

# Innovation in research infrastructure

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Rohan Samarajiva, LIRNEasia

*IDRC Roundtable on Policy Research Environment*

*Galle, January 21, 2009*



# Agenda

- What is research infrastructure?
- Which components can be improved using new technologies?
  - No formal study conducted
  - Lived experience mostly
- Thoughts to initiate discussion

## What is research infrastructure?

- Infrastructure = what one cannot self-supply, technically or economically
- Elements
  - Well-prepared human resources [higher education system]
  - Prior knowledge [libraries, abstracting and indexing services, document delivery services, bookstores]
  - Large data sets, statistics [government]
  - Environment for generating new ideas [colleagues knowledgeable of the subject, colleagues in cognate areas, opportunities for interaction, art, coffee shops, bars . . . ]

# What is research infrastructure?

- Elements

- Specialized knowledge services, e.g., statistics consulting [networks, formal or informal]
- Quality-control mechanisms [colloquia, conferences]
- Dissemination mechanisms for multiple audiences [policy makers, other researchers, media, etc.]

# Well-prepared human resources

- Sources
  - Local universities
  - Foreign universities

- How to find
  - Interns and employees
    - Advertisements
    - Networks

- Barriers
  - Labor rules
  - Immigration rules

**Use of the Internet**

**We use Comminit.org to advertise; as well as our own website; thinking of using Google ads**

# Prior knowledge

Pure Internet  
territory

- Libraries, abstracting and indexing services, document delivery services, bookstores. . . .
- Google is pretty good as an **A&I service**
- Google also gets you to some **fulltext**, enough to get by for quite a lot of policy research, depending on the field
- IDRC's **e journal** collection (still has huge gaps such as the lack of Elsevier/Science Direct); few pure online/open access journals
- Document delivery services (by the time you get the article, you sometimes wonder why you ordered it)
- Amazon can be very quick even if expensive (mostly because of postal costs), but can lose speed at Post Office
  - Tortured by security regime around credit cards
- But, offer for researchers to go hang out at university libraries is always on the table

ICTs complemented by  
transportation

Payment mechanisms,  
enabled by ICTs

# Large data sets, statistics

- Nationally representative surveys that can only be done by governments; International Government Organizations (IGO) data sets
- In Sri Lanka, easier to get access to National Statistical Organization (NSO) datasets than in India, for example
  - **Electronically available**, but layers of bureaucracy
- IGO datasets tend to be **available electronically** and more accessible, but are not the most up to date

# Environment for generating new ideas

- Colleagues knowledgeable of the subject, colleagues in cognate areas, opportunities for unplanned interactions around art, coffee shops, bars . . .
- Main Internet contributions are in locating colleagues and communicating with them: **Internet presence** is a necessary condition, as shown in our research
- Do we need more interactions among PROs?
  - What is the line between schmoozing and being creative?
  - Balance between work and pleasure?
- Planning meetings are best held face-to-face, but **video conferencing** has significant value
  - Used on two occasions in 2005
  - Not used more because of cost and inconvenience; skype is more flexible
- In addition to being a good dissemination vehicle, **blog** has certain qualities conducive to generating new ideas: we have found ideas as well as partners though blog comments

# Significant online-only journal

MIT Press Journals - Information Technologies and International Development - Abstract - Mozilla Firefox

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http://www.mitpressjournals.org/doi/abs/10.1162/itid.2008.00019

Summary (LIRNEasia) Sri Lanka gets new deputy fina... indi.ca » Information and Pow... Map Overlay - Google Analytics MIT Press Journals - Informa...

## MIT Press Journals

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**Internet Presence as Knowledge Capacity: The Case of Research in Information and Communication Technology Infrastructure Reform**

**Sujata Gamage**  
Director of Knowledge Networks, LIRNEasia, 12 Balcombe Place, Colombo 00080, Sri Lanka, +94 11 267 1160, [www.lirneasia.net](http://www.lirneasia.net), [gamage@lirne.net](mailto:gamage@lirne.net).

**Rohan Samarajiva**  
Executive Director, LIRNEasia, 12 Balcombe Place, Colombo 00080, Sri Lanka, +94 11 267 1160, [www.lirneasia.net](http://www.lirneasia.net).

**Sujata Gamage** is the director of Knowledge Networks at LIRNEasia. Her latest research concerns communities of practice for innovation in government services. She is a scientist with experience and expertise in public policy and management.

**Rohan Samarajiva** is executive director of LIRNEasia, a regional Information and Communication Technology (ICT) policy and regulation think tank that is active across South and Southeast Asia.

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search

Done

Gamage & Samarajiva, Internet presence as knowledge capacity: The case of research in ICT infrastructure reform

# Specialized knowledge services

- E.g., statistics consulting
- Networks, formal or informal
  - Need not be proximate; **Internet** allows utilization of distant resources
    - Following difficulties with statistical expertise in Sri Lanka, we now work with an expert in South Africa
- Internet, especially **Scholar.google** can help to locate and assess expertise, though we have so far used our networks in the old fashioned way
  - Successful with statistical consulting, not with gender expertise

# Quality-control mechanisms

- Colloquia, review, conferences
- We hold virtual colloquia
  - Bandwidth inadequate for **skype videoconferencing**, yet
  - **Realtime blogging and skype audio**, with questions and comments sent as chat or email
  - Known people, works relatively well
- Conferences are about serendipitous meetings and networking
  - Internet is not the best, though some advocate **virtual conferences**
- If we can get Cisco Telepresence™ in place and affordable, may replace f-to-f (requires 5 Mbps for simplest link, 15 Mbps for the complex forms; we are lucky to get 1 Mbps consistently here)

# Dissemination mechanisms for multiple audiences

- For a Policy Research Organization, not only scholarly peers; policy makers, corporate leaders, media, etc. must also be reached
- Scholarly peers (peer review; quality control; but not most important)
  - Most scholarly journals have moved to online submission and review management systems
  - SSRN as a possible vehicle for reaching scholarly audiences
- Policy makers and corporate leaders (**push; on our schedule**)
  - Direct presentations
  - Short magazine type pieces/policy briefs
  - Media
- **Just-in-time access** for policy makers, corporate leaders and media (**pull; on their schedule**)
  - Web (do they come to your site? do you come up on Google searches?)

**SSRN USER HQ**

First-time user? Free Registration

USER ID

PASSWORD

[Forgot ID or Password? | Help](#)

- Accounting **ARN** Research Network
- Cognitive Science **CSN** Network
- Economics **ERN** Research Network
- Entrepreneurship **ERPN** Research & Policy Network
- Financial **FEN** Economics Network
- Health **HEN** Economics Network
- Information **ISN** Systems Network
- Leadership **LRN** Research Network
- Legal **LSN** Scholarship Network
- Management **MRN** Research Network
- Marketing **MKT** Research Network
- Negotiations **NEG** Research Network

**SSRN eLibrary**  
*co-hosted by*

**CHICAGO BOOTH** **ecgi** european corporate governance institute

**KOREA UNIVERSITY** **Stanford Law School**

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**Leading Social Science Research Delivered Daily**

Social Science Research Network (SSRN) is devoted to the rapid worldwide dissemination of social science research and is composed of a number of specialized research networks in each of the social sciences. We have received several [excellence awards](#) for our web site.

Each of SSRN's networks encourages the early distribution of research results by

# “Googlability”

- Good test: are you on the first page when keywords are searched?
  - Tip 1: Google seems to favor blogs
  - Tip 2: You need to produce a lot of webposts, even if it’s the same thing in different forms
  - Tip 3: Unique and exclusive is not the way the game is played; the more other people carry your stuff, the better
- Can we predict what will rise on the web? No
- Can we improve the chances of rising? Yes

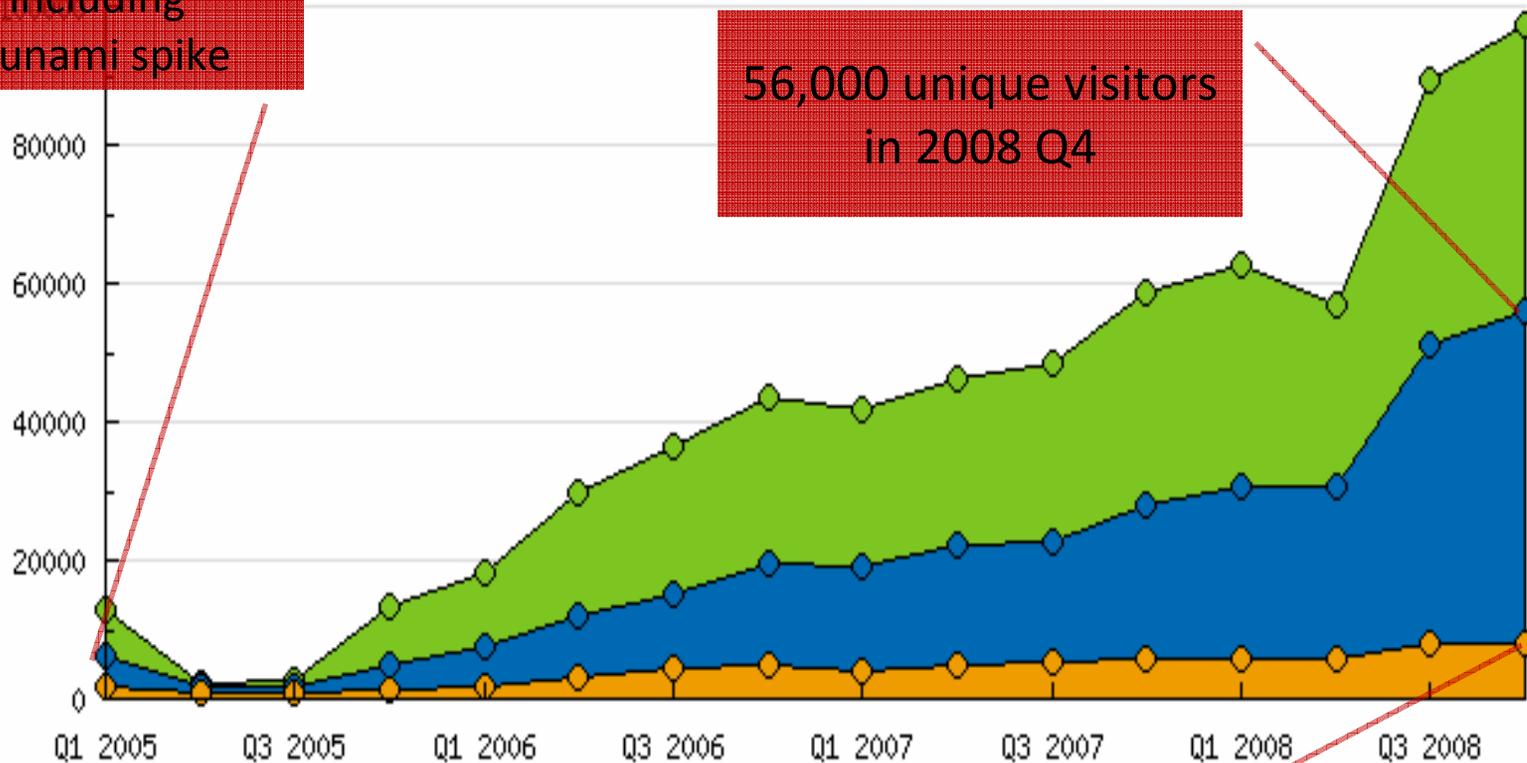
**Necessary condition: A website that is visited**  
**Quantity (and some quality) data**

From StatCounter (2005 Q1 to 2008 Q4)

# Traffic on lirneasia.net, 2005-2008 (blue = unique visitors)

6,300 unique visitors in 2005 Q1, including tsunami spike

● Page Loads ● Unique Visitors ● Returning Visitors



56,000 unique visitors in 2008 Q4

8,200 returning visitors (returned 1 hr or later) in 2008 Q4 (high quality)

# Who visits? For LIRNEasia, prime audiences = South Asia, Southeast Asia and East Asia

From Google Analytics, for month ending Jan 17, 2009

## Quality indicators for site:

Average time on site = 00.01.37

Bounce rate (person leaving from entry page) = 71.61%

High quality; long stay

Poor quality; most leave w/in seconds

Sub Continent Region	Visits	Pages /Visit	Avg.Time on Site	% New Visits	Bounce Rate
1. Southern Asia	18,776	2.06	00:02:05	76.48%	66.36%
2. Northern America	4,195	1.37	00:00:30	91.82%	84.79%
3. Northern Europe	1,280	1.51	00:00:40	90.86%	80.31%
4. South-Eastern Asia	1,041	1.54	00:01:22	86.46%	78.10%
5. Western Asia	817	1.70	00:01:05	88.37%	75.76%
6. Western Europe	561	1.46	00:00:42	92.51%	83.60%
7. Eastern Asia	490	1.56	00:01:20	86.53%	77.76%
8. Australia and New Zealand	403	1.84	00:01:01	86.85%	75.93%

Surprise, Expats?

Bharti Airtel hopes to enter Sri Lankan telecom market this year at LIRNEasia

Visits from all over, but top 20 cities are all in Asia Pacific, except "unknown", London and New York

- Trending
- Loyalty
- er Capabilities
- rk Properties
- efined
- : Sources
- nt

m Reporting Beta

d Segments Beta

rces  
s Report  
on University  
Questions



### 28,732 visits came from 2,651 cities

Detail Level: [City](#) | [Country/Territory](#) | [Sub Continent Region](#) | [Continent](#)    Dimension: [None](#)

Site Usage	Goal Conversion
Visits	Pages/Visit
Avg. Time on Site	% New Visits
Bounce R	

# Sufficient condition: First-page test

# Search term: Telecom bottom pyramid

The screenshot shows a Google search results page for the query "Telecom bottom pyramid". The browser window title is "Telecom bottom pyramid - Google Search - Mozilla Firefox". The search results are displayed on a white background with a blue header. The search bar contains the text "Telecom bottom pyramid" and the search button is labeled "Search". The results are listed in a vertical column, each with a blue link, a snippet of text, and a green URL. The first result is a sponsored link from "www.NextBillion.net" titled "BoP: Base of the Pyramid". The second result is from "www.lirneasia.net" titled "Teleuse at the Bottom of the Pyramid 2 (Teleuse@BOP2) at LIRNEasia". The third result is also from "www.lirneasia.net" titled "Teleuse at the Bottom of the Pyramid 1 (Teleuse@BOP1) at LIRNEasia". The fourth result is from "www.i4donline.net" titled "i4d: The first monthly magazine on ICT4D". The fifth result is from "www.regulateonline.org" titled "World Dialogue on Regulation - Teleuse at the bottom of the ...". The sixth result is from "economictimes.indiatimes.com" titled "Telcos, gear cos trawl bottom of the pyramid - Telecom-News By ...".

Annotations in red boxes with arrows pointing to specific results:

- Think-Tank Advertisement**: Points to the sponsored link "BoP: Base of the Pyramid".
- Our main website entry at the very top**: Points to the first result from "www.lirneasia.net".
- Publication in online magazine**: Points to the second result from "www.lirneasia.net".
- Top 4: different URLs, but all LIRNEasia research**: Points to the first four results.
- Eighth reference is to a more Scholarly piece by LIRNEasia**: Points to the sixth result from "economictimes.indiatimes.com".

# Search term: early warning last mile

Good presence on first page of Google search, but only one of top references from our website

early warning last mile - Google Search - Mozilla Firefox

File Edit View History Bookmarks Yahoo! Tools Help

http://www.google.com/search?hl=en&client=firefox-a&rls=org.mozilla%3Aen-US%3Aofficial&q=early+warning+last+mile&... SSRN

Most Visited QuickPost-it Kottu

Summary (LIRNEasia) Sri Lanka gets new deputy financ... indi.ca » Information and Power ... Map Overlay - Google Analytics early warning last mile - Googl...

Google early warning last mile Search Advanced Search Preferences

Web Results 1 - 10 of about 189,000 for **early warning last mile**. (0.28 seconds)

**Evaluating Last-Mile Hazard Information Dissemination: A Research ...**  
The vision is to expand upon the results of the **Last Mile Hazard Warning System ...** for warnings to be transmitted from the national **early warning** system to ...  
[www.stockholmchallenge.se/data/526](http://www.stockholmchallenge.se/data/526) - 17k - Cached - Similar pages

**The long last mile - Multimedia - Early Warning - Themes & Issues ...**  
What technologies are appropriate for conveying hazard information to communities in the "**last-mile**"? Can communities become disaster resilient through ...  
[www.preventionweb.net/english/multimedia/v.php?id=1402&tid=35](http://www.preventionweb.net/english/multimedia/v.php?id=1402&tid=35) - 17k - Cached - Similar pages

**Consultant: national consultant for early warning system (last ...**  
CLOSED: Consultant: national consultant for **early warning** system (**last mile** preparedness and response). Source(s):United Nations Development Programme (UNDP ...  
[www.preventionweb.net/english/professional/jobs/v.php?id=5314](http://www.preventionweb.net/english/professional/jobs/v.php?id=5314) - 28k - Cached - Similar pages  
More results from [www.preventionweb.net](http://www.preventionweb.net)

**Evaluating Last-Mile Hazard Information Dissemination (HazInfo) at ...**  
An effective national **early warning** system will not only include technical systems ... Training on how to respond to hazard warnings along with **last mile** ...  
[www.lirneasia.net/projects/current-projects/evaluating-last-mile-hazard-information-dissemination-hazinfo/](http://www.lirneasia.net/projects/current-projects/evaluating-last-mile-hazard-information-dissemination-hazinfo/) - 34k - Cached - Similar pages

**UNU-EHS :: Last Mile**  
The **Last Mile**-Evacuation research project aims to develop a numerical tsunami **early warning** and evacuation information system, particularly for the ...  
[www.ehs.unu.edu/category:56?menu=95](http://www.ehs.unu.edu/category:56?menu=95) - 14k - Cached - Similar pages

**Bridging the long 'last mile' in Sri Lanka: Centre de recherches ...**  
Because the most advanced **early warning** system in the world can only do half the job: ... The **Last Mile** Hazard Information Dissemination Project is a civil ...  
[www.idrc.ca/ir/ev-106977-201-1-DO\\_TOPIC.html](http://www.idrc.ca/ir/ev-106977-201-1-DO_TOPIC.html) - 34k - Cached - Similar pages

**GITFEWS: "Last mile"**

Done

Page 1

LIRNEasia video

Only reference to LIRNEasia website

We get by with a little help from our friends

# Thoughts for discussion

- Necessity was the mother
  - Blog innovation driven mostly by **resource limitations**
- Need to **think differently** about the use of the web
- Incremental changes add up to very different ways of doing things and a radically different cost profile
  - LIRNEasia has no library, no PBX, no webmaster, no receptionist, no desktop computers; no wires except for electricity
  - Our communication costs may appear high (per capita telecom/month = USD 39.55; per capita broadband/month = USD 15.08 in 2-4Q 2008) but think of what they replace and their yield
  - Per capita journals & books/month = USD 3.00; not controlled; should/could be higher
- Can you live with “open” forms of control? E.g.,
  - Blogs don’t work with excessive moderation
  - If you want to pay ONLY for official calls, mobile-centric strategy may not work

**www.lirneasia.net** (can see the traffic data: StatCounter is an accessible button)

Rohan Samarajiva, [rohan@lirneasia.net](mailto:rohan@lirneasia.net)