|  |
| --- |
|  |
| **Project - ConnectX**  **Group Initial Paper – DedSec** |
| |  |  |  | | --- | --- | --- | | **Tushar Mahendra** | **300156940** | **CIS 385** | |

# Introduction

ConnectX is an innovative project that uses high altitude balloons in the stratosphere to create a moveable and adaptable aerial wireless network. The objective of this project is to provide internet access to remote rural areas. This project aims to eliminate the major hindrance in provide internet access to remote regions – wires & infrastructure. This project is very ambitious as it aims at removing the rising tensions between India and Canada. According to a report by Internet World Stats, India showed a 11000% growth rate in internet users from 2000 to 2019 (Internet World Stats, 2019). Even with the second largest number of internet users, around 50% of the 1.36 billion population still doesn’t have internet access (Internet World Stats, 2019). This data advocates the need for a faster and more accessible solution. This project is inspired by Project Loon by google.

# Triple Constraints

* **Scope** – The scope of our project is to build at least 10 ground stations to maneuver the 100 balloons in the stratosphere. For the test run, we are going to deploy 5 balloons with temporary ground stations. These balloons will be placed in Chandigarh (2), Manipur(1), Goa(1), Surat(1). These test locations will help to study the usage and maintenance according to the demographics and the geography of that region (wind speeds, humidity, etc).
* **Time** – ConnectX will require 6 months of testing and in the meanwhile the construction of ground stations can be handled. Other than that, it would take 2 years to successfully deploy 100 balloons in different regions of India. We have 1-2 months of buffer time for this project.
* **Cost** – The complete budget is $8,000,000 (CAD) which includes the estimate for buying all the materials for 100 balloons ($40000 per balloon including maintenance for 5 years) and building the 10 ground stations ($350,000 per station). We have $50,000 of emergency fund incase something goes wrong.
* **Deliverables**- To provide high speed internet to people of India and give them new technology which they can use in coming years as there will be huge growth in number of internet users. 100 balloons will be launched in different cities of India.
* **Project Milestone**

|  |  |
| --- | --- |
| **Project Start Date** | **Project End Date** |
| 1st November 2019 | 31st November 2021 |

* **Kill Points-** 
  + Protests by environmental groups can make the government to stop this project.
  + Complains or pressure by local telecom companies or ISPs can also put an end or hold on the project.
* **Initiation-**
  + This project aims to reboot the relations between India and Canada.
  + It also aims to generate job opportunities for the people of India.
* **Planning-**
  + Purchase balloons
  + Test them in the four regions (Goa, Surat, Chandigarh and Manipur)
  + Meanwhile, construct ground stations.
  + Check the performance of beta testing
  + Launch the rest of balloons in other cities.
  + Maintain the balloons
* **Execution-**
  + After planning everything, the balloons will be beta tested in the four selected cities.
  + Performance check for the beta balloons.
  + Meanwhile, other ground stations will be constructed.
  + Hiring and training of employees
  + Launch of balloons that are left
  + Maintenance of balloons
* **Monitoring and Controlling-**
  + Weekly report has to be submitted till the beta testing ends to Government of Canada
  + After beta testing period, monthly reports need to be submitted to the Government of Canada
* **Closing-**
  + Review the project
  + Approvals and Signatures from the sponsors
  + Close Contracts
  + Complete final costs and make payments
  + Create Final Reports of the project
  + Proper Documentation for future use.
* **Question:**

Is this project viable under the given budget ? Can you please shed some light on it?

# References

* Fitchard, K. (2013). *Project Loon: Google’s biggest obstacle isn’t technology. It’s politics – Gigaom*. *Gigaom.com*. Retrieved 12 October 2019, from https://gigaom.com/2013/06/21/project-loon-googles-biggest-obstacle-isnt-technology-its-politics/
* *Internet Top 20 Countries - Internet Users 2019*. (2019). *Internetworldstats.com*. Retrieved 11 October 2019, from <https://www.internetworldstats.com/top20.htm>
* *Internet users in India to reach 627 million in 2019: Report*. (2019). *The Economic Times*. Retrieved 12 October 2019, from <https://economictimes.indiatimes.com/tech/internet/internet-users-in-india-to-reach-627-million-in-2019-report/articleshow/68288868.cms>
* *Project Initiation Processes*. (2019). *Free-management-ebooks.com*. Retrieved 12 October 2019, from <http://www.free-management-ebooks.com/faqpm/processes-02.htm>
* *X - Loon. (2019). X, the moonshot factory. Retrieved 12 October 2019, from https://x.company/projects/loon/*