

Science & Technology for VIP

A personal perspective

Keynote Address
Science Day @ ISTRAC
Bangalore
February 28, 2017

Talk outline

- Science & Technology for Specially Abled Persons
- S & T for Visually Impaired Persons
- Five stories from personal perspective
 - Bionic Eye – Dr. Rajat Agarwal USC
 - NAB machinist training for VIP
 - Netra Sarati – IBPS, NAB, IIITB
 - iPhone for VIP
 - Subramanian / Akhilesh Malani / Rajdeep Manwani /Vidhya

Bionic Eye

- Science fiction story of the decade
- Dr. Mark Humayun, Rajat Agarwal and others at University of Southern California hold the patent (President Obama honouring Humayun)
- Costs \$ 55,000!
- About 50 people have been able to “see” after 20-30 years of blindness!
- Rajat Agarwal has been trying to get a “low cost” version (India Today article)
- May be ISTRAC Scientists can help!

NAB Karnataka and HMT

- Science Fiction story of 70's
- National Association of Blind, Karnataka and HMT
- Blind people operating lathe, milling machine & drilling machine
- 30month training program
- HMT recruited them!
- Bangalore is a pioneer!!

NAB, IBPS, IIITB – *Netra Sarathi*

- IBPS recruits lakhs for Indian Banks
- Getting a “scriber” was difficult
- Used screen reader technology to re-purpose question paper for Bank exams
- *Netra Sarathy* – project done by IIITB for IBPS with NAB help – launched by NRN in Mumbai on December 14, 2011
- BusinessLine article December 15, 2011
- Bangalore is a pioneer!!

iPhone for VIP

- Apple is a pioneer in assistive technologies
- All Mac computers had built in screen readers
- iPhone took one more step (Voice over from the word go)
- E-Mail, SMS, Newspapers, Websites are all so easy to use for VIP
- Used by normal folks too!

Four VIP's

- Subramanian, Deccan Herald, Editor
 - "Lights Out" Book
- Prof Rajiv Manwani, School of Business, Jain University
- Akhilesh Malani, Google
- Ms. Vidhya MSc (Digital Society) student @ IITB

Summary

- Science & Technology are a great help for Specially Abled People
- Right in Bangalore a lot is happening
- A lot more can happen when YOU join us!
- Thanks a ton
- Any questions?