

# E Democracy: Pre-conditions & suggestions

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# Outline

- Dimensions of e democracy
- Preconditions for e democracy
- What can be done?
- Back to e democracy

**E DEMOCRACY**

# E democracy

- Is it the replacement of representative democracy by direct democracy enabled by ICTs?
- Is it the use of ICTs in the conduct of elections?
  - The provision of election services is an important government service that can be modernized using ICTs
- Is it the use of ICTs in legislative work processes?
- Is it the use of ICTs to improve delivery of government services (incl. elections, consultation, etc.)?
- Is it the use of ICTs to enhance citizen participation in governance (including between elections)?

**PRE CONDITIONS**

# E connectivity: Narrow or broad

- By definition, all (more or less) citizens must be able to participate

# According to ITU, 9% Nepalese used Internet and 44% had mobile SIMs in 2011

	Mobile SIMs/100	Internet subs/100	Internet user %	Broadband/100
Maldives	165.72	6.63	34	6.37
Bhutan	65.58	1.9	21	1.79
Sri Lanka	87.05	-	15	1.71
India	72	1.8	10.07	1.08
Pakistan	61.61	1.63	9	0.31
Nepal	43.81	-	9	0.31
Bangladesh	56.06	0.76	5	0.31
Afghanistan	54.26	-	5	-

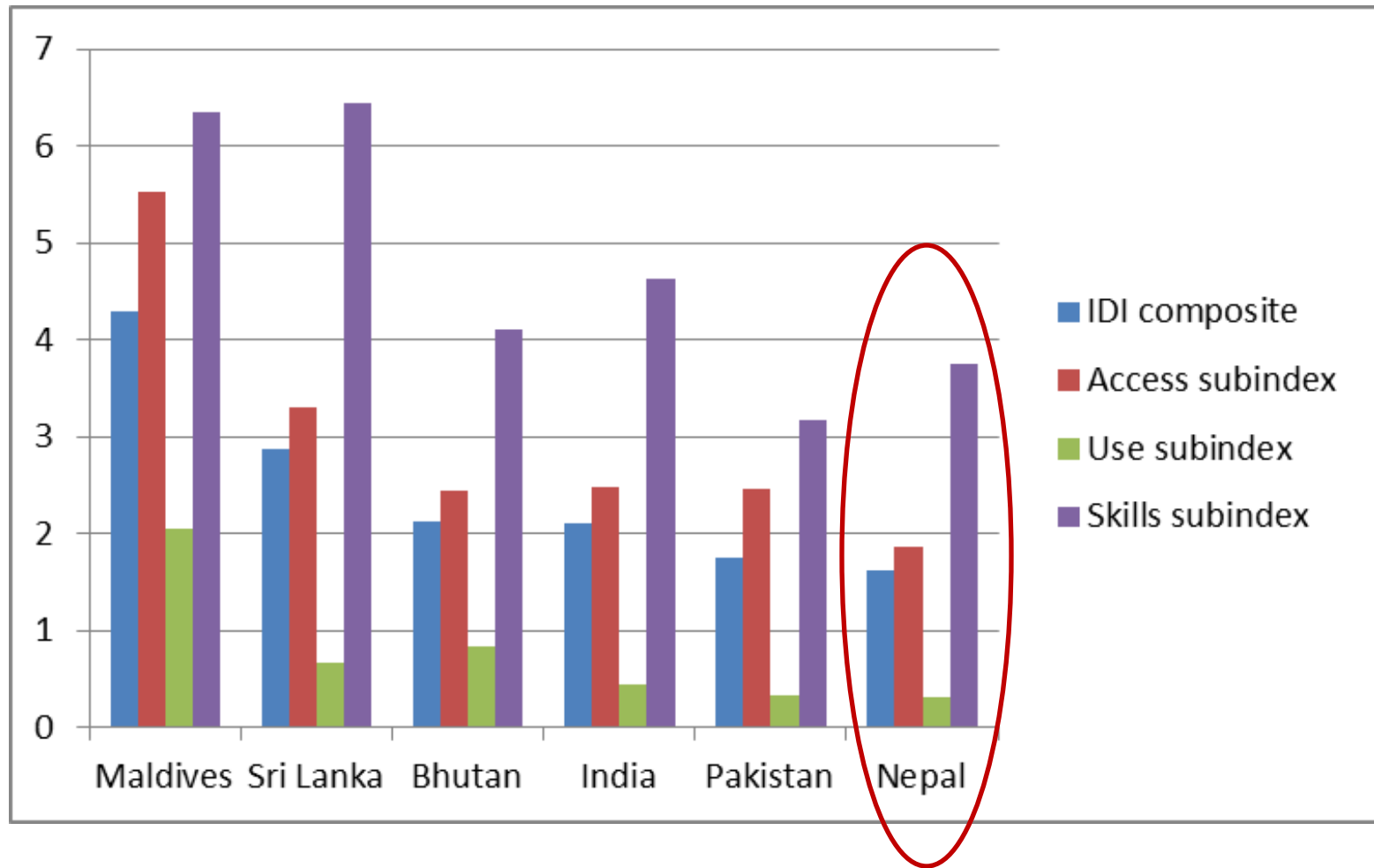
LIRNEasia has concerns about the quality of these numbers, but they are the best available source of comparative data at this time.

# Facebook users/100, last 3 months: 7 out of 100 Nepalis, compared to 1 out of 3 Maldivians

<b>Maldives</b>	<b>34.44</b>
Bhutan	11.29
Sri Lanka	7.08
Nepal	6.63
India	5.26
Pakistan	4.37
Bangladesh	2.10
Afghanistan	1.38



# ITU's ICT Development Index 2012: 6/6 among S Asian countries, except in skills

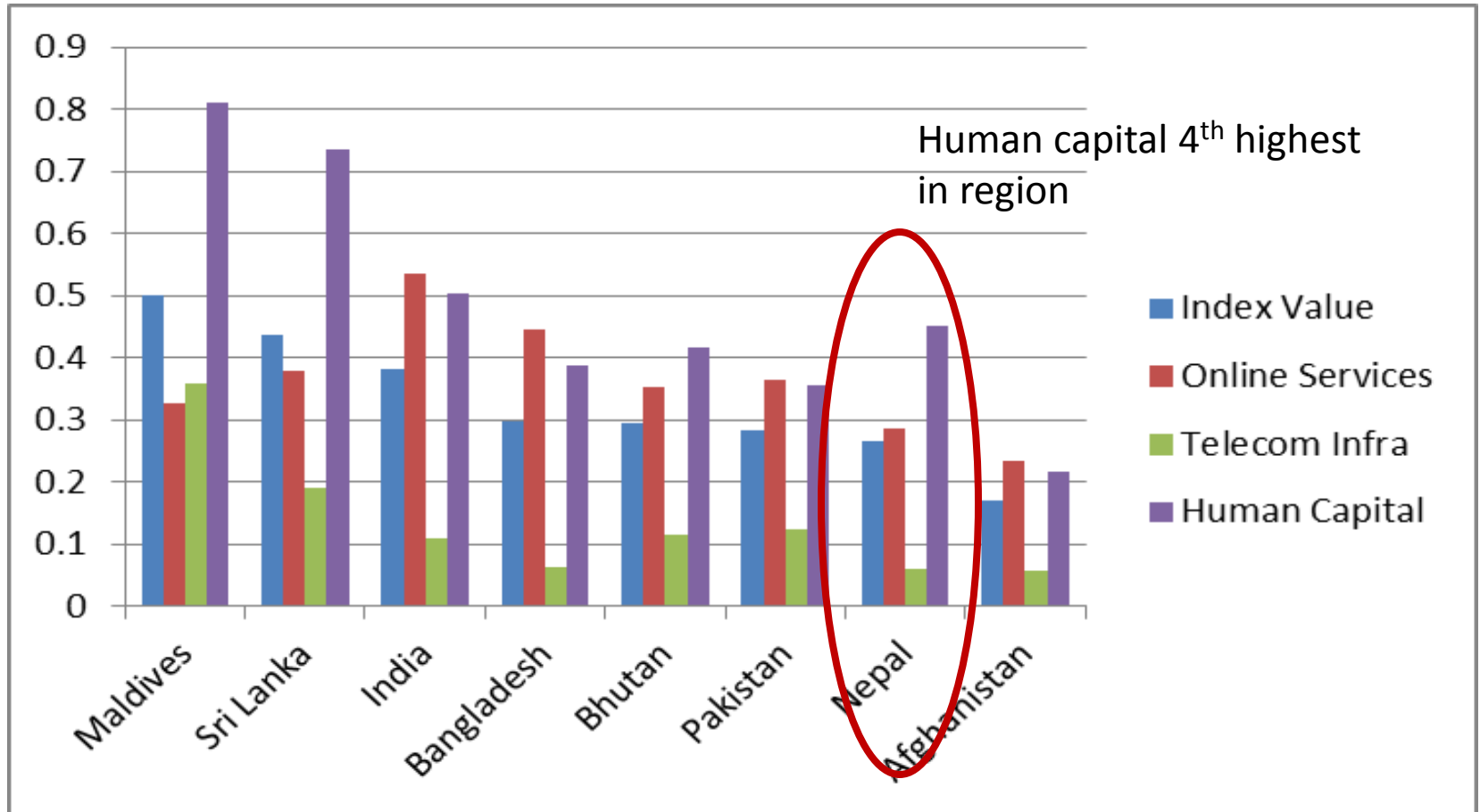


No data for Bangladesh and Afghanistan in 2012

But ITU's definition is not ICT specific . . .

- “Skills sub-index: This sub-index captures ICT capability or skills as indispensable input indicators. It includes three proxy indicators (adult literacy, gross secondary enrolment and gross tertiary enrolment), and therefore is given less weight in the computation of the IDI compared with the other two sub-indices.”

# UN E-Government Survey 2012 also sees Nepal as having an advantage in human capital



# Findings from Teleuse@BOP4 survey of “bottom of the pyramid”

## Actual population proportions

	Bangladesh	Pakistan	India	Sri Lanka	Thailand
SEC D+E (% of population)	73	59	69	44	33
Less than USD2 per day (% of population)	84	80	74	43	25
Year	2000	2004	2002	2003	2002
Source: World Resources Institute					

# BOP-representative surveys in 5 countries in mid 2011

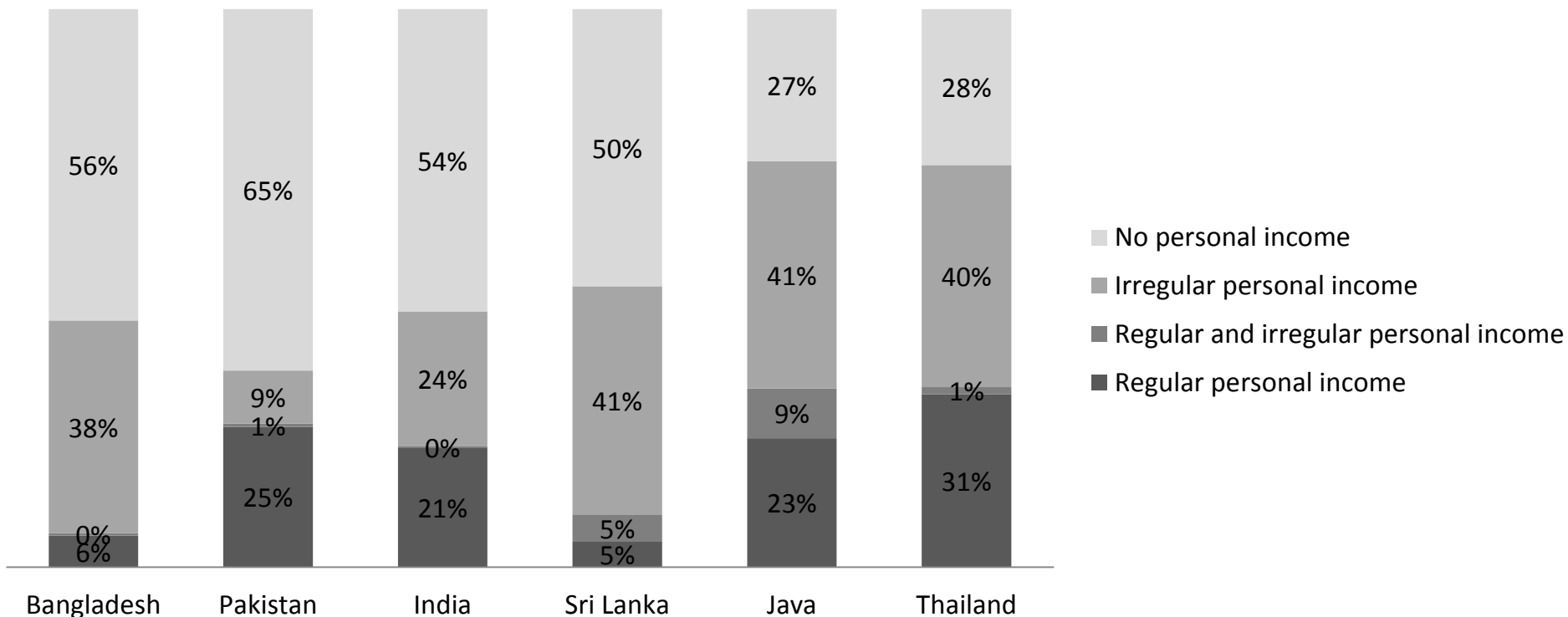
	Bangladesh	Pakistan	India	Sri Lanka <sup>[1]</sup>	Java <sup>[2]</sup>	Thailand	Total
BOP teleusers	2,050	1,835	3,181	1,200	1,088	800	10,154
Margin of error @ 95% CL (%)	± 2.0%	± 2.0%	± 2.0%	± 3.0%	± 2.0%	± 4.0%	

[1] Sri Lanka: Includes North and East

[2] Java region only; separate sampling procedures and BOP definition used

# Majority either have no, or irregular, personal incomes

Personal income status (% of BOP teleusers)



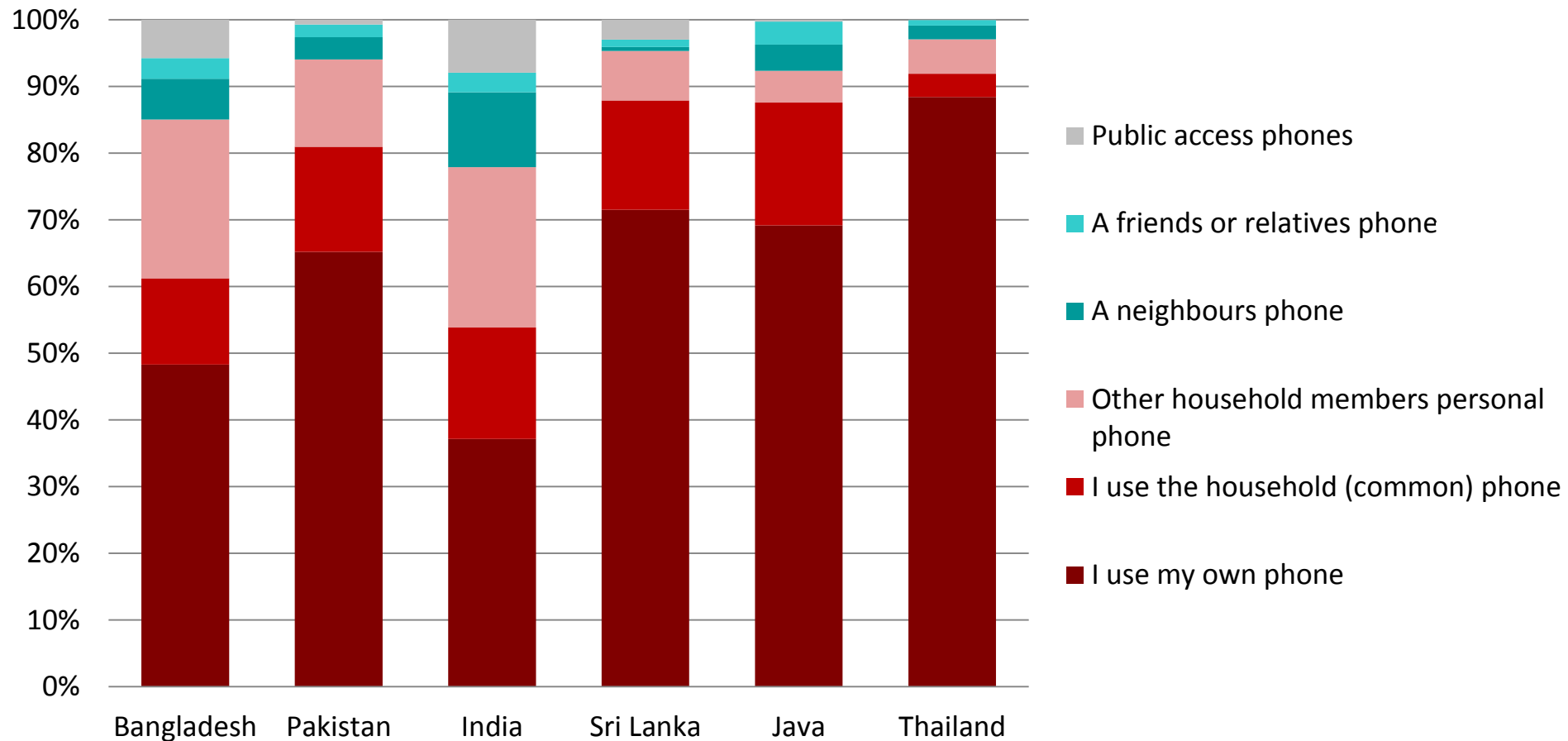
# But 89-99% of BOP have used a phone in previous 3 months

## Used a phone in the last 3 months (% of BOP)

	Bangladesh	Pakistan	India	Sri Lanka	Java	Thailand
2008	95%	96%	86%	88%	-	77 %
2011	99%	96%	89%	90%	90%	91%

# > 75 % of BOP have access within the household

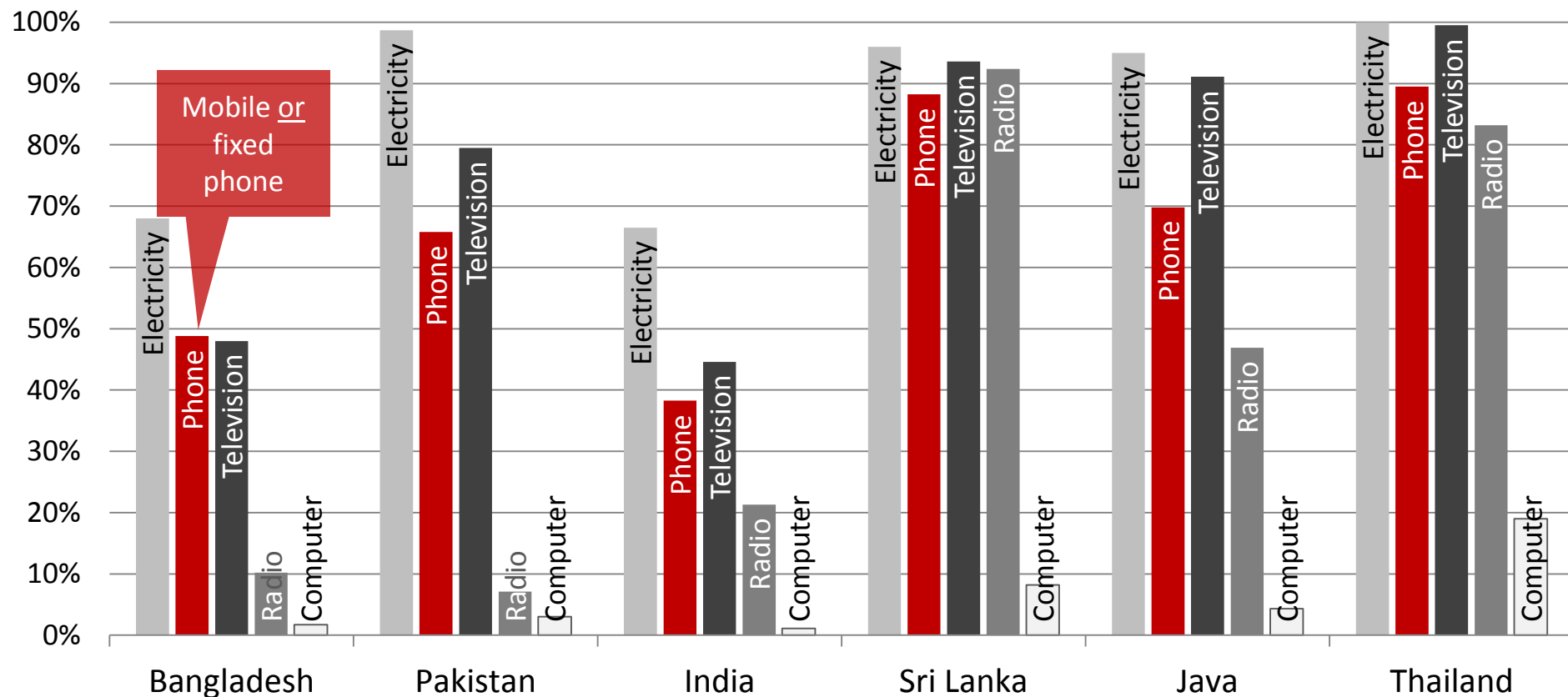
Most frequently used phone (% of BOP teleusers)





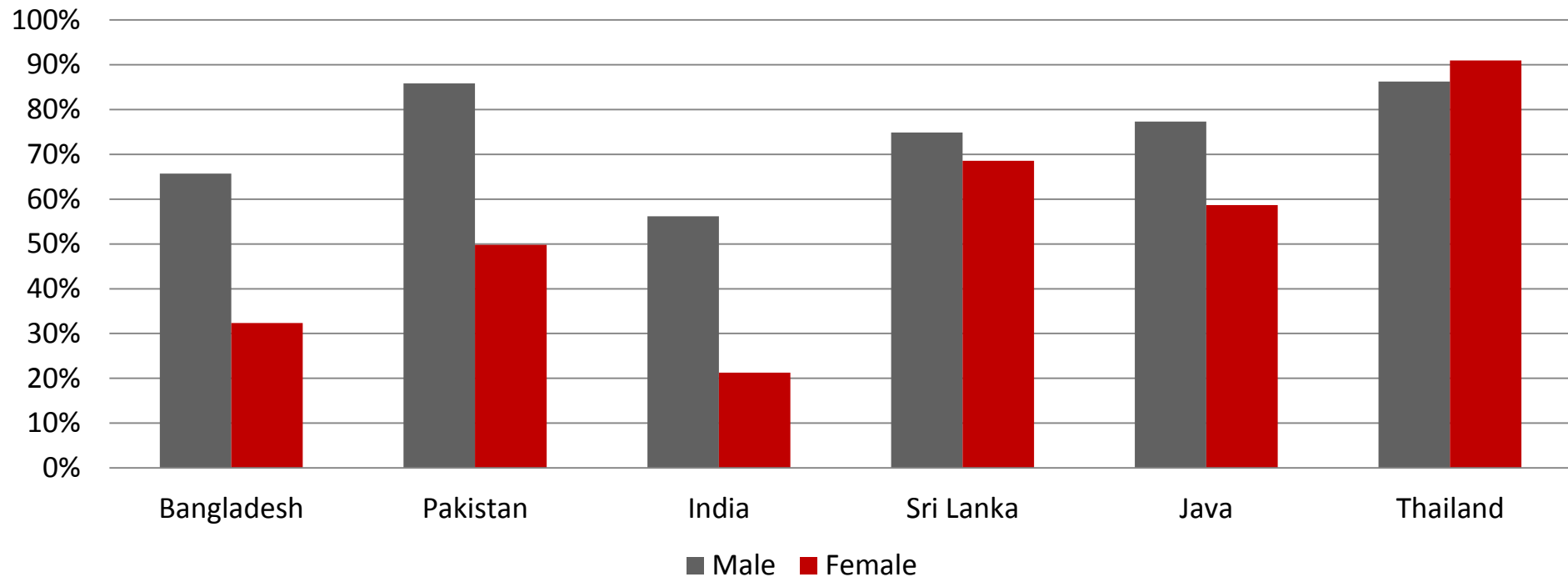
# Phones have overtaken radio at BOP everywhere except LK (but some mobiles are used as radios)

Household access (% of BOP teleusers)



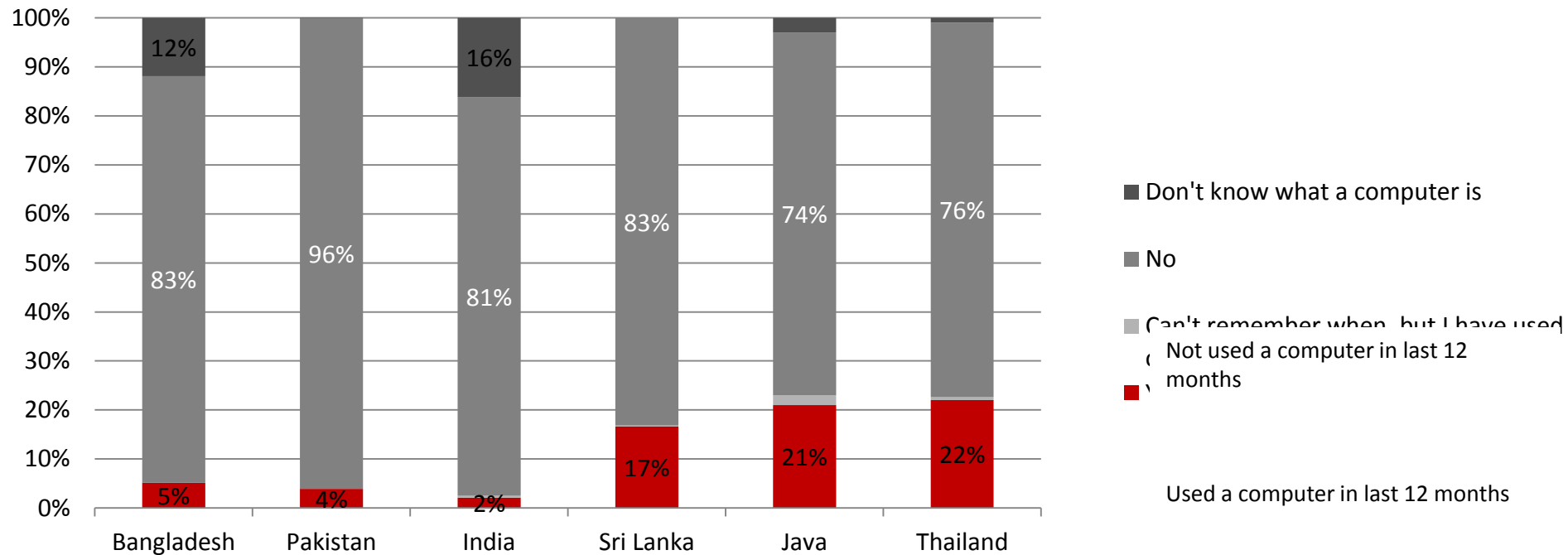
# Male v. female: Gender gap continues in BOP mobile ownership in sub-continent. Flipped in TH

Mobile ownership - individual (% of BOP teleusers)



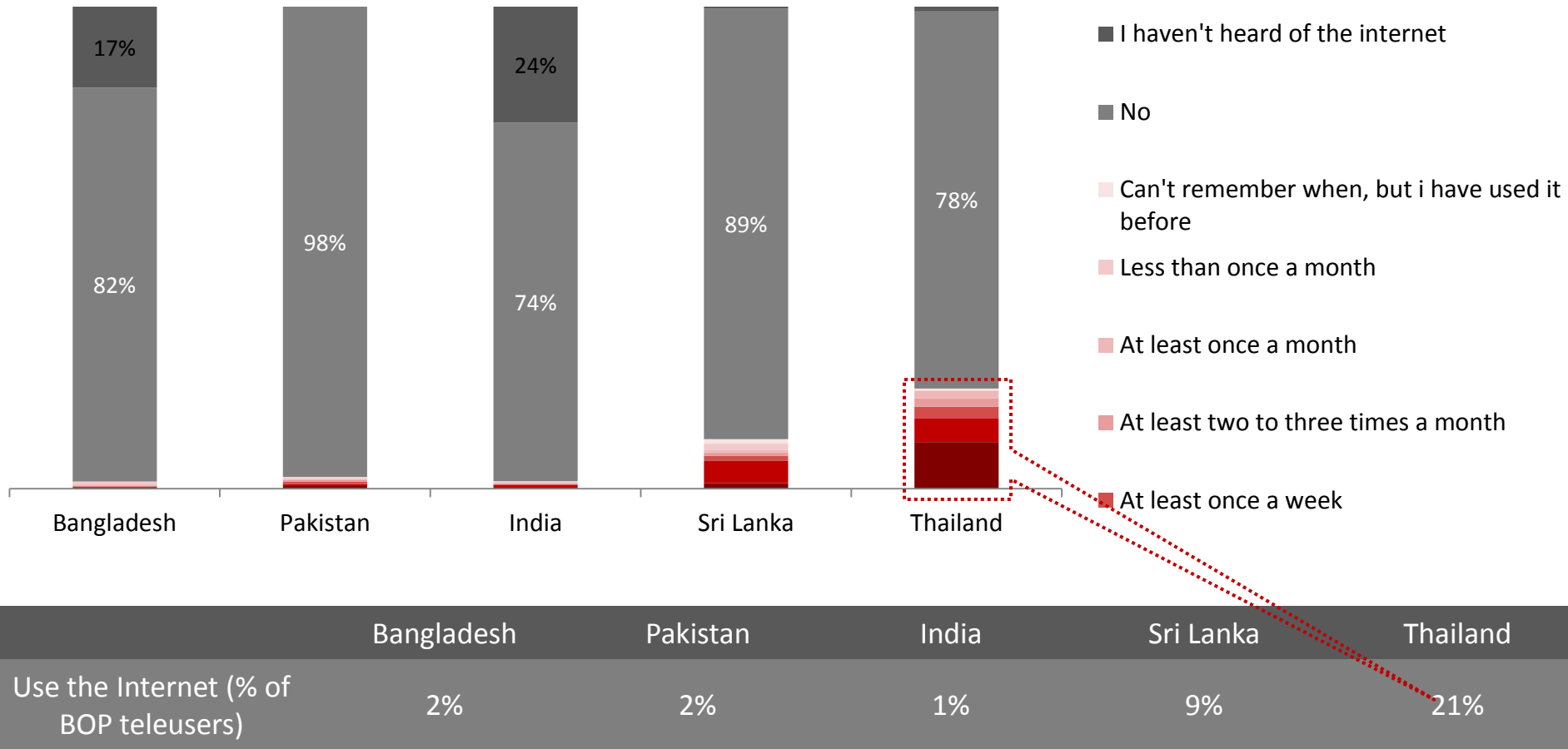
# Computer use at BOP low at best

## Use of computers (% of BOP teleusers)



# Internet use at BOP even lower

Internet use (% of BOP teleusers)



# How can we include most/all of our citizens within e democracy?

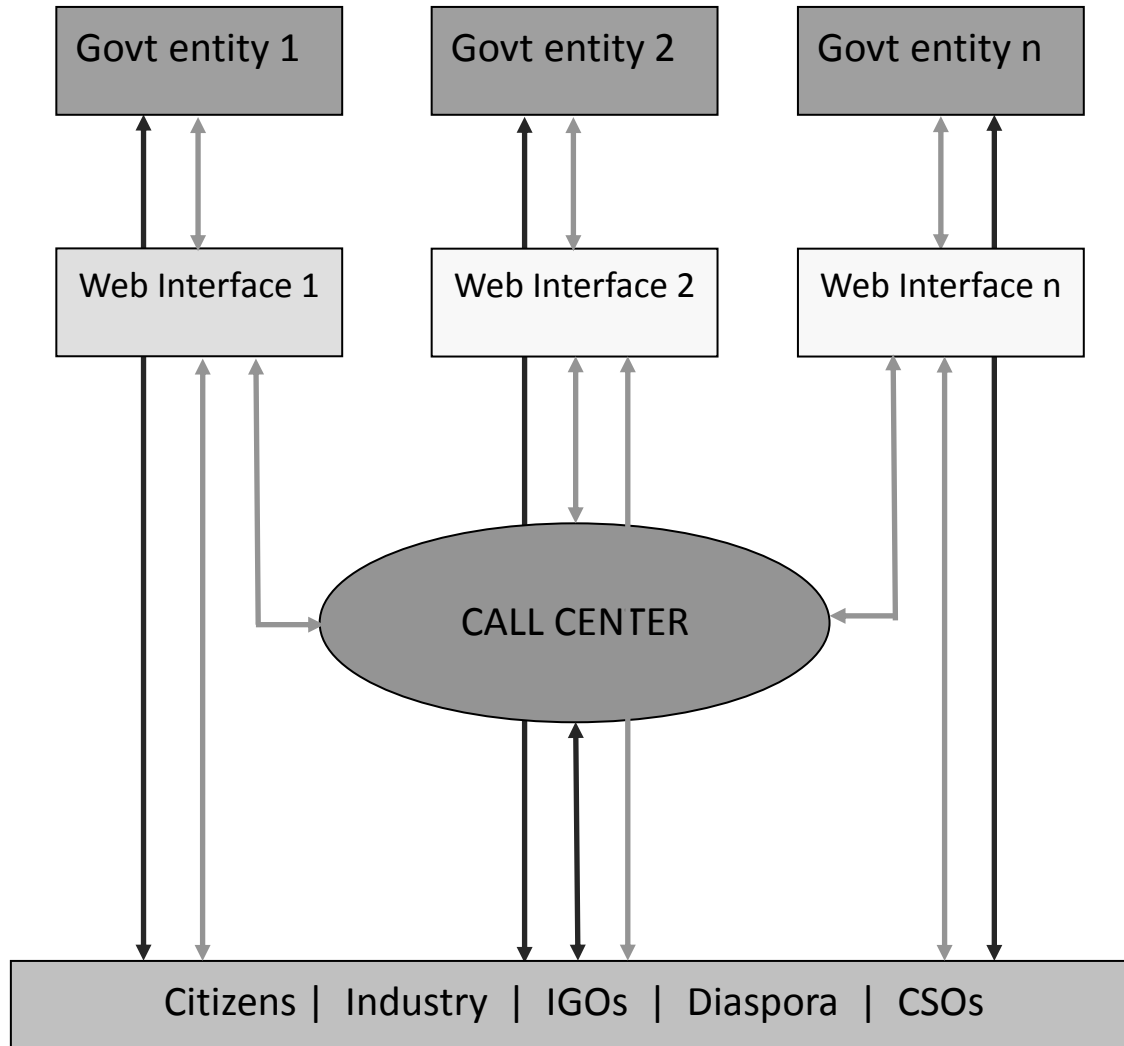


Voice is part of the answer, especially in the context of 59.1% literacy: **Government call center**

**TWO SUGGESTIONS, ONE FOR  
IMPROVING GOVERNMENT & THE  
OTHER FOR IMPROVING GOVERNANCE  
➔ DEMOCRACY**

**1. IMPROVE DELIVERY OF GOVT  
SERVICES: PROVIDE GOVERNMENT  
INFORMATION OVER VOICE INTERFACES**

Not web OR voice, but web AND voice; supplemented by common access centers for specialized functions & special groups



Even in smartphone rich New York City, 50,000 calls are made every day.



# New York City 311 Call Center

- USD 46 million a year to operate (because of high NYC salaries)
- 306 full-time operators, handling an average of 90 calls per shift
- More than 50,000 calls a day on average
- 3600 pieces of information retrieved from database
- Preparing the database is the most important activity; part of reengineering gov
- “No door is wrong” except for 911 (but even here calls will be redirected)

**311**

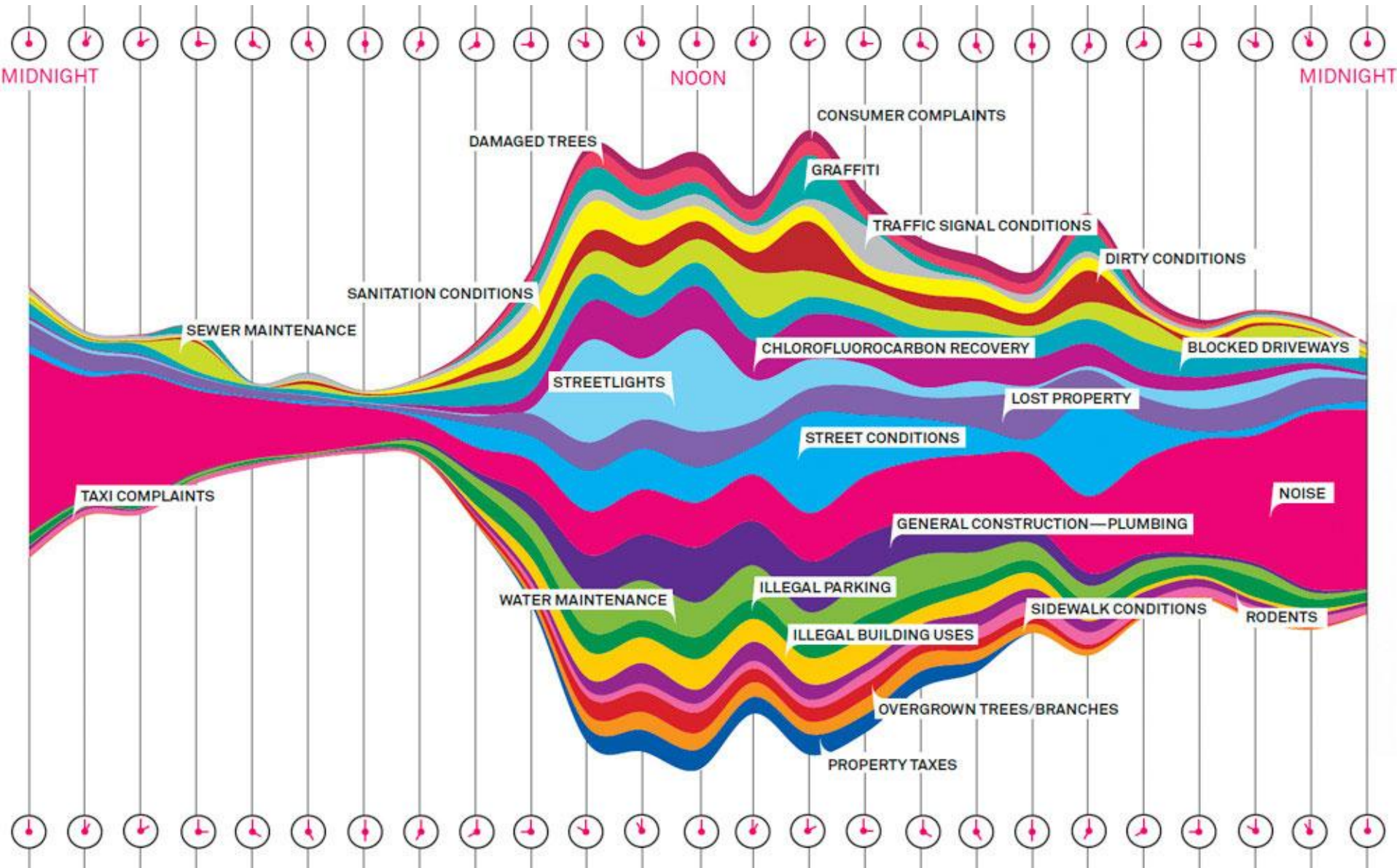
**FOR NON-EMERGENCY NYC SERVICES**

**DIAL**

**911**

**FOR EMERGENCIES**

# What the calls to New York City 311 are about through the day



# Big data from call centers (& web inquiries) can help improve services

- Can serve as diagnostics go identify geographical areas with problems and also particular services
- Can drive resource allocations
- Can also provide geo-spatial clues to identify problems and solutions

# Redundancy

- Call center must have backup
- Websites to be decentralized with standards enforced
- Mesh architecture for backhaul networks
- Multiple suppliers; multiple paths; multiple media

# Recommended policy actions

- Expedite release of LTE frequencies to current (and perhaps new) operators, depending on market conditions and spectrum availability
- Enable mobile money
- Ensure open access to backhaul (terrestrial, undersea and satellite)
- Centralized call center; decentralized web sites
- Call center to be staffed by trained personnel relying on databases
- Establish competitive procurement for government web design & maintenance
- No central server facility; ensure redundancy preferably outside country

## **2. IMPROVE GOVERNANCE: OPEN UP GOVERNMENT INFORMATION FOR APP DEVELOPERS**

Accurate, reliable, timely INFORMATION/DATA  
is needed for useful apps and services

- Service design and development best left up to the private sector (app community)
  - Operators and donors are already supporting these activities

# Why not open up government data?

- A large amount of information and knowledge resides within government agencies on a vast range of topics
  - E.g., public transport schedules, meteorological information, agriculture extension and market price information
  - Third party data collection is costly, plus issues of accuracy, credibility, accountability, scalability, sustainability...
- Opening up this knowledge means:
  - Codifying the knowledge: packaging the knowledge appropriately and making them computer readable
  - Allowing open access: creating APIs that service providers can easily plug into





## 1. Make Open Data, Content, and Web APIs the New Default

To lay the foundation for opening data and content efficiently, effectively and work with representatives from across government to develop and publish an open web API policy for the Federal Government. This policy will leverage central coordination and leadership to develop guidelines, standards, and best practices for improved interoperability. To establish a “new default,” the policy will require that newly developed IT systems are architected for openness and expose high-value<sup>22</sup> data and content as web APIs at a discrete and digestible level of granularity with metadata tags<sup>23</sup>. Under a presumption of openness, agencies must evaluate the information contained within these systems for release to other agencies and the public, publish it in a timely manner, make it easily accessible for external use as applicable, and post it at [agency.gov/developer](http://agency.gov/developer) in a machine-readable format.

### Fueling the A

The City of San Francisco public transportation d schedules, and to-the-r updates directly to the services. This has enable operators to write over 10 c applications to help the Francisco’s public trans services than the city co focused on presentation rather than opening th through

Official  
US gov  
Policy

# True democracy, enabled by “e”

- Is not limited to periodic elections
- Means that the public, at least the informed and interested citizens, are consulted on important policy and regulatory decisions (good governance)
- Permits informed participation in governance, for which Right to Information, including easy access to government information at granular level and in easy-to-use forms (i.e., apps), is critical
- Consultation and an informed citizenry were very costly
- But ICTs can reduce those costs for government as well as citizens

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