

E-MITRA

CORE PROBLEM

Difficulty of access, archive and authentication of the documents

Agriculture bureaucracy issues

Every year, before the start of farming season, every farmer needs to collect documents from the concerned authority. Then it is submitted to the bank or funding agencies. For the collection of these documents, they have to travel 10 to 50 kilometres to nearest city.

SPILLOVERS:

Value to society that goes beyond the value for the parties considered in a market transaction;

IMPORTANT:

Scope (big territorial coverage, many people negatively affected) + negative consequences = opportunity to create value for society;

NEGLECTED:

Still not addressed by the government, market or civil society in general

Nagpur, Maharashtra, India



70% of its rural households depend primarily



82% are small and marginal - on agriculture.



5.2% of rural households have a computer at home

ADDITIONAL STATS

- Agrarian country, largest source of livelihoods.

- Computer literacy in rural area is negligible.



Causes:

Difficulty to read/understand the content of the documents (illiteracy).
Difficulty to travel.

Effects:

Losses on time, money and efficiency with travelling - Farmer's withdrawal.
Barrier for new agricultures.

E-MITRA / E-FRIEND

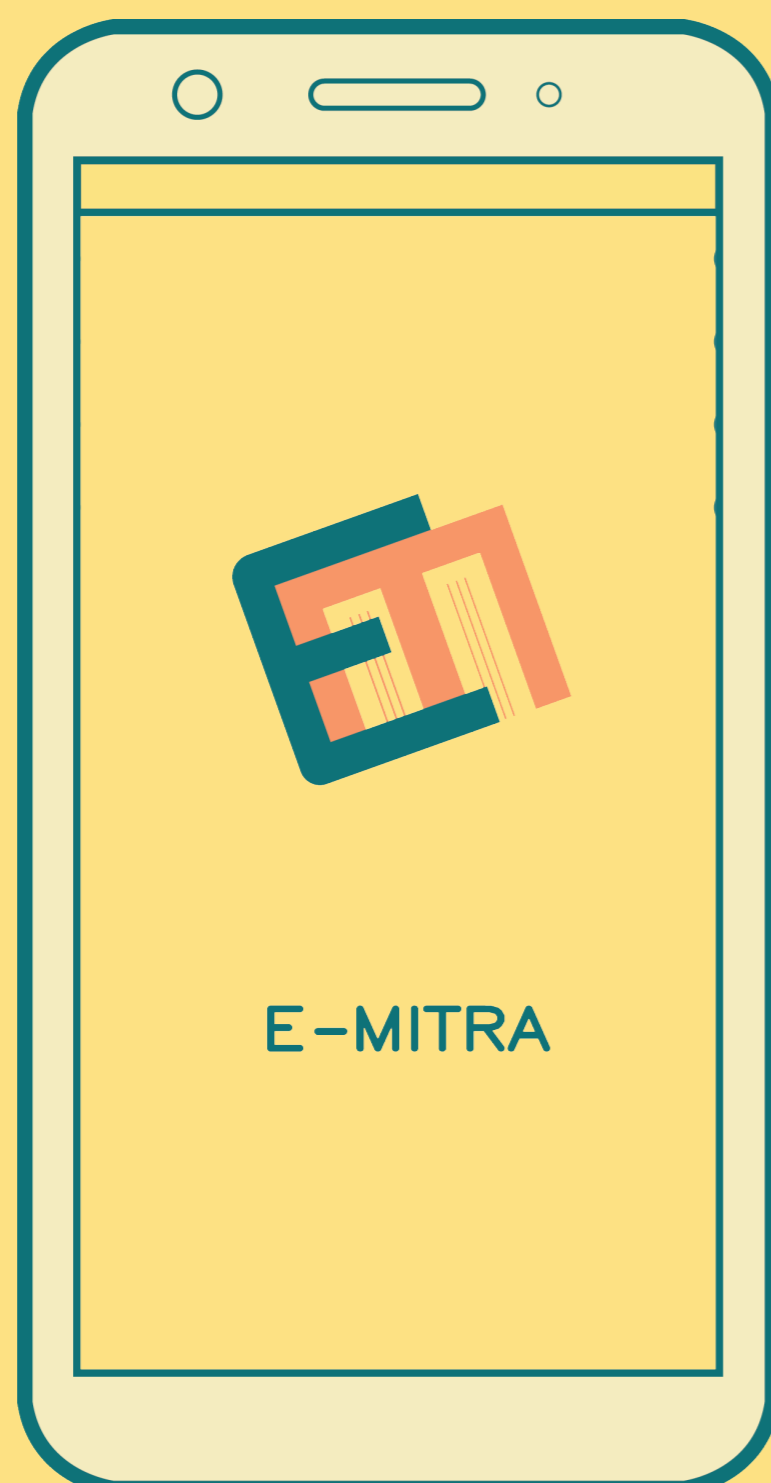
Technology-based idea from India (Priyadarshini Institute of Engineering & Technology Nagpur).

Virtual Assistant for computer illiterate farmers of rural India.

Official authorities can digitally sign documents for authentication.

Phone Application

Farmers can access this application from anywhere by using a smart phone



Documents digitally signed by official authorities for authentication



IMPACT VENTURE

MISSION: to solve the problem of the agricultures

INNOVATION: change their traditional way of working

IMPACT: make it easier and more efficient (make it better) for all the stakeholders

EMPOWERMENT: build the capacity of stakeholders to use the new solution

SCALABILITY: to have a business model that can achieve a wider scale and prominence.

SUSTAINABILITY: make the solution work over time

TEAM IN INDIA

TEAM IN PORTUGAL

DESIGN PROCESS

- Calling up experts for more information and references
- Getting experience from the field
- Looking for other organisations that are doing similar work
- Reading material related to this societal problem
- App architecture



Questions:

- Could every feature be done by voice?
- How do they login?
- How do they "read" the documents?
- Security questions?

HOW MUCH?

Government of India is providing the financial support (loan) and subsidies to the agriculture with the help of the state government and funding agencies.

- Developing of the app
- Education
- Maintenance

INDIA:

Farmers in Maharashtra – beneficiary;
Priyadarshini Institute of Engineering & Technology;
Dr. G. M. Asutkar, Professor, Department of Electronics & Communication Engg., PIET Nagpur - Proj. Mentor;
Mr. Ketan D. Bodhe Assistant Professor, Department of Computer Technology, PIET, Nagpur - Proj. Mentor;
Mr. Saket Chatruvedi - Proj. Developer;
Mr. Nachiket Gaurihar - Proj. Developer
Ms. Samruddhi Parkhi - Proj. Developer;

PORTUGAL:

André Ribeiro - app developing department
Bernardo Peixoto - management department
José Congo - management department
Rodrigo Rocha - app developing department
Miguel Amaral - supervisor

Performance: improvement (time).

Reduction in costs/price: similar value at a reduced price - many human resources for the development but less for the operations after implementation (comparing to the current situation).

Accessibility: after the implementation, it will be accessible for all.

Convenience/ease of use: they won't have to travel for the authentication and they will be able to access the documents easily.

STEPS FOR IMPLEMENTATION

- Resource mobilization - smartphone and internet connection needed.

According to, a Boston Consulting Group study says that by the year of 2020, about 315 million Indians living in rural areas will be connected to the Internet by using smart phones.

- Education and support