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 prerequisite



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



- 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



- 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



HEALTH

Foetal Monitoring
Portable Ultrasound
Telemedicine

• DRINKING WATER
Simputer with appropriate sensor interfaces can facilitate quality checks



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



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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 handheld 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."





WELCOME TO THE SIMPUTER ADVENTURE!

