Internet Shutdowns Shutting Down Democracy

Key Insights/Consequences

- **Undermining Democracy and Human Rights:** Internet shutdowns undermine democratic processes and civil liberties by restricting information flow, increasing authoritarianism, and impeding the activities of NGOs and advocacy groups.

- **Economic Impact:** Shutdowns disrupt local economies, causing significant financial and job losses.

- **Health and Education Consequences:** Shutdowns disrupt telemedicine and emergency services, leading to worsened health outcomes, and severely impact access to educational resources.

Policy Recommendations

- **Resilient Infrastructure:** Invest in decentralized networks and redundant communication pathways, such as mesh networks and distributed internet exchange points, to mitigate the impact of shutdowns.

- **Circumvention Tools:** Promote and invest in VPNs, Tor, and decentralized messaging apps, alongside digital literacy programs to educate populations on using these tools during shutdowns.

- **Legal Frameworks:** Advocate for international and national laws that recognize and penalize unjustified internet shutdowns. Develop binding international agreements with clear definitions, accountability mechanisms, and penalties for violations.

- **Global Advocacy and Awareness:** Increase international pressure through bodies like the UN to build consensus against internet shutdowns and support organizations that track and publicize shutdown occurrences.

Internet shutdowns are now a prevalent tool governments use to limit information flows and suppress dissent. Most commonly executed through government orders to Internet Service Providers (ISPs) to cut off access, they range from localized blackouts to national or regional service disruptions. Typically occurring during political unrest, elections, and conflicts, shutdowns are also increasingly used preemptively against social unrest, protests, and spread of oppositional information.

FIGURE 1: INTERNET SHUTDOWNS, 2016-2023

Shutdowns
0
1-5
6-10
11-50
51-100
101-75C
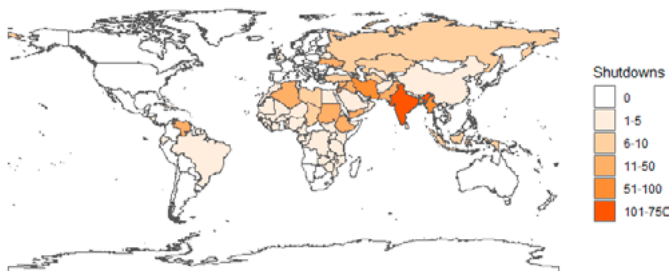
Note: Data on internet shutdowns from Access Now's Shutdown Tracker Optimization Project (STOP).

The growing trend of governments shutting off the internet poses a severe threat to democratic processes, economic stability, and human rights. Governments justify these actions under the guise of national security, but the real motive frequently lies in controlling information flow and suppressing dissent.

The rise in frequency and scope of these shutdowns highlights a worrying trend toward authoritarianism, where the free exchange of information is stifled to maintain control and prevent opposition.
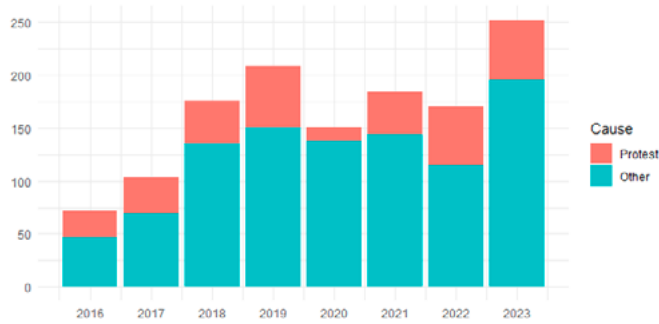
Defining Internet Shutdowns

Although international law does not provide a singular definition for internet shutdowns, most definitions align with that of the UN Human Rights Council (A/HRC/50/55), which describes them as "measures taken by a government, or on behalf of a government, to intentionally disrupt access to, and the use of, online information and communication systems."

Shutdown Tactics

Governments usually shut down the internet through orders to ISPs who then cut off internet access in different technical ways. Some of the most common techniques include blocking specific content or websites by manipulating DNS or IP addresses, or through methods like Deep Packet Inspection (DPI). Other tactics include throttling, shutting down mobile networks, disrupting specific services like social media, manipulating routing protocols, tampering with Border Gateway Protocols (BGP), and launching DDoS attacks.

FIGURE 2: YEARLY SHUTDOWNS

Note: Data on internet shutdowns from Access Now's STOP.

Shutdown Consequences

Internet shutdowns can lead to significant human rights violations and can have profound negative political, economic, and developmental consequences.

Democratic Processes, Civil Society, and Human Rights

There are several ways in which Internet shutdowns erode democratic processes and increase authoritarianism, weaken civil society, facilitate impunity, reduce accountability, transparency, and the rule of law, and restrict human rights and free speech.

Internet shutdowns erode democratic processes by restricting information flows and impeding transparent electoral conduct, leading to increased authoritarianism and social unrest.

FIGURE 3: INTERNET SHUTDOWNS BY REGIME TYPE, 2016-2023
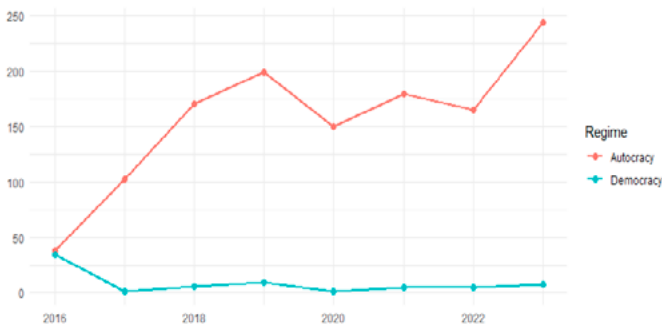
Note: Data on internet shutdowns from Access Now's STOP. Democracy and autocracy estimated using the Regimes of the World measure found in V-Dem's dataset (Coppedge et al. 2024).

They hinder the operations of NGOs and advocacy groups, weakening civil society and thereby reducing diagonal accountability and transparency. Shutdowns disrupt communication and organization of peaceful protests, stifling pro-democracy movements and curtailing civil liberties (Chang & Lin 2020).

Internet shutdowns also facilitate impunity by preventing the monitoring of human rights abuses thus undermining *the rule of law*. Governments often justify these actions under national security, legitimizing broader repressive measures and increasing surveillance and intimidation, which fosters a climate of fear and self-censorship (Gohdes 2023).

Election Shutdown in the DRC

The internet was shut down for nearly three weeks during the 2018 presidential election in the Democratic Republic of Congo.

The blackout limited the ability of election observers, journalists, and citizens to report on and verify election-related activities. This created an environment ripe for election fraud and rigging when irregularities would likely not be detected.

Additionally, the shutdown fueled suspicion and unrest among the populace, contributing to instances of election violence. The disruption of internet services also impeded the work of civil society organizations and international bodies in monitoring and ensuring the integrity of the election, ultimately undermining the democratic process.

Source: Human Rights Watch (2019)

Economic Consequences

Internet shutdowns significantly disrupt the digital economy, leading to extensive financial losses and economic instability (Tagat, Phokeer, & Kreitem 2024). These shutdowns foster an environment of uncertainty and inefficiency, deterring foreign investment and hindering innovation.

This particularly disrupts the growing proportion of businesses that rely heavily on online services such as e-commerce and online banking. It can also lead to broader negative impacts such as economic instability, increased poverty, and inequality.

FIGURE 4: ESTIMATED COST OF SHUTDOWNS IN 2022
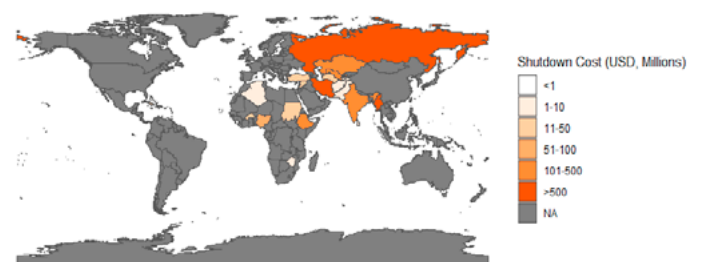
Note: Shutdown costs estimated using Woodhams & Migliano's Cost of Internet Shutdowns Tracker.

Health and Education

Internet shutdowns can have significant health consequences. They severely compromise health services that rely on digital communications, disrupting the dissemination of public health information, emergency services, and telemedicine (Purdon, Ashraf & Wagner 2015). The broader consequences of such disruptions include worsening health outcomes and increased mortality rates, particularly among vulnerable populations who are most reliant on these digital health services.

Economic Impact of Shutdowns in India

In the first half of 2023, internet shutdowns in India resulted in a loss of approximately $1.9 billion to the economy. These shutdowns disrupted various sectors, including e-commerce and banking, which are heavily dependent on internet connectivity. The shutdowns also caused a loss of nearly $118 million in foreign investment and led to the loss of over 21,000 jobs.

Source: Business Standard (2023).

Internet shutdowns lead to school closures and severely hinder remote learning, disrupting access to online educational resources and communication platforms. This significantly affects learning outcomes, especially during the COVID-19 pandemic (Nadaf 2021). The broader consequences include increased educational inequality and long-term economic impacts due to the loss of learning, which further exacerbates socio-economic disparities.

Shutdowns and Education in Zimbabwe

Internet shutdowns in Zimbabwe have a detrimental impact on educational outcomes: Students cannot access essential materials, participate in virtual classes, or submit assignments; for educators, shutdowns hinder the ability to prepare lessons, collaborate with colleagues, and provide timely feedback.

These disruptions are particularly damaging in rural areas, where educational resources are already limited, and the internet serves as a crucial link to quality education. Additionally, internet shutdowns undermine efforts to implement e-learning programs and educational reforms aimed at improving access and quality of education in Zimbabwe. Shutdowns are further exacerbating inequalities and limiting the country's socio-economic development.

Source: Tarisayi & Munyaradzi (2021)

Open Internet: a human right

Open and undisrupted internet access is considered a human right and a policy priority for international organizations. The UN expanded Article 19 of the Universal Declaration of Human Rights (UDHR) by adopting the non-binding Resolution A/HRC/RES/47/16 in 2021 on "The promotion, protection and enjoyment of human rights on the Internet" (UN, 2021). The resolution explicitly denounces internet shutdowns and online censorship.

Similarly, the EU has a committed and principled stance on open internet. Under Regulation EU 2015/2021, internet traffic in the EU shall be treated without discrimination, blocking, throttling or prioritisation (EU, 2015). Most recently, the United Nations General Assembly adopted in September 2024 the Global Digital Compact, a comprehensive framework for global governance of digital technology and artificial intelligence which includes an explicit commitment by all UN member states to abstain from internet shutdowns (UN, 2024).

Policy Recommendations

The growing frequency and harmful impacts of internet shutdowns on various aspects of local life necessitate solutions to address and mitigate their negative effects.

Resilient Infrastructure

Investing in decentralized networks and redundant communication pathways can significantly reduce the ability of governments to impose total internet shutdowns. Technologies such as mesh networks, which allow peer-to-peer communication without relying on a central server, are particularly effective. Additionally, building more distributed and numerous internet exchange points and diversifying internet connectivity at international borders can make it more difficult and cumbersome for governments to implement a single "kill switch."

Encouraging the development of decentralization technologies, such as mesh networks and blockchain-based communications platforms, further enhances the resilience of internet infrastructure against shutdowns (Kremenova & Gajdos 2019).

Circumvention Tools

Promoting and investing in tools like VPNs, Tor, Psiphon, and decentralized messaging apps are crucial for maintaining the flow of information and communication during internet shutdowns. To ensure these tools are effectively utilized, it is essential to implement digital literacy programs that educate populations on how to use them. By enhancing digital literacy, individuals can effectively bypass shutdowns, maintain access to information, and uphold their digital rights. Educational programs should focus on privacy, security, and the ethical use of the internet, empowering communities to navigate and counteract internet restrictions.

Legal Frameworks Against Shutdowns

Advocating for international and national laws that recognize and penalize unjustified internet shutdowns is crucial for creating a legal deterrent against their use. Establishing robust legal frameworks to regulate shutdown conditions, ensuring they are lawful, necessary, and proportionate, is essential.

Promoting global condemnation through international bodies such as the UN, and developing binding international agreements with clear definitions, accountability mechanisms, and penalties for violations, can further restrict the ability of governments to impose shutdowns. Increasing the public and international costs of shutdowns through sanctions, punishments, and public shaming can also serve as effective deterrents. Recognizing unjustified shutdowns as violations of human rights and reflecting their use in regime classifications can further pressure governments to refrain from using internet shutdowns as tools of repression.

Global Advocacy and Awareness

Increasing international pressure through the UN and other global bodies can help build a consensus against internet shutdowns and encourage more countries to uphold internet freedoms. Supporting organizations that track and publicize shutdown occurrences and funding the technical community to develop tools for monitoring internet disruptions, including throttling and filtering, are crucial steps.

Highlighting the economic costs of shutdowns on GDP, investment, and trade can emphasize the negative financial impacts to governments and potential investors, with published reports further publicizing these downsides. Supporting civil society initiatives to monitor, document, and report on shutdowns provides valuable resources and advocacy.

Additionally, encouraging corporate responsibility in the telecommunications and technology sectors to commit to transparency and human rights principles, resist unjustified shutdown orders, and publicly report such requests, further strengthens the global effort against internet shutdowns.

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ABOUT V-DEM INSTITUTE

Varieties of Democracy (V-Dem) is a unique approach to conceptualization and measurement of democracy. The headquarters – the V-Dem Institute – is based at the University of Gothenburg with 14 staff. The project includes a worldwide team with 5 Principal Investigators, 22 Project Managers, 33 Regional Managers, 134 Country Coordinators, Research Assistants, and more than 4,000 Country Experts. The V-Dem project is one of the largest ever social science research-oriented data collection programs..

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