. Potential partners include: Black Rock, Climate Capital

BlackRock

Manages ~7 trillion USD, looking to invest in climate change companies



Backs climate change companies, previous investments in carbon companies

Ideation Phase

Teams develop a fully implementable, information-backed idea on how to remove and store 1 gigaton of CO2 per day

Company Partner

XPRIZE partners with innovative climate companies for potential acquisitions or licensing of finalist team solutions. Potential companies include: Tesla, Shell

TESLA

Elon Musk's (challenge sponsor) company, energy and climate aware company

Mini-Challenge Sprint Phase

Teams develop a fully functioning prototype for a part of the process in removing and storing CO2. Ex: Teams develop a safer and more economical method of transporting removed liquid carbon



Heavily interested in climate change and carbon removal

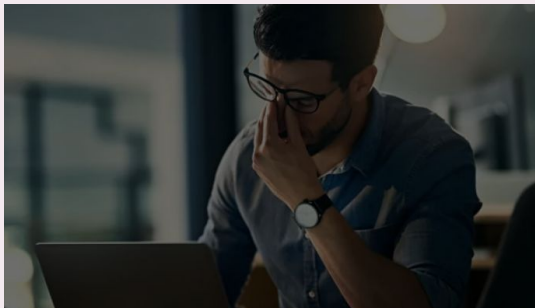


SOLUTION

PARTICIPANT PORTAL

Participants in the XPRIZE Challenge are able to access resources to assist in product R&D, network with other participants and form mentor groups

Current Challenges Teams Face



SENSE OF DISCONNECT

94% of the interviewed teams from previous XPRIZE challenges stated that they felt a disconnection between their team and XPRIZE during the course of the challenge and would prefer to be more actively involved with check-ins.



RESOURCES INACCESSIBILITY

Previous XPRIZE participants, especially with international teams reported that having a single platform or organization that contained all of XPRIZE's resources would be beneficial.



INACTIVE COMMUNITY

87% of previous XPRIZE participants stated that they would prefer that XPRIZE is more community and network based, and active engagement can be fostered between the teams within the challenge.

“I wish we were given the opportunity to speak more to mentors who can assist us during our prototype development and have XPRIZE do more frequent check-ins with us”

- Chris, XPRIZE Water Abundance Challenge Finalist

Portal Overview

Once a team is registered for a challenge, each member will be given access to the XPRIZE platform where they will be able to create a basic profile on their competition category, background and current team.

The participants would be given access to an activity feed page across all participants in an XPRIZE challenge, resources page and mentor pairing and messaging features.



> XPRIZE'S COMPILED RESOURCES

Resources to help with the teams' product R&D including documentation, publication sites, development softwares, prototyping tools, as well as contacts for suppliers, vendors, and contractors.

> ACTIVITY FEED & MESSAGING

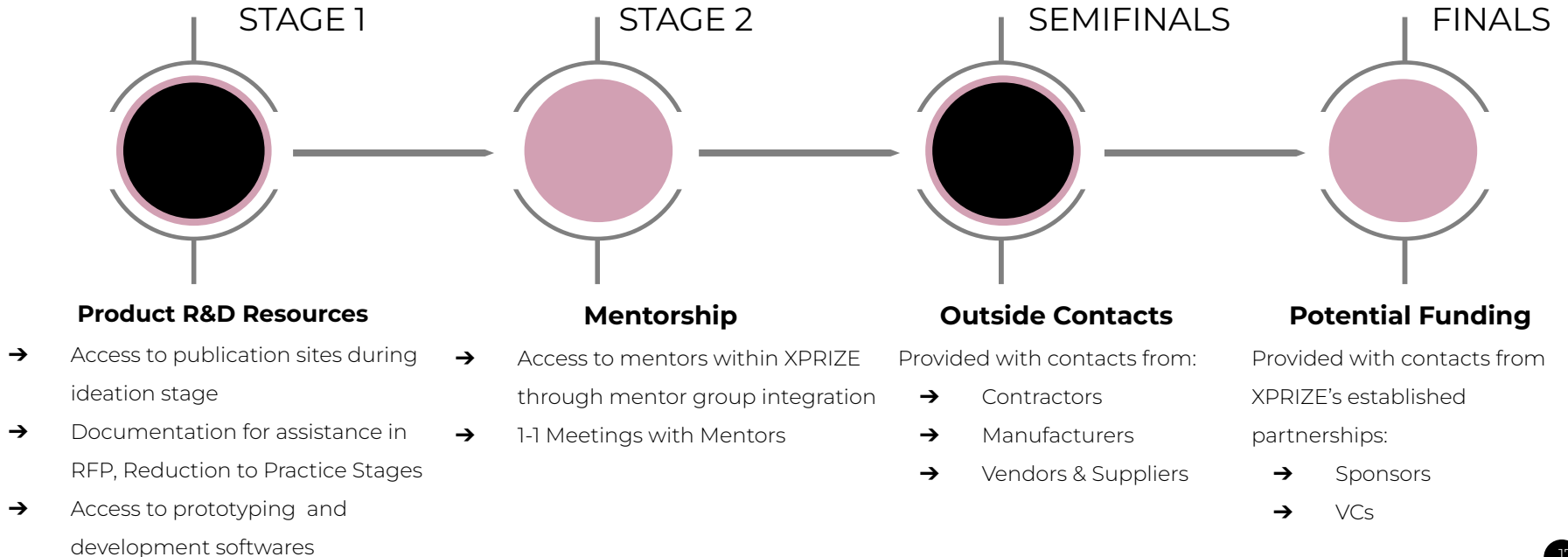
Participants can actively engage with other participants by posting resources, updates, etc and for team formation. Participants can also directly message other participants throughout different challenges.

> MENTOR GROUPS

A matching algorithm within the platform takes inputted tags from XPRIZE'S partnered mentors and inputted tags from participants (mentees) who are seeking for a mentorship. The tags for the mentors are skills they have / can offer and the tags for the mentees are specific skills they need help with. The algorithm will then generate paired matchings.

Resources Page

Depending on the specific stage in the challenge that each team is in, they will receive access to different resources on the platform. As teams advance further into the competition, they will be provided with more resources to assist them with completing the deliverables for that stage.



MENTOR GROUPS



PARTICIPANT REQUEST

Participants in a team will submit tags of the domain that they are working in (ex. carbon capture technology) and technical areas they want guidance in (ex. product development, hiring advice, pitching).



MENTOR SKILL SET

Mentors in XPRIZE will submit tags of their domain experience and areas of skill



SMART PAIRING

A simple algorithm integrated into the platform will create “mentor groups” and a curated list based on the tags from the participants and mentors.

“It would be great if XPRIZE could be more mentorship and guidance focused while maintaining its competition aspect”

- Kat, XPRIZE Shell Ocean Discovery Finalist

TEAM FORMATION



ACTIVITY FEED

Participants within all challenges in XPRIZE will be given access to the platform They will be able to engage in their community by posting introductions, updates, helpful resources, questions, etc.

Participants are also able to onboard for members to join their team or seek for teams to join.



INDIVIDUAL MESSAGING

Participants will be granted access contact information from other participants in the challenge as well as contact information from vendors and sponsors from the Resources Page (if they are in the appropriate stage).

“It would be great if there was more community engagement and we could bounce ideas off of each other...teams merging isn't uncommon.”

- Phil, NRG Carbon Challenge Finalist

Portal Walkthrough - Resources

Participants are able to filter by challenge and contact type

<input type="checkbox"/>	Name	Email	Company	Role(s)	Schedule Meeting
<input type="checkbox"/>	Lindsey Stroud	lindsey.stroud@gmail.com	GE Ventures	Venture Capital	View Availability
<input type="checkbox"/>	Nicci Troiani	nicci.troiani@gmail.com	Carbtrol Corp	Vendor	View Availability
<input type="checkbox"/>	George Fields	george.fields@gmail.com	Erlab Inc	Vendor	View Availability
<input type="checkbox"/>	Rebecca Moore	rebecca.moore@gmail.com	TIGG LLC	Manufacturing	View Availability
<input type="checkbox"/>	Jane Smith	jane.smith@gmail.com	Highland Tank	Manufacturing	View Availability
<input type="checkbox"/>	Jones Dermot	dermot.jones@gmail.com	Sentry Electrical Group, Inc.	Contractor	View Availability

“My team was international so having a single platform that is able to compile all of XPRIZE’s current resources would be extremely helpful...travel logistics were difficult whenever there was an in-person event.”

- Devashish, XPRIZE Women’s Safety Finalist

Participants can schedule 1-1 meetings with the contacts

Resources to assist in the product R&D process are able to be viewed

Portal Walkthrough - Mentor Groups

XPRIZE Portal My Profile

SORT BY
XPRIZE Challenge

My Tags

Product Development Patents Technicals Pitching

Curated Mentor List

<input type="checkbox"/>	Name	Email	Mentor Tags	Schedule Meeting
<input type="checkbox"/>	Catherine Davis	catherine.davis@gmail.com	Pitching Patents Technicals	View Availability
<input type="checkbox"/>	Troy James	troy.james@gmail.com	Product Development Pitching	View Availability
<input type="checkbox"/>	Mason Smith	mason.smith@gmail.com	Product Development Patents	View Availability
<input type="checkbox"/>	Melissa Tran	melissa.tran@gmail.com	Technicals	View Availability
<input type="checkbox"/>	Bryan Cummings	bryan.cummings@gmail.com	Patents	View Availability
<input type="checkbox"/>	James Deere	james.deere@gmail.com	Pitching	View Availability

Page 1 Page 2 Page 3

Participants input tags on specific areas they need assistance on

A curated list based on the matching of tags from the mentor and participant is generated

CASE STUDY: INNOCENTIVE

There are currently over **380,000 users** from over **200 countries** on the Innocentive Challenge Platform.

The Innocentive Challenge consists of an open innovation platform where organizations put their unsolved problems to the crowd to address.

The challenges are focused on the theoretical/ideation stage and have monetary prizes ranging from \$20,000-\$100,000. So far, they awarded over \$20 million.

Innocentive's **mission** is to provide the network, methodology, platform and expert support for the innovative potential of this connected world to be fully realized.



Designing and Developing a Smart Helmet

Electronic Request for Partners (eRF...

Open until 26 May 2021

Award Collaboration with Enel

[VIEW CHALLENGE](#)



Innovative Techniques for the Safe Decommissioning of Fuel Storage Tanks

Electronic Request for Partners (eRF...

Open until 30 Apr 2021

A... Collaboration with Enel, Affili...

[VIEW CHALLENGE](#)



Excavating and Repairing Low Voltage Underground Networks

Electronic Request for Partners (eRF...

Open until 18 May 2021

Award Collaboration with Enel

[VIEW CHALLENGE](#)

Distributed Challenges

Smaller sub-challenges with less deliverables and a smaller time frames from a variety of different subjects attracting and fostering diverse participation from people.

Connectivity Among Participants

Participants in the challenge are encouraged to collaborate and directly make teams on the platform. There is a messaging integration to reach out to other participants.

Ideation-Focused First Steps

1) ideation and theoretical 2) request for approval 3) reduction to practice. The one step at a time approach allows teams to better follow the process.

EXECUTION & IMPLEMENTATION

GATHER DATA & RESOURCES

~1 Month

Gather all XPRIZE's data on contacts with current partnerships and compile all supporting resources to assist in product R&D

HIRE DEVELOPER

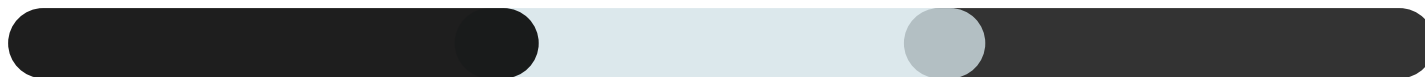
~6 Months

Hire developer to build out platform. Cost estimate: \$20,000

IMPLEMENTATION

~2 Months

Implement portal and make available for participants in all XPRIZE challenges



COST BREAKDOWN

DEVELOPMENT STAGES	ESTIMATED HOURS TO COMPLETE	TOTAL COST
Specifications	30	\$960
Design	25	\$975
HTML/CSS	36	\$900
PHP Development	128	\$11475
Testing	178	\$3026
Admin	29	\$638
SM	81	\$1863

Individual Components

- Document management
- Knowledge management
- Advanced search
- User profiles
- Collaboration tools
- Data feeds
- Data aggregation

Assumptions

For XPRIZE to implement our solution, some assumptions and factors must be taken into account

XPRIZE Has The Ability To Protect The Intellectual Property of Teams

During the Ideation phase, to prevent ideas from being used without proper payment, XPRIZE must have a system in place to ensure that team's ideas are protected from misuse

XPRIZE Has The Capital for Platform Development

The platform containing the participant portal would have ~\$20k development costs. We assume that XPRIZE has the ability to dedicate this cost for the platform development

XPRIZE Has The Ability to Hire Extra People

Due to the fact that two extra stages are proposed to be added, we assume XPRIZE has the ability to hire new people to manage these new challenges

Increased Participation Levels in XPRIZE'S Contacts

Increased involvement from the VCs and mentors that XPRIZE is partnered with will be needed due to the VC pitch competition that winning teams are offered to compete in and the mentor groups.

Dear XPRIZE Team,

We would like to sincerely **thank you** for this amazing opportunity to develop a recommendation for you. It was truly a unique learning experience and one that we have thoroughly enjoyed!

We hope that our solution has been **valuable** and helpful. Feel free to reach out to any of us for any further questions or comments about our solution!

Alice, Gabo, Vikram

Alice Liu



Gabo Zhang



Vikram Menon

