SMART INDIA HACKATHON 2025

TITLE PAGE

- **Problem Statement ID – SIH25018**
- **Problem Statement Title- Telemedicine Access for Rural Healthcare in Nabha**
- **Theme- MedTech/BioTech/HealthTech**
- **PS Category- Software**
- **Team ID- NSIIC-SIH25-0001**
- **Team Name: K.Nex**

K.Nex

Swasthya Gram Setu

SMART INDIA HACKATHON 2025

Solution

We propose a multilingual telemedicine platform for rural Nabha that lets patients check doctor availability, book appointments, and consult via video call. The app includes a low bandwidth friendly AI symptom checker and a real-time medicine tracker across Civil Hospital, Jan Aushadhi, and more. If medicines are unavailable, it auto-suggests the nearest pharmacy and supports optional delivery through local tie-ups.
Patients get offline health records with QR-linked ABDM cards plus a scheme eligibility checker for govt health benefits. With ASHA/ANM worker integration and one-tap emergency ambulance alerts, it forms a complete, scalable rural healthcare ecosystem.

Address the problem

- Doctor Shortage
- Medicine Unavailability
- Poor Internet Access
- Low Health Awareness
- Travel & Time Burden
- Fragmented System

Innovation

- Voice/IVR design
- Complete Healthcare Chain
- AI-Powered Medicine Finder
- Empowered ASHA/ANM Workers
- ABDM-Linked QR Health Cards
- Scalable Pilot-to-Nation Model

K.Nex

TECHNICAL APPROACH

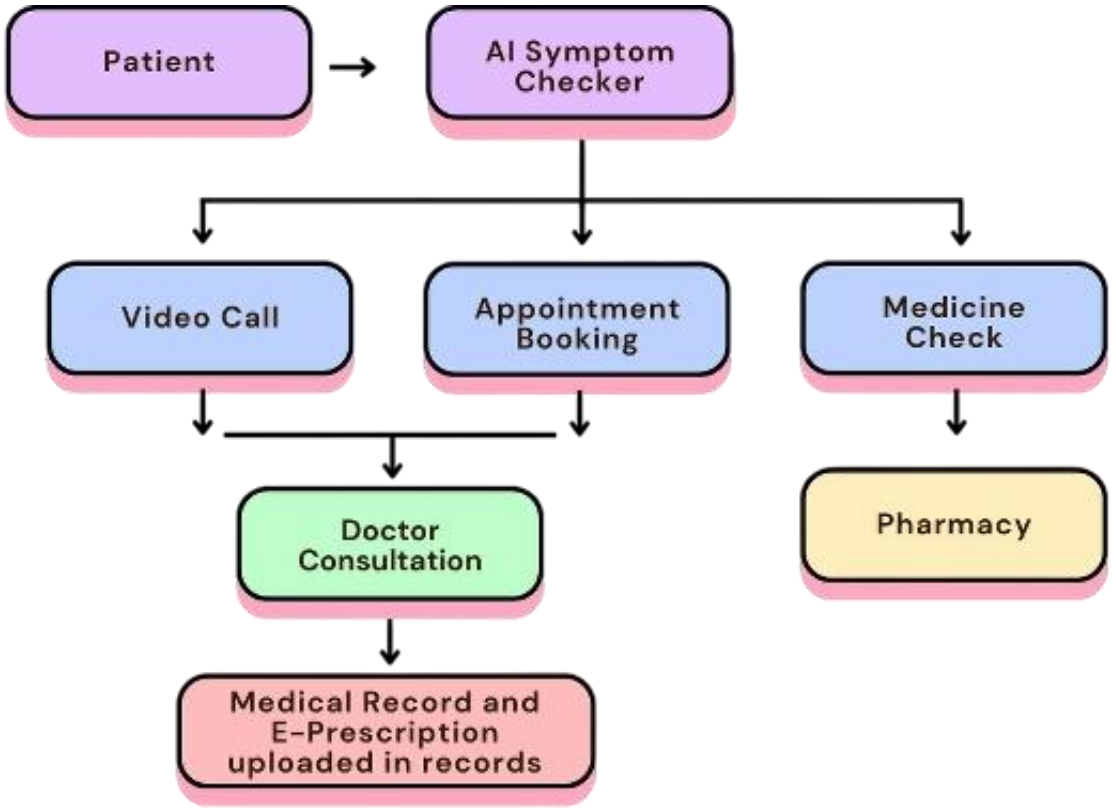
SMART INDIA HACKATHON 2025

App Development
- React Native
- Appwrite
- Firebase
- Clerk
- Tailwind CSS

Tech Stack

AI/ML
- Python
- PyTorch
- TensorFlow

Database & APIs
- SQLite
- Node.js
- REST/GraphQL APIs

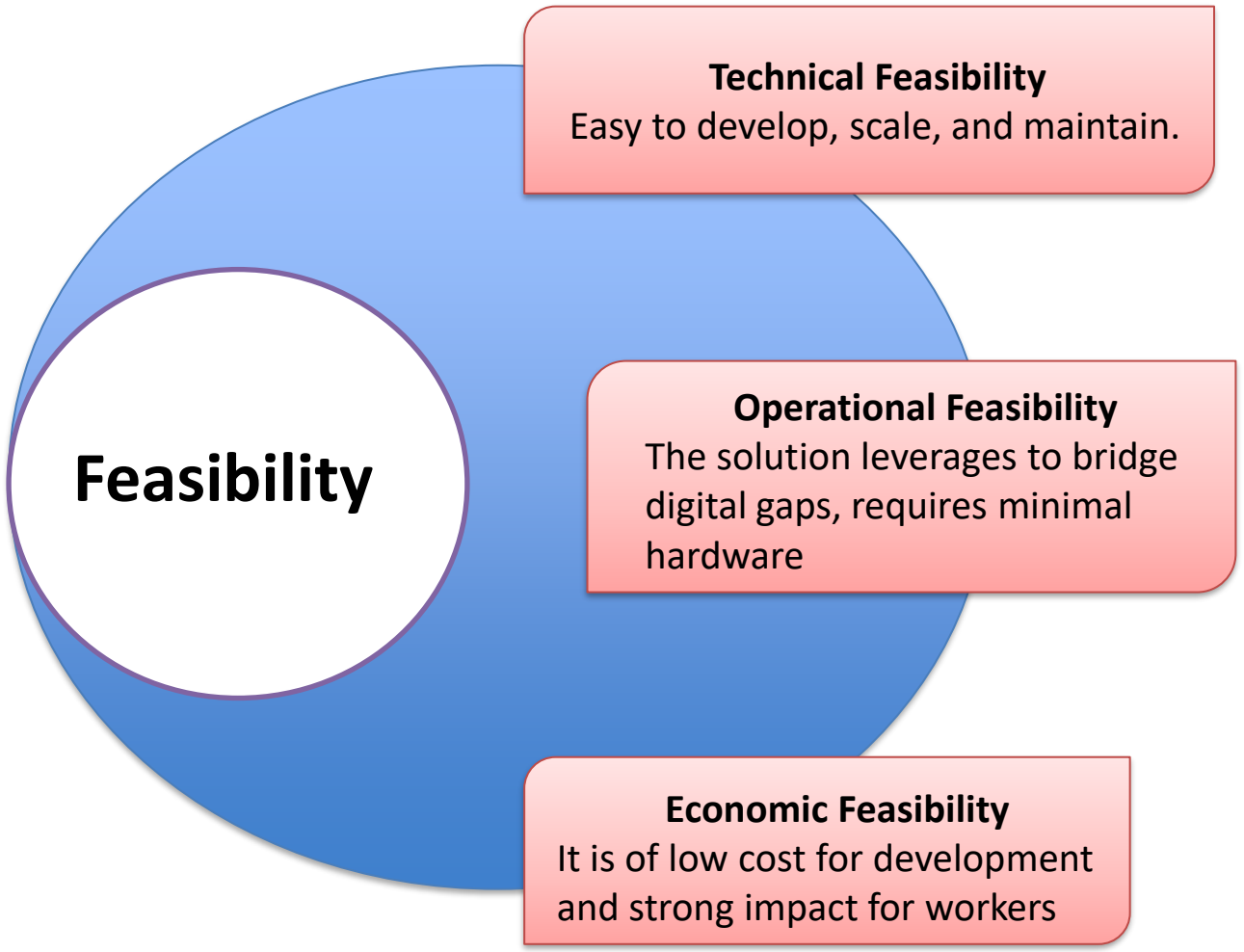


Workflow

K.Nex

FEASIBILITY AND VIABILITY

SMART INDIA HACKATHON 2025



Potential challenges and risks

- Low internet penetration
- Hesitation to adopt digital workflows.
- Data privacy & security risks
- Patient Trust issues
- Digital literacy gap

Strategies for overcome the challenges

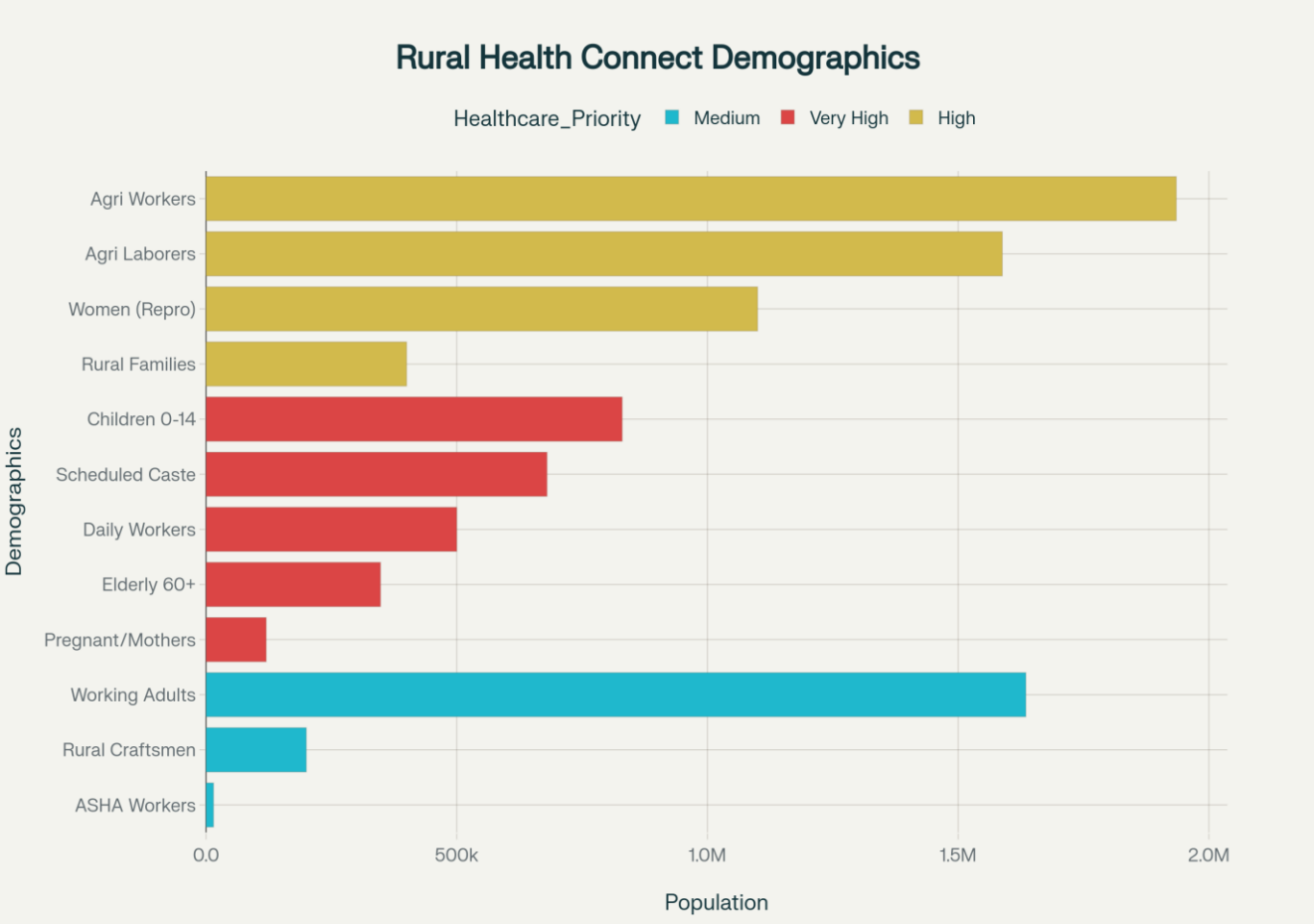
- Training and Awareness
- Delivery Logistics
- Data Security
- Connectivity Solution
- AI Limitations
- Digital Literacy

K.Nex

IMPACT AND BENEFITS

SMART INDIA HACKATHON 2025

Target Audience



Social Benefits

- Reduced patient suffering due to timely treatment & medicine availability.
- Empowerment of ASHA/ANM health workers with digital tools.
- Increased awareness of government health schemes.

Economic Benefits

- Saves travel costs and daily wage loss for farmers & workers.
- Reduced out-of-pocket expenses due to optimized medicine availability & scheme eligibility checks.
- doctors use time efficiently, improving productivity.

Environmental Benefits

- Digital records cut down on paper prescriptions & files.
- Encourages resource-efficient healthcare.

K.Nex

SMART INDIA HACKATHON 2025

RESEARCH AND REFERENCES

•NITI Aayog's National Digital Health Blueprint / NDHM Strategy Overview – Ministry of Health & Family Welfare- NITI Aayog

•"India's National Digital Health Mission" working paper on health stack and NDHM architecture- csd.columbia.edu

•Scholarly article: "The Ayushman Bharat Digital Mission of India" - Taylor & Francis Online

•Systematic review of AI + telemedicine adoption in rural communities- PMC

•Telemedicine in rural Punjab: Smile Foundation case study- Smile Foundation

•Punjab government report on rural medical officer shortage- The Times of India