03/09/2019 FEASIBILITY STUDY

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SE-2019-D1 SECTION: D

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Revision History

Revision #	Date	Author	Where Change	Approved by

1. PROBLEM STATEMENT

The goal of this project is to develop a marketplace to connect donors to charitable organisations. Such a marketplace would allow charitable organisations to advertise their mission, and users to find a charity based on causes they support. This platform would also allow charities to advertise their events of social service, and users to register and participate. It will also include a service to automatically flag emergency events and allow charities to start emergency relief campaigns for the same.
Well written.

2. EXECUTIVE SUMMARY

Oftentimes donors cannot find an appropriate charity to get behind or a genuine organisation that will put their donations to good use. There is a need for a platform to connect charitable organisations and causes to the people and companies that can contribute meaningfully to their mission, either through monetary donations or by means of extending service where it is called
for. This platform would serve as a marketplace for charities to advertise their requirements, and for donors to match their goals.

This document covers the current systems and processes in place for dealing with some of these problems. It also proposes a system that would tackle these problems and details the features that the solution would include. Implementation details are also covered in the block diagram and technology considerations section. This document also discusses the customer benefits and potential marketing strategies for the product. Potential issues and legal implications are also listed. Some of the alternative solutions are reflected on as they help bring perspective to the uniqueness of the product. The objectives of this project are also formalised as they help scope the project and define clearly what it will deliver, and by when.

Have explained clearly what is the problem they are trying to solve and a brief summary of what the document contains.
Have not mentioned about the blogging feature in both the executive summary or the problem statement. Its mentioned later on as a feature. Could have been added here.

3. CURRENT SYSTEMS AND PROCESSES

3.1 CURRENT OPERATIONS

This section lists existing platforms that accomplish similar goals -

- **causes.com**

  Causes.com is a campaigning platform that empowers individuals and non-profit organizations to collaborate and take action together. It is a social networking platform that connects like-minded, socially conscious people. Users can create and advertise campaigns associated with a cause, in addition to connecting with other users and organisations that support their cause.

- **FirstGiving**

  The site provides individuals with the tools to raise money or donate to a cause. FirstGiving provides online peer-to-peer fundraising tools to manage events, grassroots campaigns, direct donations and donor communications.

- **Crowdrise**

  In addition to starting a fundraising campaign, giving to one, volunteering or interacting within Crowdrise, you can accumulate points for your activities -10 points for every dollar raised or donated and double points for giving to a featured charity. Top point winners get prizes such as electronics, clothing and gift cards .

  Current operations well written. Three main competitors who perform similar task in a different way.

3.2 PHYSICAL ENVIRONMENT

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Most services of this sort are available as a web application. Several of them come with an analytics platform for users to systematically understand patterns of giving. Crowdrise allows users to integrate their account with a Salesforce account, facilitating the use of crowdrise data for Customer Relationship Management, which is crucial in donation systems involving recurring donors. Some of these platforms rely on a RESTful Web Service Architecture, enabling easy integration into other applications.

Have explained the current software being used pretty well.
Little bit more analysis on the hardware side could have been done to overcome challenges that the team is going to face when they are going to work on the project.

3.3 USER ORGANISATION

These platforms are used by large charitable organisations such as UNICEF, the World Wildlife Fund, American Red Cross, and the like. On the other end, ordinary donors participate by connecting with these organisations to provide monetary assistance. FirstGiving allows peer to peer transfers as well.
Well written!

4. SYSTEM OBJECTIVES

4.1 DESCRIPTION OF PRODUCT AND SERVICES

The primary goals of this platform are to -

- Provide a hassle free mechanism for charities to advertise their mission. This would be made possible through customisable homepages for each registered organisation, as well as a service to allow organisations to blog about their events and happenings.

- Allow charities to start and manage campaigns for resources requirements (donations). For example, a soup kitchen for the poor might require help procuring ingredients. They would use our platform to create a campaign for this requirement. Users of our service would then match this requirement by directly getting in touch with the involved charity. Each campaign will be customisable via an interface that can be used to

    - add custom tickers for progress towards their goal

    - add relevant details such as location/contact details etc.

- Provide charities a means to schedule and advertise events such as a day of social service with individuals or large organisations. For example, a large corporate firm might be able to connect with an orphanage to provide the facilities and man-power to organise a day out with the children of the orphanage. Several corporates do currently engage in such events. This platform would provide an interface for charities to manage these events which would include

    - Adding a list of requirements

    - A way to track attendance of registered users

    - Adding the event to their calendar etc.

- Create a system to auto-track and advertise emergency events and campaigns associated with emergency relief. Taking the example of a flood, our site would have a blurb indicating what the issue is, and also the option for organisations to set up campaigns for resource donations. For extra ample, PES University might choose to be a collection center for relief supplies. This could be registered on our platform and advertised to our users.

- Create a recommendation system that pairs users with charities similar to the ones they usually interact with, or those that match their interests. This system would also include

recommending events to users based on similarity to their event history as well as their interests. A search-by-tag service will also be provided to enable users to find events/charities with pre-defined tags as well as by location.

- Integrate a calendar for users and charities to log upcoming events.

Mentioned about the different functionalities that are going to be considered.
As an add-on, can you create a feature that lets users ask one of these charity organizations to post a particular cause(Since users wont be able to post any events?)

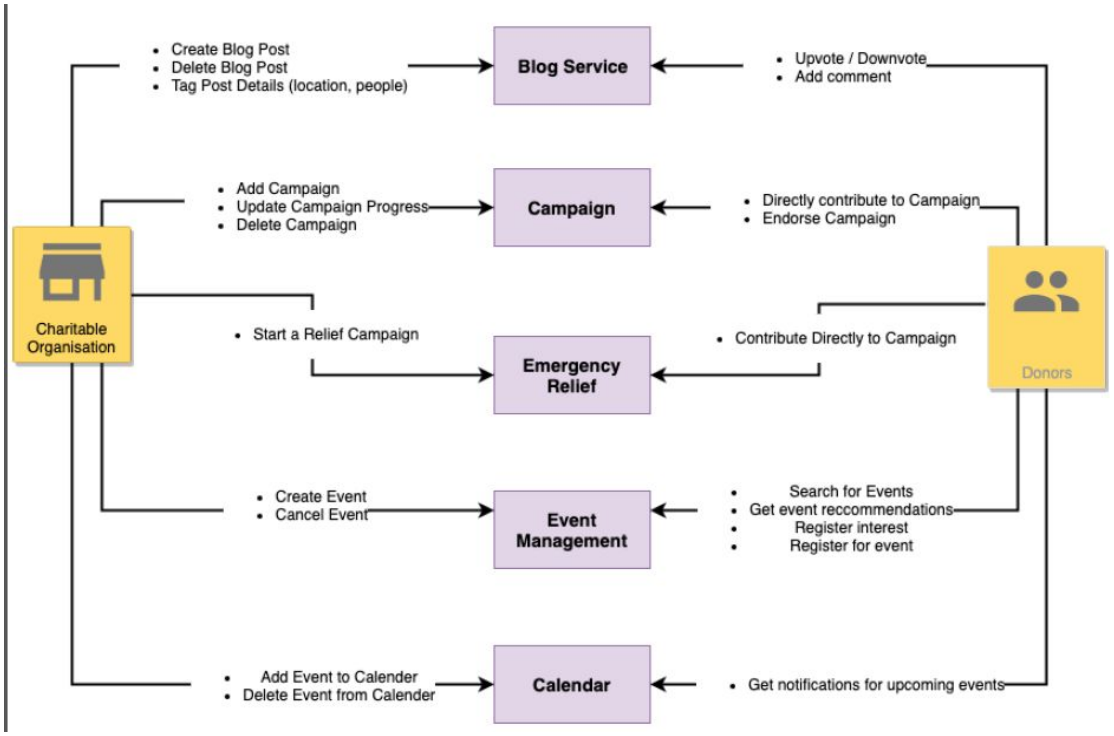
4.2 HIGH LEVEL BLOCK DIAGRAM

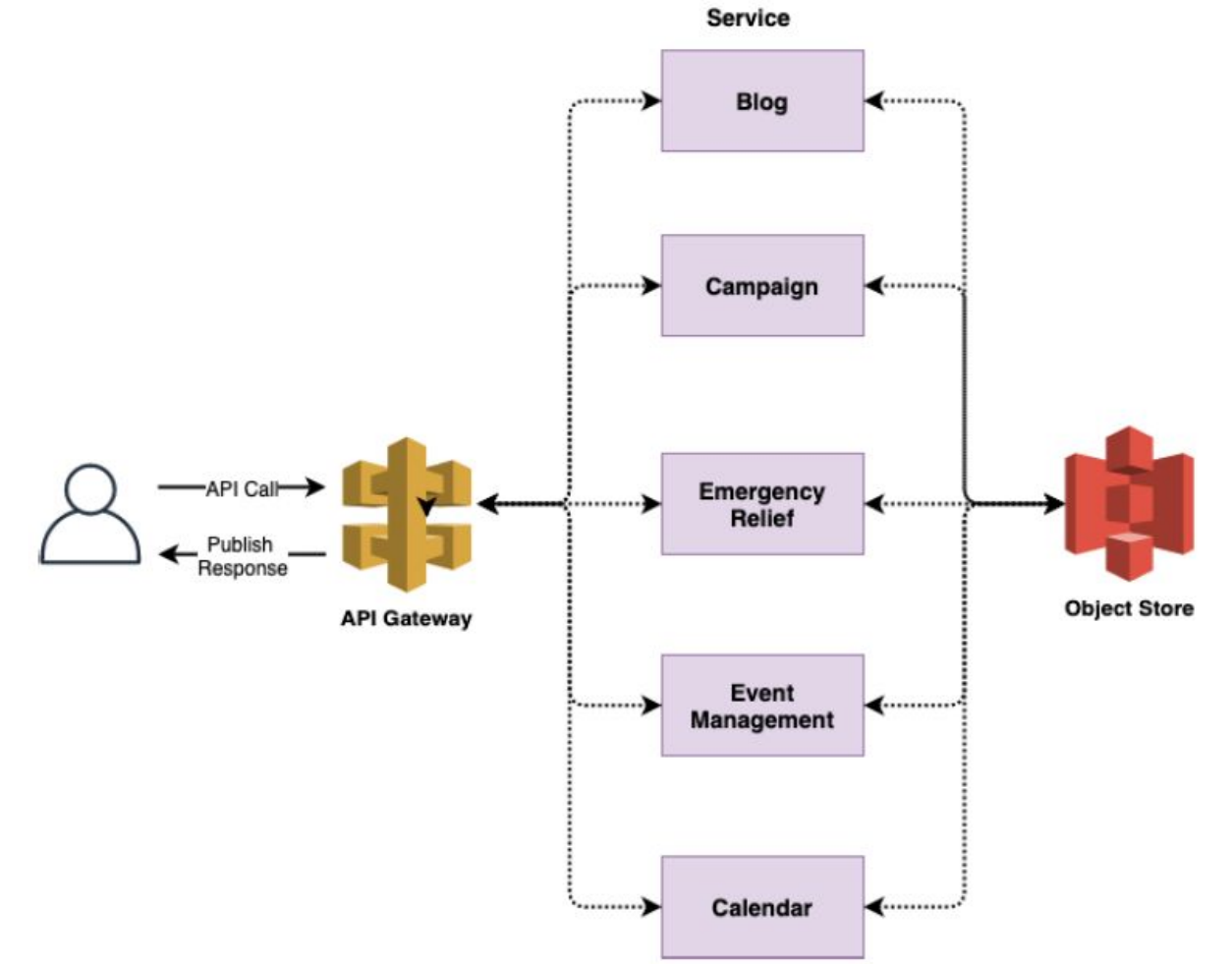
This section details the primary services and operations this platform supports.

NOTE: Prior to engaging in any of the available services, an organisation wishing to register with us, must go through a vetting process to determine their genuinity. This process requires the organisation to submit the appropriate documentation required to prove their legitimacy. These documents would then need to be verified by personnel from our organisation. Once this vetting process is complete, an organisation may engage in any of the below outlined activities/services.

A user requires no such verification, since no transaction, monetary or otherwise, takes place via this platform. All transactions are carried out directly with the charitable organisation in question.

If the user is not verified does it mean he/she can create more than one account?


Create Blog Post
Delete Blog Post
Tag Post Details (location, people)
Blog Service
Upvote / Downvote
Add comment
Add Campaign
Update Campaign Progress
Delete Campaign
Campaign
Directly contribute to Campaign
Endorse Campaign
Charitable Organisation
Start a Relief Campaign
Emergency Relief
Contribute Directly to Campaign
Donors
Create Event
Cancel Event
Event Management
Search for Events
Get event reccommendations
Register interest
Register for event
Add Event to Calender
Delete Event from Calender
Calendar
Get notifications for upcoming events



4.4 TARGETED CUSTOMERS AND BENEFITS

This platform primarily aims to target charitable organisations and causes which are in need of advertising and discoverability. Enabling these organisations to register an event and advertise it on a common platform would vastly improve the kind of exposure and attention they get from potential donors. This would also serve as a medium of communication where they can publish the outcomes of an event that took place. The events could range from fundraisers for orphaned kids, to teaching drives or even environmental causes like tree planting drives, Swacch Bharath etc.
This platform would also help people and corporate firms to find a cause that they would like to get involved in. For example, a company might be on a lookout for a social cause or event where their employees could take part in a cleaning drive. This activity could be shared on an embedded blog on this platform as it would improve their social image.

Organisations can verify participation of users in events and regular participants could be

awarded a certificates/badges of appreciation that they could flaunt on their resumes. This would really encourage a spirit of social service amongst individuals and organisations alike.

Very well written about their targeted customers and benefits.

Could have included a little more about users. Might be large companies that want to donate could have been listed?

4.5 TECHNOLOGY CONSIDERATIONS

- This application will rely primarily on HTML, CSS, JavaScript, Bootstrap for Front-end. This may be supplemented to some extent by a framework like ReactJs and jQuery.
- We will use MySQL as our database and Python as our backend language.
- Python will use either Flask or Django as a backend framework. This will also enable us to package all our files into a consolidated package.
- RSS data will be sent over as XML files which will be parsed at the front-end. We will write REST APIs to retrieve and transfer data between client and server. We will rely on the microservice architecture for this.
- User data and passwords will be encrypted by hashing algorithms like SHA256, B-Crypt etc.
- Data will be loaded dynamically over the pages, requiring us to employ AJAX methods to perform these tasks.
- We will need to develop specialised software to create our forums and comment threads.
- Creation and handling of events as well as a CMS (Content Management System) with Dashboard to help users track and modify their events.
- Badge systems and Rating System has to be developed.
- Calendar system to mark relevant dates and events.

Have mentioned all kinds of technologies that needs to be used in a very systematic way starting from front end, database and backend.

Why SQL?

The last few points the technology that is going to be used isnt clear. For example for calender system or the badge and rating system.

5. PRODUCT AND SERVICE MARKETPLACE

The current platforms that exist for connecting potential donors and charities that are raising

money for a cause include Causes, Crowdrise, and Givey. These platforms all provide a means for both charity organizations to advertise their cause and donors to browse and contribute to these causes. These platforms are predominantly used to endorse large and ongoing problems such as poverty and lack of education. It is reported that disaster relief fundraisers do not attract recurring donors, and that although there is swift response, the response is short-lived. In a study done on the hurricane Harvey, recurring donors had a lifetime value of $893 on average, compared to a lifetime value of $129 for one-time donors. **What the current marketplaces for charity lack is the ability to continually provide attention to localized disaster events, especially those that are past the initial stage.**

Our platform will include the standard features of a charity platform, that will let the donors and non profit organizations link, but will also factor in live updates of potential disasters/immediate situations that are in requirement of monetary relief. This would give a higher chance for faster and more consistent fundraising for emergency events, while still letting ongoing problems (poverty etc.) gain enough traction. This will be ensured by coordinating with top charities automatically in the event of an emergency by means of email.

Our platform will also prioritize localized help and management of donation centers. This will be key to reduce the time taken for the donated articles to reach the disaster site. Physical articles such as clothes and food could also be donated by the donors with this feature.

Clearly listed out why this problem is important i.e continual support.

The various organizations mentioned in 3.1 could have been added here and as a whole it could have been mentioned in the current operations.

6. MARKETING STRATEGY

This product will be marketed primarily by partnering with charities, advertising across the web, word of mouth and leveraging periods of disaster to advertise out emergency relief services. The following lists possible approaches to marketing the product -

- Leverage the reach of social media influencers and social media advertising to advertise the platform
- Partner with large, well recognised charities to garner trust and a high reputation among prospective organisations considering our platform, and users considering using our platform
- Our proposed feature of maintaining a record of people's good deeds, adds value to existing solutions in this arena. Doing so serves both as a badge/certificate of their work, as well as a bank of memories. This significant value-add, and our first-to-market advantage with this feature will make promoting the platform easier
- Leverage times of disaster to advertise the platform on social media, as well as via

organisations that have started emergency relief campaigns via our platform

● We could also be promoted by schools during their annual charity programmes by allowing students to register and mark their donations on our platform. This would increase the number of members as well as start documenting their contributions from early years. Should they want to continue with their charity work down the line, their previous work would serve as a landmark for them.

● Potential sponsors of philanthropic events (marathons, galas etc.) can use the history of the organisation soliciting their help to determine whether or not the organisation is to be trusted. We could provide this data in exchange for some advertising real-estate in said events.

Well written. Mentioned about social media, word of mouth, advertisements and many more

How is this platform different?

● Charity websites are extremely commonplace and everyone knows some of the big charities like WHO and The Red Cross, but people normally have to look up these websites individually and have to search for other charities as well. How many charities can you name off the top of your head? We eliminate this problem by consolidating multiple charities on our platform, thereby allowing people to choose a charity of their choice.

● Our service provides smaller, lesser known charities with the opportunity to voice their mission and their campaigns. We propose a system of reviews and ratings so that donors may rate their experience with lesser known charities, thereby providing a basis for new users to decide whether or not a given charity is right for them

● We also aim to provide a system to automatically alert participating organisations of ongoing disasters, so that they can pioneer relief campaigns, as well as direct donors to contribute towards these campaigns as well

● We also aim to improve participation in charity drives by documenting and advertising donors' efforts in charitable areas, thus providing an incentive for their good deed as well.

● We also propose a system of location and interest based recommendations of events of social service, so that people may engage with their communities meaningfully. Cleaning parks, planting trees and awareness campaigns all require a mass group of people to be physically present and we aim to improve that statistic through this feature

Could have mentioned this in the Product/Service Marketplace section to indicate what's new in your website.

Target groups :

The target audience varies based on the type of charitable activity at hand, but primarily we can break them up into categories for all age groups.

Younger Children : If promoted by schools (as most schools do), we would be able to enlist students and familiarise them with the charity process, as well as give them a platform to store their charity achievements for future use. Clothes, books, toys and other relief items can be provided by them at their school for collection. They would also be inclined to notify their parents who would become a part of the target audience (stated below).

Young adults : College students and the like are more inclined towards charitable causes and would likely be interested in contributing more. We would once again document this process and store them online, while raising awareness to them for other charity events as well. They would be part of actually organizing the events as well as being able to collect the relief items or other things from the aforementioned schools.

Adults : While mostly time strapped and busy, adults could contribute monetarily through us, as we'd provide a simple consolidated platform for them to be able to donate to a charity of their choice. We would only link them to the charity donation page and as such remove the doubt of us consuming any portion of the donation ourselves.

Again could have mentioned this in the targetted customers and benefits section

7. Organisation and Staffing

In addition to the team of designers, developers and testers the following personnel are crucial to the smooth operation of out service -

- Certain processes are not amenable to automation, such as verification of partner organisations as genuine, trustworthy. Verification personnel are crucial to the process of identifying and approving potential partner organisation as genuine.
- In the event of legal trouble, such as the posting of events or campaigns that are not genuine, we require legal personnel at hand.

The manual verification of partner organisation could be tedious. You can think of automating this similar to how KYC is done by many platforms such as Paytm, Amazon etc.

What about staffing for maintaining the website,database managers?

8. SCHEDULE

Week 1 - Complete feasibility report, get reviewed

Week 2 - Make decision on Software Engineering Approach to be used

Week 3 - Finalise design and technologies,divide work amongst team

Week 7 - Complete implementation and begin integration of developed subparts

Week 8 - Complete work integration, test product

Week 10 - Fine tuning

Week 11 - Final deployment of product

Very high level overview and few of them are deliverables that are already expected. Could have looked at it as when the database population will be completed. What all features will be done in a particular week etc.

9. FINANCIAL PROJECTIONS

Since the platform is a not for profit entity, it would be unethical for the platform to make money from the donations themselves. Keeping this in mind, the financial projections need to account for revenue through ads being the only source of inflow to make up for the initial investment and operational overhead. Another potential source of revenue could be through partnerships with donor companies that would sponsor the platform to support its further development and operational costs.

The cost structure includes:

- Staffing requirements
- Insurance costs
- Contract support for IT and training needs
- Web server and hosting costs.

The Revenue Stream projections are as follows:

- Earnings through Google AdSense: $1 to 1.5 per thousand impressions

Written about a possible way to earn money and where they will be spending money.

Costs for Webserver hosting could have been written in a tabular way on an yearly basis.

10. ISSUES

There are numerous challenges that our donation web platform must overcome in order to gain the amount of impact that we envision. The first and most important of the problems is persuading and convincing the masses that the platform is trustworthy and genuine. Without gaining the trust of donors and convincing them to become regular users of the platform, the website will be unable to make a major contribution to the charitable causes.

There also exists the problem of persuading charities to take up social issues based on our automated mechanism of disaster detection. Although the platform will make an automated effort to communicate with charities to lead donation efforts for the disaster, there exists no
tangible incentives for the charity to do so. Whether they choose to support a cause is solely to their own discretion, and the success of our platform depends on the assumption that they do.

Barring the credibility of the website to both the donors and the charitable organizations, the website needs to generate some form of revenue in order to at least sustain itself. This is a challenging issue, as it directly contradicts the non-profit cause of the platform. However, certain targeted advertisements can be a source of revenue without seeming like intrusive, profitable sources of revenue.

Well written!

11. Assumptions and Constraints

11.1 Operational Life

Our application is expected to be up and running almost all the time due to the constant need for social services as well as the fact that a national emergency could be declared at anytime.

However, this is obviously not feasible as we need downtime for maintenance, and to achieve this we aim for the **five nines availability** (99.999%). High availability of services, where downtime is less than 5.26 minutes per year. To achieve this we will use Cloud services and allow auto-scaling to take place, so that during periods of great emergency, our website will not cave-in to the number of incoming requests. We also would implement failover in the event of a

system crash and track it with Kubernetes.

11.2 Date new system is required

There is no particular date as to when the application is supposed to be up and running. Tentatively, the application should be up and running within four to five months from present day.

Our goal is to get it up as fast as possible and in the best possible conditions to start helping out with causes almost immediately.

11.3 Interaction of proposed system with other systems and organizations

The system should slot in perfectly well with pre-existing systems in other organizations due to the fact that we are not taking over any of their roles. Our system aims to utilize data provided for public use from the websites.

The emergency alerts are property of the United Nations and are in the public domain. This data will be consumed by us in the form of RSS feeds which already exist in the form of XML files that can be read and used conveniently.

11.4 Financial considerations including development and operational core costs

All of our Cloud services will be running all the time, therefore all costs mentioned below are monthly on the assumption that they are on all the time.

EC2 Instances

Since we require at least two EC2 instances (for around a 1000 requests/s).This will cost approximately **$19.04/month.**

Elastic Load Balancer (ELB)

This project uses 2 Elastic Load Balancing balancers transferring ~10 GB a month. This will cost approximately **$36.68/month**.

Amazon S3

Amazon S3 provides a secure, durable, and highly-scalable cloud storage for the objects. Examples of objects you can store include HTML pages, CSS files, images, videos, and JavaScriptThis project uses 10GB of object storage per month on Amazon S3. This will cost approximately **$0.30/month.**

Therefore, we anticipate our monthly expenditure to be around **$56.02 or 4018.87 ₹ per month.**

Listing this in the financial projection would be better.

11.5 Legislative and policy mandates or issues

In terms of legislature, we will personally not be handling any fees or donations (other than those meant for us). We do not and will not be middle-men for transactions. All transactions strictly will be with the donors and the charities themselves.

A few issues that may concern us is providing a platform for charities to grow. This means that charities can be formed on false pretenses and can lead to either scamming or bogus events. As such, we will not take any responsibility and instead require people to thoroughly read up on the charity as well as look at past ratings to confirm their validity. Personally, we will do our best to remove bogus charities and pass on any scams to the police departments.

All charities however, will be required to provide either suitable identification, be endorsed by a well known public figure or recommended by a professional or notable charity. Failing which, they will not be granted permission to create or promote any events.

11.6 Changing hardware/software/operating environments

Since our entire project is web hosted, we require no hardware or operating environment changes.

Software will change based on the quality of new software that comes out. New frameworks, Amazon services etc. will be factored in during maintenance and future upgrade sessions. The base underlying hardware however, will be solely reliant on AWS.

11.7 Availability of information and resources

All of our information will be provided by the charities when they sign up with us. Considering the whole idea behind charity is to get the information out as far as possible, we should not have any issue both in taking data as well as using it.
Our real time emergency service relies on RSS feeds hosted by the UN which is in the

public domain.

Any extra information on events will be generated by the people who set up the events and they themselves will tell us what and how they intend to go about their event. Beyond this, we require no other extra information or resources.

12.
ALTERNATIVES

12.1 Continue with Existing System

The existing system would be to let donors manually search and find causes/charities that they could donate to. This would involve the donor having to browse the internet for causes to donate to, and then finding appropriate charities that support the cause. Then they must get in touch with the charity and proceed with the donation procedure. For smaller localized issues, it would be hard to find trustworthy charities in the locality of the donor as large charities do not focus on smaller, acute issues. Our platform will connect donors to trustworthy charities and encourage those charities to support small, localized causes as they occur.

12.2 Online Charity Portal (with Payment via Platform)

A charity portal where all monetary donations go through the platform would be an alternative to our current proposed solution. The donations in this alternative would be handled by the platform, and given to charities or causes. This would help in regulating and monitoring all monetary transactions, and can be used to identify and hold fraudulent charities responsible. This however comes with its own downfalls, like cost to maintain the money transactions, cost to delivery of goods and articles, and there must be preventive measures taken to ensure that the platform does not have legal exposure. As the platform is intended to bring together non-profit organizations and donors, the capital required to maintain such a service would be much higher than what can be expected via small ad revenue etc. There is also the added limitation that donors would be reluctant to donate money to a third-party platform, and it would be difficult to prove the platform's trustworthiness.

Well written!

13. Findings and Recommendations

13.1 Project objectives

- **The features provided by our application:**
    - The donation aggregation platform is being designed for donors and charities to

interact in a hassle free manner.

○ Registered charities and non profit organizations providing relief can post their requests and events on their customized home page.

○ Donors can find charities,campaigns and events that they may wish to support with ease. Since a recommendation system is being built to match donors with charities that they may have an interest in supporting it becomes easier for them to make decisions and donate.

○ In addition, people who work in corporate organizations and others can use this platform to discover events for which they could be volunteers.

○ A system to auto-track and advertise emergency events and campaigns associated with emergency relief

○ There is a calendar by which users and organizations can log events and be notified when events.

○ Users can discuss and review events on each campaign listing, along with rating their experience post event.

○ Up and coming charities or people who would like to host an event can also create events provided they have been thoroughly vetted and have the required certification.

○ QR scanners will be provided on-site for tracking and identification as mark of attendance for social service events scheduled by charities.

○ Users will have badges marked as per their involvement in each event allowing them journal their experiences with charity events.

○ Recommendation system to suggest potential events to users.

- **Assumptions ,constraints and issues:**

○ The platform will need to be maintained and updated on a regular basis. Registering charities and providing donations should be done in a cost effective manner.

○ Will need to verify records of all registered charities and non profit organizations and make sure that they comply with the laws and policies and have the necessary documents and permits to carry out their activities.

○ Will need to interact with representatives of these organizations to receive feedback,make changes etc.

○ Building a platform that will scale to support the increase in user load especially during serious emergencies.

○ Not all donors wish to share their data. Also to build the recommendation system we may need data to train our machine learning models to perform data analytics that may not be publicly available.

● **Technology:**

○ The application is going to be hosted on the cloud and hence this reduces hardware infrastructure requirements. We will be sharing the hardware infrastructure risks with our cloud service provider.

○ We will be utilizing existing technology which lowers project risk. We will be using open source libraries and APIs ,so any issues that these libraries or APIs have will affect our application.

○ Once in place this technology is simple to operate and maintain for a relatively low cost

● **Marketing:**

○ The platform allows smaller and lesser known charities to be visible to the donors.

○ It allows donors to find causes that they wish to support with ease.

○ There will always be people who want to do good and help out and this platform is just the place for them to interact with various kinds of charities and help when needed.

○ The platform differentiates itself from other similar products currently available in terms of how it is structured. We act as an umbrella for all charities to advertise themselves and their requirements.

○ The user efforts are monitored and documented ,this will improve participation

○ All age groups can to some extent identify the need for charity, and hence anyone can be a participant.

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● **Organizational**:

○ Capital investment will be needed for registering and maintaining hardware infrastructure on the cloud.

○ From the organizational standpoint there is a minimum staffing requirement for maintenance of the application and to perform certain tasks like verification of organization before registration and so on.

○ A legal team to handle possible issues and proof-read terms of service etc.

- **Financial**:
    - ○ Being a charity, financing is not our primary concern as we do not stand to make any net profit. However, money is required to run the cloud platform.
    - ○ We can receive money through
        - ■ Donations
        - ■ Money through Google Adsense
        - ■ Money from endorsements.
    - ○ We require money for
        - ■ Staffing and IT professionals
        - ■ Maintaining the cloud platform and future updates and patches
        - ■ Insurance
        - ■ Attorneys for legal purposes

- **Significant risk factors**
    - ○ **Legal** : While the charities and their representatives can be verified before allowing them to use our platform, it does not always guarantee their authenticity. There could be legal issues associated with this.
    - ○ **Technology** ; In terms of technology our platform is a web application hosted on the cloud. The team may need to learn some new tools and technologies. This could cause minor delays.
    - ○ **Security and privacy**:Keeping track of the donations and donor profiles on a third party database could be a privacy risk.(not sure about this)

- **Feasibility recommendation(s)** :

○ Based on the findings of the feasibility study it has been observed that building a donation aggregation platform is useful and is feasible. It is recommended that this donation

aggregation platform be approved and the project is initiated.

○ It is beneficial to everyone and there is a strong need for such a platform

○ It promotes a good cause and encourages all age groups to participate; even from a young age.

PROJECT PLAN

1. **Deliverables of the Project**

Final Deliverable - A working web application that allows charities to connect with donors

a. Customisable homepage creation for registered charitable organisations
b. Campaign Creation and Management service for registered charitable organisations c. Social Service Event Creation and Management service for registered charitable organisations d. Disaster detection and advertisement platform e. User profile creation

and networking to log events and donations for individual

users f. Recommendation system that matches charities to donors g. Search service to find charities and events based on user's interests and location h. Calendar to log events created by charities and reminders for events users have

signed up for

2. **Process Model which you intend to follow**

Agile Approach to Development - We choose this approach for its advantages in development in stages, continuous interaction and integration, and quick and incremental development of the final product

3. **Identification of the upstream-downstream partners needed for the product**

Upstream partners would include charitable organisations which could give us some feedback on what kinds of features they would benefit from. These would help us shape the product in a way most suited to the problem that it intends to solve.

Downstream partners would be the charitable organisations that would use the platform after its development to advertise their causes and attract donors. Donor customers and corporate donors would also constitute the downstream partners as they are crucial for a platform like this to see success in terms of its adoption.

4. **Resources needed for the project/product**

Will need access to a cloud service like AWS or Azure to host the web service. Will also need to make use of existent RSS feed APIs for disaster identification. This might entail some licensing/fees. The project will also require some exposure to charitable organisations to understand how the system can be built to suit their needs. It is important that the platform brings as less overhead to the organisations/causes as possible as that would improve its usability in the long run.

5. **How are you organizing your team in the project**

The agile model is prescribes that a project be divided into several smaller tasks that incrementally build up the final solution. These smaller tasks are taken on by teams of a commensurate size. We will leverage the skill-set possessed by each member on the team to build smaller teams each of which is equipped with the right skills to take on the

tasks assigned to said team.

6. **Standards-Guidelines-Procedures**

   In order to maintain seamless integration of the several components of the product into a consolidated whole, it is imperative to ensure that each component has a well defined interface, and is up to the mark in terms of readability and simplicity. The former is dealt with by agreeing upon standard specifications for such interfaces, while the latter is handled by employing code linting tools, and code reviews.

7. **Communication Mechanism**

   In order to communicate across teams, we will employ a communication mechanism similar to Agile boards. Since solutions like JIRA are unavailable to us, we will employ a similar format of planning and reviewing on common spreadsheets, as well as through weekly discussions on progress and planning.

8. **Risks**

   This project does bring with it a few risks which are to be kept in mind. Primarily, it is crucial for the platform to find a legal middle-ground wherein donations or services merely go through the platform but no money is brought into the platform itself. This is especially important because it it posed as a social product.

   Another risk is the operational cost that needs to be taken care of considering the lack of any robust monetisation policy. The fact that the only source of reliable revenue is advertisements means that operation costs must be kept as low as possible. If operating costs are higher than the revenue the product makes, it will not be sustainable.

9. **Quality Criteria**

   The measure of quality of the finished product will be its complete functioning in a deployed state. It must function as intended in all scenarios of its deployment and must not produce any bugs that would bring down its usability in any way.

10. **Work Packages**

The work packages would broadly include
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- Searchable web interface for viewing donation drives/ social service activities - UI for charitable organisations to blog about their events/drives - including details like date, location, category, capacity, needs etc. - Web interface for event registration - FAQ pages associated to events being hosted - Automatic Disaster identification system - UI for blogging about the results/outcomes of an event that was held

11. **Budget and Schedule**

The budget roughly amounts to around **$52** per month with respect to the AWS cloud platform. Besides that, some basic capital investment will be provided by us, and we would be willing to go up to **$200** as a starting capital investment or around **1400** ₹ per person**.** Which is roughly 4 months of Cloud data, after which we expect the website to be self sufficient.

Schedule :

Week 1 - Week 3 : Research, constraints and features

Week 3 - Week 7 : Prototyping and implementation of features along with work division

Week 8 - Week 10 : Complete integration, test products and fine tuning

Week 11 - Final deployment of product

12. **Delivery means**

The finished product will be delivered as a deployed web-app with all of the functionality as detailed in earlier sections. It will be accessible via a link that will be updated here as and when it is complete and hosted.