DifferenceMaker Idea Challenge Idea Plan

**Project Title (50 words or less)**

*Affordable Parcel Tracker*

**Project Concept (200 words or less): Provide us with a brief summary of your project.**

1. Describe your project and the problem it addresses.

Parcel delivery companies such as have transformed retail as they have made it possible to deliver goods to almost anywhere throughout the world. They have also helped businesses gain clients and improve distribution. As a customer, when we use postal service, we face a lot of inconvenience such as the packages are lost or the customers aren’t alert enough to know if the mailman knocked the door and it also mails cannot be tracked in real time.  We did a survey and we found that around 22% people said USPS lost their package, 12.5 % said UPS lost their package, 32% said other courier companies while 0% voted for Fedex. This issue increases on a very large scale when we consider developing countries.

For example: In India, this issue is so terrible that the third party insurers for packages won’t insure the packages going to India. Henceforth, We would like to build an affordable real time parcel tracker to solve this problem which will track your parcel and send the exact location to you.

**Problem (200 words or less): Provide us with a detailed summary of the specific problem you are looking to solve.**

1. What is the specific problem that your project is going to solve? (e.g. hard to afford/expensive prosthetic devices)

Today’s rate at which clients do call the tracking agents and also the rate at which clients visit the courier company office to confirm the status of the parcel they sent through the courier company is too high . At times, the courier company may not be able to say precisely whether the parcel has been delivered or not due to inadequate means of communication to the company while on journey and secondly, it is more prone to error due to data lost. The data entry and validation aspect of the old system are done manually, the system use the data entered as the basis for the tutorials schedule while all documents given to the clients are generated from the data collected and result of processed data for use. This process is often associated with high-levels of manual processing, limited tracking visibility and henceforth, resulting in poor customer service. Also, In critical condition such as when a delivery vehicle is stolen with packages, one is confused as to what can be done if one has something expensive and he wants to check it regularly. Out system will overcome this issue by making it convenient to the customer to track their packages in real time without paying a huge sum for the services provided.

**Opportunity (800 words or less): Demonstrate your knowledge of the actual opportunity associated with your project. This includes numbers and market research/data on how many people are affected by the problem you stated in Section 1. Clearly discuss any research you conducted, including:**

1. Data on real-life people/customers you have talked to, interviewed, and/or surveyed who are actually affected by the problem or could benefit from your proposed project solution that you stated in Section 1 (e.g. 10 doctors about a new medical device)
2. Is there another organization(s) or business(es) doing something similar to your project? If so, who are they and what are they doing similarly?
3. Online research, numbers, databases and articles you found that supports the need and demand for your project
4. Why is your project better/different than there’s? (Competitor Analysis)

A. We did a survey and we found that 25% people said USPS lost their package,12.5 % said UPS lost their package, 32% said other courier companies while 8% voted for Fedex. Also on personal note, We and Our friends had delivery problems many times. My friend ordered a computer online and the postman try to deliver the package and ask for a sign, but my friend in the second floor and cannot hear the postman, finally he missed his computer. I have bought a jean online it’s showed delivered but I can’t find it near my mail box after the merchant send me another jean. Because of this reason, I think it is a common problem that everyone undergoes every now and then. Also, it is important to mention that the issue’s scale increases exponentially during the Holiday season. One of the main reason being the sheer amount of orders that are placed during that time and the amount of those orders that are handed over to the postal services. For consumer it’s convenient to know where the parcel exactly is and we can receive the package as required. For merchant and post service, this can reduce the cost of the deliver problem.

B. Direct Parcel Distribution (DPD) in Germany has real-time parcel tracking, Hanhaa ParceLive is another company that is providing parcel tracking.

C. One of the surveys carried out in Australia against a national representative group of 1025 australians had around 50% of them having a problem with professional parcel services. Most of them, around 24% had received a parcel notice saying “no one was present at home” even though there were people in the house, around 23% had an issue with package delay, around 14% had an issue with missing packages or packages being lost and around 11% found that the packages were left at vulnerable position. On the other hand, in the United States Postal Service had come up with an approximate of nearly 4.7% of their total packages was lost in the year 2010. Taking into consideration that USPS processed around 171 billion packages in the year 2010. The amount of lost packages can be calculated to be roughly around 8.037 billion packages, which is a huge sum when we considered the fact that the entire people of United States of America uses this postal service.

D. One of the above mentioned postal service is only valid in Germany and cannot be tracked elsewhere. Regarding the other package service, we would be making our product affordable by only using the essential components for tracking and also collaborate with postal agencies for mass production. Also, we would be mainly concentrating on the different postal services in the United States of America and we would be branching out in the next 4 to 5 years.

**(800 words or less): Describe the solution you are proposing to the problem you addressed in Section 1. Please support your claims.**

1. Clearly describe your proposed solution (e.g. low cost prosthetic limbs)
2. How does this specific solution solve the problem you stated above?
3. How is your solution new, innovative and/or unique?
4. How will your solution be sustained over time? Please provide details and be clear. (e.g. Will you work on it after you graduate? Pass it off to someone else? How will your idea continue on in the years to come?)
5. What stage of development is your project in? (Idea stage, prototyping/testing stage, raising funds stage, ready to launch stage)
6. Why is your project valuable? What value does your solution provide? To who? (Value Proposition)

A. We develop a container consisting of a pressure sensor and a GPS tracker that holds the package, the container has a pressure sensing pad on top of which the package is kept. The pressure sensor senses whether the package is within the container and sends the exact location of the package to the user, whenever the user makes a request over Internet/SMS. The device is provided supply through a battery pack that can be charged wirelessly.

B. For the device cost we prefer rent rather than buy. When the device is rental we can update the quality and the performance and it’s easy to maintain. The postal service and the merchant can cooperation to buy the device and hold a deposit of customer to rent. And it’s can add a little rental fee to the device, it’s depend on the customer if they chose the parcel tracker and it’s concept can think as insurance.

For the maintain of the device, we can use wireless charge to charge the device and the postal service can built a wireless charger station on each check point to make sure the device work properly on the journey.

C. It’s realtime and accuracy to know where the package is. For the customer it’s easy to know the package location and won’t miss the postman in case the package is lost it’s easy to trace back. For the merchant and postal service it’s can efficient reduce the cost of deliver problem, if the device used for a long term there is no cost even can make some money through rent.

D. First we built the product include the hardware and software. For the hardware we can search the existing product and do some research and update it. After that we can develop the corresponding software. When we make a simple demo we can market the product to some company.

E. Our project is currently in the Idea stage, as we are conceptualizing the entire product and the way it is supposed to be working.

F. This product can solve the issue of packages being lost and therefore help the merchants and the consumers receive a better quality of service from the package service providers. This project is therefore helpful for everyone who have been disturbed once or more because of the delivery problems of package services.

**Resources (500 words or less): Demonstrate why you need funding from the DifferenceMaker Idea Challenge.**

1. How much funding do you require to implement your project?
2. How much time will you and your team members commit to your project after the Idea Challenge?
3. How will these DifferenceMaker funds be used to support your project?
4. Please provide an estimated budget for use of DifferenceMaker funds from May 2015-2016.

A. We would be requiring a funding of roughly $1500

B. We will require 12 months to build the end to end system.

C. For  development, quality check and marketing of the product.

D. a. Procuring the instruments and sensors: Between May - August 2017: $400

    b. Product integration: August - October 2017: $200

    b. Development of Web/SMS portal: October - December 2017: $200

    c. Quality analysis: October - December 2017 - January 2018: $300

    d. Marketing: January - May 2018: $400

Reference:

<https://www.eurosender.com/blog/lost-package/>

<https://www.hanhaa.com/>

<https://www.choice.com.au/shopping/shopping-for-services/services/articles/parcel-delivery-and-postal-issues>

<https://about.usps.com/future-postal-service/postalfacts-2011.pdf>