

# **Tech Goodies versus Tech Power**

*Power analysis as a tool for  
ICTD research and project design*

**Learning Clinic from IT for Change**

**PAN ALL June 2009**

# Power-exercise-1

## Exercise

Introduce yourself

What is your expectation from this learning clinic? (2 sentences)

Do you believe power analysis is important in ICTD contexts?(yes/no/not sure)

Write out (not to be shared now) one instance of how power played / plays out in ICTD.

# Why Power Analysis?

Since ICTs offer significant benefits to everyone, we tend to ignore relative differentials

Focus on commonality rather than on conflict

*“A rising tide lifts all boats”*

Goodies versus Power

Model examines the nature of the ICTD space and the differential outcomes for each actor

ICTD – network of actors using, and being impacted by the use of, technologies for development

# What are we trying to do here?

Exploring outcome differentials in ICTD

Provide an opportunity to test out a model

Rudimentary model being shared, needs to be developed further through collaboration

Examine the relevance of the model for ICTD research and project design

# Session Plan

Session I - 1:30 - 2:00 - Introductions and objectives

Session II - 2:00 - 2:20 - Presentation of PAM (Power Analysis Model)

Sessions III - 2:20 - 2:35 - Case study discussion (plenary)

Coffee Break

Sessions IV - 2:50 - 3:30 Case study discussion (small groups)

Session V - 3:30 - 4:10 Sharing on case study (plenary)

Session IV – 4:10 - 4:30 - Reflection on PAM (plenary)

# Model for Power Analysis

ICTD Spaces explored – **Technology, Policy, Community**

## Elements

**Actors** – Who are the actors

**Interests** – What is it that each actor wants

**World Views** – What are the belief sets of actors

**Action** – What do actors do based on their interests and world views

**Outcomes** – What ensues from the actions of all actors

# Actors

Individuals

Community (heterogenous)

Private sector (*small and big*; multiplicity of players)

State actors (*Governments, regulatory agencies, Telecom PSUs, local governments*)

Funding agencies (*multi-laterals, foundations, CSRs*)

Technologists

Researchers

.....

# Interests – What is it that actors want

Self-interest (*Telecentre operator refuses to provide service to someone who cant afford to pay*)

Class interests (*location of a telecentre*)

Shared interests (*broadband reaches the village*)

Conflicting interests (*open source and proprietary software*)

Long term interests vs short term interests (*gender neutrality in the interest of scalability*)

Negotiated interests (*community radio project provides some commercials*)



# Worldviews – What are the belief sets of actors

Individual world view (a tech goodie is worth much more than the mere promise of tech power – *gmail, Facebook*)

Dominant world view

Hegemony - the notion of 'invisible power' that shapes the ideological and psychological boundaries of participation.

Realm of consciousness and culture

*(Financial viability of tele-centres is essential, governments are incapable of acting in ICTD, Open Source is clunky)*

*“Folk philosophy” (most internet users are immature and hence need to be shielded from inappropriate content)*

Counter cultures (*piracy*) – accepted as an exception, sometimes feed dominant interests

ICT as media (both mass media and community media) itself impacts world views

# Action – What do actors do

Actions arise from interests, mediated by world views

Individual/private action (*buy and use a cell phone*)

Collective action (*Socially marginalised women run a community telecentre*)

Policy /state action (*setting up technology standards*)

## Action Spectrum

Degree of freedom - autonomy to shape what is possible (*new ways of being and doing in the information society*)

Degree of constraint - the boundaries that delimit possible action (*Vietnam policy on Open Source and proprietary software based school programs*)

Formal opportunity vs substantive opportunity (positive rights - CSC)

ICT impacts the degree of freedom (community mobilization) and constraints (new forms of censorship) of actors

# Outcomes – What ensues

Outcomes are the confluence of actions of diverse actors, where certain interests and world views get privileged

## Tech Goodies or Tech Power

Absolute outcomes vs Relative outcomes (*connectivity vs participation in the information society*)

Long term outcomes vs Short term outcomes (*digitization of books by Google*)

Participation vs need satisfaction (*community radio and community tele-centre*)

# Power Analysis Tool

We will now attempt to use a set of tools to explore the Power Analysis Model

**Case - Mobile telephony for internet access vs Computers**

# Actors

Hardware vendors

Connectivity vendors

GSM v/s CDMA

Service-providers on mobiles

Large corporates / Small businesses

Users

Corporate / Retail / Small

Rich / Poor

Women

Government

Regulator / User (ICTD)

# Examining Interests

## Are there shared interests?

More mobiles, higher volume, more services  
Handy device

## Where are interests conflicting?

Service providers and users want open networks

Costs come in way of reach (very poor)

Pay per call / SMS

Mobile in place of internet Broadband/PC (return on investments)

Availability of spectrum / competition and volumes

# Examining Interests

## Where are interests conflicting?

Mobile technology architecture relatively 'closed' while internet architecture is open

Hardware (mobile chargers)

Operating system

Services (Connectivity provider and content provider)

Limited Services (Skype blocked)

The proprietary nature of the mobile technologies is a sharp contrast with the basic open nature of the PC/internet

# Examining Interests

Are any interests compromised to reach 'negotiated interests'

If yes how ?

Who is trading what interests

Long term for short term interests

Countries not investing into internet backbones and relying on mobiles.

Any more questions?



# Examining world views

What are the dominant world views in this space?

Mobiles are the way to bridge digital divide

Markets can entirely or largely meet developmental needs

Wireless telephony requires lesser investments (than wire based internet broadband)

Public policy role should be to deregulate

Positive public policy / public investment (eg in broadband internet networks)  
not possible and not required

# Examining world views

## How are discourses / meanings / terminologies deployed to sustain dominant world views

Dichotomy of open network (PC/internet) versus closed (mobile) is underplayed against the dichotomy of PC-Internet (expensive, for high end users, not handy etc) versus mobile (voice based, handy, inexpensive, easy interface and striped down essential services etc)

“Mobile is reaching broadband to world and is the basis to bridge digital divide” - Mr. Sanjay Kaul, Vice President Multimedia Solutions, Ericsson keynote speaker at CSTD 2009

Poor don't need internet, they need mobiles (Economist)

# Examining world views

**What ecologies (rewards and punishments) sustain world views**

**Extent of funding for research and projects relating to mobile telephony**

**'m-Governance' pushed as e-Governance**

**Whose interests are being compromised by dominant world views**

**??**

# Actions - Questions

## Who has resources and who has influence

Spectrum allocations  
Open vs proprietary standards  
Oligopolistic market

## Who is present and who is absent (presence) /Who speaks and who is excluded (participation)

CSTD Panel on mobile phones  
Local language interfaces

## What enables and curtails freedoms and choices in this space

Policy (formal vs substantive opportunity)  
Common mobile number across providers, Use of USOF to cut rural telephony call rates or build towers

Socio-cultural factors (freedom to use mobiles or computers, v/s freedom / capability to participate in creating knowledge)  
e-literacy (capability ecology)

## How world views shape actions ??

# Outcomes

## How are outcomes perceived by actors

There is a significant push to looking at Mobiles as the solution for internet access in poorer regions of the world, specially Africa.

Use of mobiles rapidly increasing, more applications/uses

Reducing costs of acquisition and use

Community mobilization, including political (Phillipines)

## What outcomes are legitimized

Private sector driven mobiles as internet access infrastructure and lack of public investments on internet broadband

# Outcomes - Questions

Whose interest was served most by the outcome??

Whose interest was compromised??

Equality of opportunities versus substantive equality measured by equality of outcomes

Participation in design of specifications for applications / Local language interfaces

Universal access to mobiles (developmental information)

Mobiles seen as 'instead of computers/Internet'

Access versus Participation / Centralization versus decentralization

# Session III 2 Cases for small groups

## Community Space

E-Choupal (A large corporate entity in the agricultural sector provides information and transaction processing on agricultural/commodity issues through a closed network to farmers)

## Technology Space

Open Source in education and in government

Social benefits of Open Source acknowledged

Slow and tardy progress in adoption of open source – Why?

Even within the education and government sectors – Why?

## Session IV - Cases for small groups

Policy Space

Internet Governance

ICT in school education policy (India)

Technology space

Google as the custodian of the knowledge of the world versus free email, store of videos, books, maps ....

Any case from your own context



# Implications for ICTD – research and project design

Power analysis one of the factors that needs to form part of ICTD research design

Negotiation would continue to remain key to achieve ones objectives - but comprehensive understanding of the the 'ground situation' would help

ICTD Research – needs to consciously study differential interests, world views, actions and outcomes to see the play of power

ICTD Project Design – needs to attempt to influence world view and actions of actors towards progressive social change (which will differentially impact different actors)