

# *The Bangalore Declaration on IT, 1998*

- “Facilitate the availability of a range of computers, including cable-TV, modified telephone instruments, and rugged, low-cost, hand-held devices, along with traditional computers, for purposes such as information gathering, communication and transaction processing”
- “Avoid blind transplants of I.T. solutions, proven in other infrastructural and cultural contexts, and instead, nurture local expertise that can adapt I.T. solutions to meet local requirements.”
- “Devise measures to create thriving markets for local language content and applications”

# The Simputer Trust

**Non-profit trust with focus on universal access to IT  
Towards empowering rural and illiterate citizens  
Uniquely Indian Solutions for uniquely Indian  
needs**

## **Seven Trustees**

- **Vijay Chandru (IISc)**
- **Vinay L Deshpande (Encore)**
- **Shashank Garg (Encore)**
- **Ramesh Hariharan (IISc)**
- **Swami Manohar (IISc)**
- **Mark R Mathias (Encore)**
- **V. Vinay (IISc)**
- **Rahul Matthan, Legal Counsel**



# IT for Bridging the Digital Divide

- **Simple, easy to use, low-cost**
- **Independent of mains power**
- **Rugged, dust-resistant**
- **Shareable**
- **Meaningful, must make an impact on daily life**
  - **Education**
  - **Earning a living**
  - **Communication**
  - **Entertainment**

# Sharing Technology

- **In India, as in many countries, technological devices are not always owned but are shared !**
  - **Radio, TV, Phones and even the Refrigerator**
- **Transformation from shared to individual ownership over time and as income rises**



# Simputer at a Glance

- **Designed to be shared**
  - **Smart card provides personalization**
- **Simple to use, perceptual computing**
  - **Icons, Graphics, Animation**
  - **Voice Feedback in Local Languages**
  - **Uniform (IMLi) interface**
- **Rich in interfaces**
  - **Soft modem**
  - **Smart card**
  - **Infra Red Data Access**
  - **USB port**
  - **Audio**



# Simputer USPs

- **“Low cost”**
- **Support for multilingual text and TTS**
- **Simple to use, uniform browser interface**
- **Free software and Hardware GPL**
- **Support for shared ownership with smartcard**
- **Built-in modem**
- **Platform-independent application development**



# Ease of Use

- **Images and sound primary output**
- **Touch is the primary input**
- **Multilingual text output and input possible for literate users**
- **Literacy in any language not a pre-requisite**

# Needs

- **FORM-FILLING**

**I want to reserve a train ticket to Mumbai.**

- Use the **Simputer** to submit a reservation form.

- **COMMUNICATION**

**Can I meet the Tahsildar today?**

- Use your **Simputer** to check his availability. You don't have to trek ten km to find out.

**E-mail, voice-mail to near & dear**

- Use the **Simputer** to send / receive



## Needs ... 2

- **MONEY ORDER**

**Dear Postman, can I withdraw Rs 100 from my account?**

- **Your money order e-transaction has arrived on my Simputer. Let me credit your smart card first.**

- **EDUCATION / LITERACY**

- **Simputer's high-resolution display facilitates images, local-language text. Combined with audio files and text-to-speech in local languages, this will facilitate literacy, self-learning**

## Needs ... 3

- **MICRO-BANKING**

**Use the Simputer to take banking to the individual's  doorstep, not the other way around. On-the-spot receipts electronically generated**

- **RURAL HEALTH STATISTICS**

**State Health Departments can empower their health workers with Simputers for collection of health statistics in the villages, regardless of location**

## **Needs ... 4**

- **HEALTH**

**Foetal Monitoring**

**Portable Ultrasound**

**Telemedicine**

- **DRINKING WATER**

**Simputer with appropriate sensor interfaces can facilitate quality checks**

## **Needs ... 5**

- **POLICE**

**Information Retrieval**

**FIRs**

**Criminal records**

**...**

- **COMMUNITY KIOSKS**

**Public Services**

**Land Records**

**Utilities payments**

**Information dissemination**



# The Simputer has high-end uses too!

- **E-Logistics**
- **Sales Automation**
- **Aid for Visually Impaired**
  - **Digital Camera**
  - **OCR Software**
  - **Text-to-Speech**
- **Automatic Control**
  - **Solar lighting**
  - **Gobar gas plants**
- ...

# **C.K. Prahalad, Interview in *wired.com***

**October 20, 2000**

**“How can you go from [looking at] the poor as an intractable problem, to the poor as a market and a source of innovation?” he asked.**

**He said the introduction of wireless hand-held computers with voice controls and graphical displays are already changing the balance in rural areas of the Third World. The real question, he said, is not if the change in business strategies and approaches will come, but from where.**

**One example is the “Simputer,” a hand-held 32MB Linux-based computer that runs on three AAA batteries. It is capable of performing a variety of functions from remote banking to Web browsing and email.**



# The Simputer and the future

- **Synergetic collaboration with infrastructure providers, content providers and service providers**
- **Role for government in adopting the Simputer for IT initiatives**
- **Hardware GPL for manufacturing**
- **Enhancement of hardware and software:**
  - **Mobility (GSM, Bluetooth/802.11B, GPS, ...)**
  - **FM radio**
  - **Voice recognition software**



**“So, take heart: simpler, more natural computer systems will enter our lives within the next 5 to 10 years. Let’s speed up their arrival, as users by asking for them, and as technologists by daring to build them.”**

**Michael Dertouzos**

*The People’s Computer*

*Technology Review*

*May/June 2000*





***WELCOME TO THE  
SIMPUTER ADVENTURE !***

