ATL TINKERING MARATHON 2020

RESEARCH DOCUMENT

Theme of submission: Demography

Problem statement: Innovate a system to promote access to technology, skill development and employment opportunities for the backward states & sections of society

Topic: Accessing computers through eye movements for Divyang people.

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Abstract

People with disabilities (Divyangjan) meet barriers of all types on a frequent basis. The goal of this research paper is to explore and understand the barriers they face when accessing technology, like mobile phones or personal computers.

Methodology

To realise the above mentioned goal, following research was done, mentioned along with source articles:

- **Article:** "Working Together: People with Disabilities and Computer Technology"
  Writer: Dr Sheryl Burgstahler
  Link: https://www.washington.edu/doit/working-together-people-disabilities-and-computer-technology

  This article helped us understand about different methods *Divyangjan* can use to access personal computers. It also contained a brief overview of challenges faced by them in doing so.

- **Article:** "Computer Access Resources"
  Writer: craighospital.org
  Link: https://craighospital.org/services/assistive-technology/assistive-tech-computer-access-resources

  This article provided links to already existing products in the market that are used by *Divyangjan* to access their personal computers and devices. It gave us a general idea about the cost of existing solutions to the problem.

Conclusion

After thorough studying of the above articles, we found out that while devices that help *Divyangjan* to access technology do exist, very few of them are affordable. Also none of them are manufactured in India, hence huge shipping costs are also added into the retail price, making these devices unaffordable to a large fraction of people in need.

Our proposed solution is cheap, and most importantly can be manufactured locally in India. Its cost is a small fraction of the cost of available solutions in the market.