The Effects of Internet Shutdowns on Societies: Lessons from Africa

Admire Mare, PhD
Senior Lecturer: Namibia University of Science and Technology
SADC Regional Dialogue, 5 November 2019
OUTLINE OF THE PRESENTATION

- CONCEPTUALISING INTERNET SHUTDOWNS
- A SHORT HISTORY OF INTERNET SHUTDOWNS
- KEY ENABLERS OF INTERNET SHUTDOWNS
- JUSTIFICATIONS FOR INTERNET SHUTDOWNS
- THE EFFECTS OF INTERNET SHUTDOWNS
- KEEPING IT ON: WHAT ARE THE OPTIONS?
TAMING THE DICTATOR’S DIGITAL DILEMMA?

COMPLICATED RELATIONSHIP BETWEEN THE INTERNET AND STATE POWER
What is an internet shutdown?

- Internet shutdowns refer to an intentional disruption of internet or electronic communications, rendering them inaccessible or effectively unusable, for a specific population or within a location, often to exert control over the flow of information, are a type of online censorship.

- It involves the following elements: a deliberate and complete disruption; throttling of speeds or blocking of specific websites or applications; blockage of fixed line or mobile Internet or both; imposition of intermediary liability and issuance of an order by an authority of the state to telecommunication operators.
Continued....

- The definition of internet shutdowns must embrace those who have been priced out of the internet ecosystem.
- The unconnected have borne the brunt of being left behind.
- What about those who are not connected? How do they experience internet shutdowns?
Types of internet shutdowns

- **A total shutdown** or blackout where all services on the Internet are blocked off, targeting mobile Internet access and/or fixed lines, such that users in a country or region are not able to access the Internet.

- **A partial shutdown**, where content blocking techniques are applied to restrict access to websites or applications, very often to block people from communicating or sharing information amongst them.
Shutdowns can be implemented at various layers of the Internet architecture.

- Internet Protocol (IP) address blocking
- Deep Packet Inspection (DPI) (where equipment reads data passing through a network and hijacks it through equipment known as a “middlebox”)
- Border Gateway Patrol (BGP) attacks (where the addresses of certain websites or routes to entire networks are taken over illegitimately) and
- Hypertext Transfer Protocol (HTTP) throttling (which is the intentional slowing of bandwidth by a service provider)
The state is still “calling the shots”
KEY ENABLERS OF INTERNET SHUTDOWNS IN AFRICA

- Unequal power relations between governments and telcos
- The political economy of telecommunication infrastructure
- The **hierarchical** rather than **fluid nature** of the physical infrastructure of the internet
- Abuse of the licensing and regulatory powers by governments and regulators
- Executive overreach:
  - Insertion of intermediary liability clauses in telecommunication laws and regulations
- Single vs. multiple Internet Gateway Systems
“He who pays the piper pays the tune”
A Short History of Internet Shutdowns
Internet shutdowns started gaining global attention during the Egypt uprising in 2011, when authorities shut down the Internet for nearly a week to disrupt communications of protestors.

Since then, the use of Internet shutdowns as a tool for political purposes has become the new normal.

Governments have learned new ways of responding to threats posed by social media and internet by joining and beating the medium and developing new methods of repression and control.

While the phenomenon is global, current trends indicate that African countries especially semi autocratic and autocratic states are at the forefront of using kill switch as a weapon of choice.

2019 can easily be described as the ‘year of internet shutdowns’.
Damocles’ sword: “technology of freedom” to “technology of repression”? 
The internet and digital technologies have led to an unstable interregnum, where the challengers are empowered in disruption but perhaps have also been paradoxically weakened by some of their superior abilities.

Strategies include legal push back (cyber crimes and fake news bills), demonization of the mediums, which aims to keep supporters away from them; blocking, which often works to increase the threshold of motivation to reach ‘restricted’ information rather than making it impossible; and flooding the space with supporters and sometimes paid ‘trolls’ (varakashi), people whose job is to make online spaces difficult to navigate.
Justifications for internet shutdowns
“The inevitability of cross-border data flow makes the task of controlling information... at the very least, very costly” (Price, 2002: 17).

However...

For authoritarian regimes intent on maintaining power, the cost of controlling information may be less of an issue than the need for maintaining political power.
ECONOMIC EFFECTS
DIRECT AND INDIRECT FINANCIAL LOSSES

- Internet shutdowns affect economies in numerous ways, disturbing productivity and generating monetary losses in time-sensitive transactions.
- There is a real impact of shutdowns on countries’ Gross Domestic Products (GDP) (Brookings Institute, Cipesa and Deloitte Reports).
- Beyond macro-economic impacts, shutdowns also result in loss of earnings in the digital economy and government revenues.
- It also affects informal economies, worker productivity, supply chains, manufacturers and service providers, investor confidence and foreign direct investment.
- Even short-lived Internet disruptions affect many facets of the national economy and tend to persist far beyond the days on which access is disrupted.
Calculation of the economic cost

<table>
<thead>
<tr>
<th>Internet shutdowns continue to cost Africa's economies</th>
<th>Cost of disruption/day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethiopia</td>
<td>$3.5 million</td>
</tr>
<tr>
<td>DR Congo</td>
<td>2</td>
</tr>
<tr>
<td>Uganda</td>
<td>1.76</td>
</tr>
<tr>
<td>Cameroon (Anglophone)</td>
<td>1.67</td>
</tr>
<tr>
<td>Gabon</td>
<td>0.88</td>
</tr>
<tr>
<td>Republic of Congo</td>
<td>0.43</td>
</tr>
<tr>
<td>Niger</td>
<td>0.41</td>
</tr>
<tr>
<td>Burundi</td>
<td>0.16</td>
</tr>
<tr>
<td>The Gambia</td>
<td>0.05</td>
</tr>
</tbody>
</table>

Data: The Collaboration on International ICT Policy in East and Southern Africa
Disruption of e-commerce and mobile payment systems

- Businesses that are heavily dependent on electronic transactions are particularly exposed to very serious consequences such as bankruptcy.
- For example, e-payments are becoming increasingly common not only in the developed world but in many developing countries.
Crippling the digital economy

- Businesses could not engage in e-commerce or provide digital products and services.
- Companies lose access to online information, thereby undermining productivity and potentially costing jobs.
- The spread of mobile internet has also offered many Africans an opportunity to achieve key development aims, and access education, health services, insurance, and employment opportunities.
The ‘Streisand effect’: causes reputational damage

- Internet shutdowns tend to attract international attention and create pressure on countries that undertake them.
- This relates to the so-called “Streisand effect”, where the attempt to silencing voices or hiding information leads to the unintended consequence of bringing more attention to them.
Shutdowns undermine commitments to Development Goals

- In particular, governments commit to ensuring universal and affordable Internet access by 2020. Internet shutdowns are in conflict with this commitment.
Political effects
Demobilisation vs remobilisation
Human Rights Violations in the Clock of Darkness

- As such, Internet shutdowns, in particular those that disable all means of communications, should be considered as potential Human Rights violations.
- Not only does shutting down the internet affect the smooth running of peoples’ lives - which is a huge inconvenience in itself, but it also occasions a veil of darkness under whose cover gross human rights violations take root.
Chilling effect: self censorship

- The increase of shutdowns has measurable economic costs, but they can also lead Internet users to change their behavior, possibly leading to self-censorship.
Reconfiguring of the public sphere

- It affects the realization of both horizontal and vertical voice which are key for holding power to account
- Pushes people to engage in oblique voice (meme-fying politics)
Social effects

- Endangering people living with disabilities
- It disrupts the learning process: learners and teachers can’t access the e-learning platforms to submit and mark assessments
- Cutting the communicative connection between those in the diaspora and those based in the home country
- Crossing Borders for Email and Contraband SIM Cards: Forcing people to migrate to other countries and regions to have access to the internet i.e. southern to northern Cameroon and DRC to Congo Brazzaville
KEY TAKE AWAY POINTS...

- Need to “guard our zones of autonomy”: holding power in various species to account
- In “times of peace prepare for war”: proactive interventions
- Transparency reports: internet intermediaries
- The “rat race”: technology always ahead of the laws
- Role of taxes, prices and laws in internet access restriction
- No one is left behind: the unconnected have been shut out of the information superhighway for too long
Thank you for your attention

- admiremare@gmail.com
- Twitter: @admire2mare

- TANGI UNENE
- ASANTE SANA