The internet has been growing rapidly in Africa in recent years, transforming the way we communicate, interact, conduct politics and business and even find love. McKinsey projects that, if built on the right foundations, the internet could contribute as much as $300 billion a year to Africa’s GDP by 2025 transforming sectors as diverse as sectors as diverse as agriculture, retail, and health care.¹

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.

But this potential of the Internet in Africa can be stymied by the preponderance of government-directed internet shutdowns which have increasingly become a mainstay on the continent. Across the African continent, internet stoppages are getting longer, more sophisticated, and targeted. As the digital economy expands, it will become even more expensive for nations to shut down the internet. Without coordinated action by civil society, this damage is likely to accelerate in the future and further weaken much needed economic development in Africa.

Despite the costly nature of temporary disruptions, it has been hard to fully approximate or accurately estimate the impact they have on not only citizens but also on the economy in general.² The Collaboration on International ICT Policy in East and Southern Africa (CIPESA) has now developed a measurement that assesses both the immediate and long-term structural effects of internet shutdowns.

CIPESA’s method calculates the direct loss of earnings not only in the digital economy and government revenues but also how shutdowns affect informal economies, worker productivity, supply chains, manufacturers and service providers, investor confidence and foreign direct investment. The framework can be used to estimate either total shutdowns that affect fixed, wireless, and mobile internet connectivity, or partial disruptions targeting social media networks.³

An analysis of internet shutdowns in 10 countries using the CIPESA methodology revealed that when connectivity is throttled, slowed or severed, the impact can be systemic, disrupting the delivery of critical services and undermining economic growth. The disruptions which lasted a combined 236 days since 2015 cost the countries over $235 million. According to Wakabi, W., CIPESA’s Executive Director, those ordering internet shutdowns are unaware of the full magnitude and consequences of these actions on their economies and citizens. NetBlocks, an organization that tracks internet

³ ibid
shutdowns, has also developed a **Cost of Shutdown Tool (COST)** that estimates the economic impact of an internet disruption, mobile data blackout or app restriction using indicators from the World Bank, ITU, Eurostat and U.S. Census.

The rise in internet penetration has, in many parts of the continent, been blamed for a concomitant rise in social ills such as child pornography, fake news, public disorder, hate speech, cybercrime among others. Many governments have blamed the internet for an increase in popular demonstrations, ethnic violence. Just three months into 2019, five countries — namely Gabon, Sudan, Zimbabwe, Chad, and DR Congo — had already blocked connectivity. According to CIPESA, 22 African countries have blocked the internet over the past five years. Mauritania, deserves special mention for the wrong reasons – of course – for blocking the internet over protests though just one in five people are online.

There is no doubt that the internet has been exploited by actors with malicious intent but the benefits far outweigh than the benefits. The question then is who stands to benefit from the growing practice of internet disruptions when the medium itself has become as integral as the seventh sense, and in many cases, can mean the difference between life and death for the citizenry.

An Internet disruption, often referred to as an internet shutdown, is the intentional blockage of access to the internet or sections of the internet such as social media platforms. It is important to note that connectivity disruptions can also be caused by massive power outages, severe weather, and fiber/cable issues.

In recent years, a number of countries have blocked particular applications, shut down specific services (e.g. instant messaging and voice over internet protocol calling), turned off mobile telecommunications services, or disrupted the entire internet. Those actions separate people from their family, friends, and livelihoods, undermine economic growth, interfere with the startup ecosystem, and threaten social stability by interrupting economic activity.4

In Africa, new forms of controlling the internet have emerged. These include taxes and tariffs on social media; cybersecurity legislation that criminalises speech and justifies mass or arbitrary surveillance; and requirements for bloggers to register or apply for licences. Another disturbing development is the increase in online misogyny and harassment of women and girls, as well as misinformation and hate speech, often encouraged or initiated by governments or political parties.

Intentional internet disruptions are mostly ordered by governments eager to disrupt communications and curtail citizens’ access to information in order to limit what the citizens can see, do, or communicate. Fear-driven efforts by African states to control use of the internet; to shut it down or block parts of it have been growing in recent years.

Many nations increasingly use internet and social media disruptions as a way to quell political dissent. Some countries have shut down social media after violent

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incidents, purportedly to curb people's ability to incite further violence, such as in Sri Lanka after the Easter suicide bombing there. Ethiopia also limited internet access in 2017 after activists leaked copies of the national school exams online. Whatever a country's motivation, the frequency of shutdowns worldwide is rising dramatically, according to Statista, which notes a 6,000% increase between 2011 and 2018.\(^5\)

Internet governance, human rights, and internet policy debates, dialogues and decision-making forums in many African countries are not sufficiently inclusive of civil society perspectives and voices.

Internet shutdowns have become much more frequent in Africa since 2015, with governments either totally cutting off the internet or blocking access to platforms like WhatsApp, Facebook, and Twitter.

In 2016 alone, 11 countries disrupted internet communications before crucial elections in Uganda, during national exams in Algeria, and anti-government protests in Ethiopia. In 2017, Cameroon instituted a 93-day blackout in its English-speaking regions, and Togo shut down the internet to stifle protests against president Faure Gnassingbé.\(^6\)

As the internet becomes central to our lives and livelihoods, the impact and cost of network blockages is detrimental to human progress. It is incumbent upon citizens to be interested in how the Internet is managed. The growing scope of internet disruptions is creating significant detrimental impacts on economic activity in a number of nations around the world, but moreso for Africa, where hope had been that technology can be leveraged to overcome development challenges.

African countries have a major informal sector that is largely supported by mobile voice communications, mobile money and apps like WhatsApp and Facebook. A 2012 World Bank study on mobile phone usage among those living below the poverty line in Kenya, found that a third of users reported using their phones for replying to casual job offers and almost half relied on their phones for work, usually in the informal economy, such as selling clothes or food, or offering professional services like hairdressing. For these users, the most desirable feature of their phones was that it made them more “reachable.”\(^7\)

Even though the internet connectivity has been growing exponentially, a lot of work remains to be done to bring the benefits of connectivity to the majority of Africans.

Africa is the second most populous continent in the world, with a population over 1.2 billion people, but according to ITU data, there are more than twice the number of internet users in Europe (501 million) than in the whole of Africa.

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Despite Africa's urgent need for information and communication technology, internet connection speeds in Africa are much slower than those obtainable in the developed world, according to recent reports by the Alliance for Affordable Internet (A4AI) and cable.co.uk.\(^8\)

Given the potential for internet connectivity to enable growth and development when woven carefully into broader political and socio-economic reforms, the obstacles to greater connectivity are an important challenge. Internet shutdowns is therefore simply an additional impediment to greater connectivity. It is ironic that the countries that disrupt internet access have some of the lowest internet usage figures.

Countries with an internet penetration rate of less than 20 per cent are more likely to disrupt the internet during protests than those with higher rates – but also that, as of early 2018, in all countries where an internet disruption was ordered, the ruling party had been in power for 18.9 years on average.

There is a failure by many African governments to invest in the growth of the internet as much as investing into the criminalization of the internet. The world is changing faster than African governments and many other African governments around the world can cope. As a result, governments are resorting to the default of binding what they do not fully understand and control. It appears that African governments with democracy deficits, regardless of the numbers of their citizens that use the internet, recognise - and fear - the power of the internet in strengthening citizen organising and empowering ordinary people to speak truth to power. (CIPESA, 2019)

A new consciousness on the part of the African political class of how to tap into the immense opportunities presented by the internet to solve some of our long-standing challenges. But operating in this environment cannot be played like a cat and mouse game where governments exercise dominion over the medium to the detriment of their citizenry. Governments need to put in place policies to dance with the internet.

A new thinking is required: technology has already moved into products, the workplace, the marketplace and even our love lives. Against this background, trying to strangle the internet is only shooting ourselves in the foot. If infrastructure investment continues, the Internet will take hold on a much larger scale in the coming decade—potentially adding $300 billion a year to Africa’s GDP.

According to Okunoye B. (2019), many African governments are bent on prosecuting citizen activity on the internet as opposed to facilitate uptake and innovation.

Many African countries have more cybercrime legislation, typically used to prosecute government critics or illegally seize data, than laws that encourage internet access.\(^9\)

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\(^9\) ibid
Removing the infrastructural, legislative, and literacy barriers to internet penetration should create even greater opportunities for a continent deeply in need of them. There is an increasing trend in the region to regulate the internet in ways that pose threats to freedom of expression, assembly and association.

States often resort to network disruptions in response to or in anticipation of civil and political unrest (e.g. during elections). Internet regulation and policy-making processes typically lack mechanisms for meaningful inclusive multistakeholder participation. Civil society and human rights defenders are frequently excluded from policy debates and discussions.

Access to internet is essential for businesses, public institutions, and households to flourish in the modern economy. In the private and public sector, internet access can help spur productivity gains and deliver services more efficiently. For households, internet access can increase opportunities, build human capital, connect households to other parts of the country, and contribute to personal well-being. Yet Sub-Saharan Africa remains a long way from achieving universal internet access. According to the International Telecommunications Union (ITU), which tracks internet usage globally and across countries, only 1 in 5 in Sub-Saharan Africa used the internet in 2017. While internet access in Sub-Saharan Africa has grown rapidly in recent years, access rates remain well behind the rest of world.

When looking closer at the spatial distribution of internet access, in many countries, only the capital region has high levels of internet access while other regions tend to lag. The low rates of reported access outside the capital highlight the importance of expanding the availability of internet to secondary cities and towns.

To ensure that gains in internet access reach the poor going forward, it is fundamental to better understand what governments in Sub-Saharan Africa are doing to expand access to both electricity and internet, especially outside of capital cities.

A government can limit access to the internet by ordering internet service providers (ISPs) to limit access to their subscribers. In the first instance, this is likely to be a block on commonly used social media sites. As a more extreme measure, the authorities can order service providers to block all internet access.

In 2018, there were 21 instances of partial or total internet shutdowns, compared with 13 in 2017 and 4 in 2016, according to Access Now, an independent monitoring group. Ivory Coast, DR Congo, Chad, Cameroon, Sudan, Ethiopia, Mali, Nigeria and Sierra Leone restricted access to the internet last year.

It’s also a global trend. In 2018, there were 188 shutdowns, compared to 108 in 2017 and 75 in 2016.

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Up to 22 African governments have ordered network disruptions in the last four years and since the start of 2019, six African countries – Algeria, the Democratic Republic of Congo (DR Congo), Chad, Gabon, Sudan and Zimbabwe – have experienced internet shutdowns.\textsuperscript{11}

The ability of governments to censor the internet depends on their ability to exercise control over telecommunications companies. Internet service providers are licensed by governments, which means they risk fines or the loss of their contracts.

According to a report by Collaboration on International ICT Policy for East and Southern Africa (CIPESA) titled Despots and Disruptions: Five Dimensions of Internet Shutdowns in Africa, 77 per cent of the countries where internet shutdowns have been ordered in the last five years are categorised as authoritarian under the Democracy Index produced by the Economist Intelligence Unit. All the other African countries that have disrupted communications are categorised as hybrid regimes, meaning they have some elements of democracy with strong doses of authoritarianism.

The report also notes that countries whose leaders have been in power for several years are more likely to order internet shutdowns. As of January 2019, of the 14 African leaders who had been in power for 13 years or more, 79% had ordered shutdowns, mostly during election periods and public protests against government policies.\textsuperscript{12}

The countries that have ordered internet disruptions are among the most lowly ranked in Africa on the 2018 World Press Freedom Index including Algeria, Congo-Brazzaville, Burundi, Cameroon, Central African Republic, Chad, DR Congo, Ethiopia, Equatorial Guinea, Gabon, Gambia, Mali, Uganda, and Zimbabwe.

According to a report by Collaboration on International ICT Policy for East and Southern Africa (CIPESA), network disruptions lead to direct lost earnings in terms of the ICT sector’s contribution to Gross Domestic Product (GDP) and the quantitative effects of loss of confidence in the digital economy stemming from government-perpetuated disruptions and the resultant loss of cost savings by businesses that are deprived of internet access.

As argued in the Framework for Calculating the Economic Impact of Internet Disruptions in Sub-Saharan Africa, internet disruptions, however short-lived, affect many facets of the national economy and tend to persist far beyond the period in which access is disrupted. They undermine investor confidence, raise reputational risk and are detrimental to foreign direct investments (FDI).\textsuperscript{13}

The countries that have ordered shutdowns also dominate the top-risk ranks on many country risk assessment indices, including those on political risk, as well as on economic and investment risk. Low internet penetration rates and frequent internet disruptions


\textsuperscript{12} ibid

\textsuperscript{13} ibid
can negatively affect the Country Risk Premium (CRP). It is therefore imperative that the effect of internet instability on country risk profile and ultimately the cost of money in an economy are estimated. CRP is the specific risk premium associated with investing in a specific country.

This means that disruptions expose both the state and telcos, who generate income for the state and enable efficiency for businesses, are exposed to high levels of economic loss. But network disruptions also undermine internet uptake mostly in regions of Africa where access and affordability are still big challenges. They thus hinder the meaningful use of the internet as a tool for innovation, business competitiveness, and civic engagement.14

The Brookings Institution released a study in October 2016 examining 81 short-term shutdowns in 19 countries and their impact on GDP. Between July 1, 2015, and June 30, 2016, the study found that the economic consequences of internet shutdowns cost at least $2.4 billion in GDP globally. The report notes that this is a conservative figure and does not account for tax losses or drops in investor, business, and consumer confidence.15

Deloitte also examined the issue in 2016, estimating that the economic consequences of a temporary shutdown “grow larger as the level of connectivity and GDP increase.” For highly connected countries, a temporary shutdown could cut 1.9% of daily GDP—an estimated $141 million per day. Medium-connectivity countries lose an estimated 1% ($20 million) of daily GDP and low-connectivity countries could lose an estimated 0.4% ($3 million) of daily GDP.

In dollar terms, the report estimates that for the average highly-connected country, the per-day impact of a complete Internet shutdown would amount to US$23.6 million per 10 million people. For the average country with medium and low levels of connectivity, the estimated GDP impact amounts to US$6.6 million and US$0.6 million per 10 million people, respectively.16

Sadly, while African governments continue to invest significant in throttling the internet, the spectre of digital colonization is growing by the day.

A 2018 study of start-ups in east Africa confirmed that 90 per cent of funding had gone to foreign founders. Many African entrepreneurs complain that foreign companies use a false African identity as a marketing tool, raising capital on the basis that they are “doing good” through “impact investing”, but in the end cashing out like any savvy capitalist.17

14 ibid
It is important to mention that citizens have not been simply accepting internet shutdowns without fighting back. Civil society across the continent has been working hard to advocate for a free and open internet. The African Declaration on Internet Freedoms and Rights in my opinion is a great initiative that provides the language which African governments need to adopt into their legislative frameworks. The African Declaration on Internet Rights and Freedoms, launched in 2014 as a response to the clear need for the articulation of a rights-based approach to internet policy in the region, is a pan-African initiative to promote human rights online in Africa.

There is growing awareness of the importance of protecting internet rights and freedoms in Africa. AfDec’s overall long-term goal is for national and regional internet-related policy frameworks across Africa to promote and respect human rights and for the Declaration to be used as a guide and reference document in internet-related law and policy making in Africa – both at national level as well as sub-regional and regional levels.

In conclusion, African governments should desist from ordering disruptions because they have a high economic impact at micro and macro levels, adversely affecting the livelihoods of citizens, undermining the profitability of business enterprises, and reducing the GDP and competitiveness of countries that implement them.

Moreover, judging from the African cases recorded in the last two years internet disruptions have not been a necessary and proportionate response to the situations for which they have thus far been employed. Far from fostering stability, as governments may hope when they effect disruptions during protests, elections, or exam periods, they in fact undermine economic activity and disrupt normal order.

The economic costs of an internet disruption persist far beyond the days on which the disruption occurs. Indeed, the negative effects of a disruption on the economy may extend for months, because network disruptions unsettle supply chains and have systemic effects harming efficiency throughout the economy. These longer-term effects are not limited to the immediate ICT ecosystem: factors such as investor confidence and risk premiums can affect a country’s broader economy long after the disruption has been lifted.18

The centrality of the internet to social and economic life recently led the United Nations to enact a resolution supporting the “promotion, protection and enjoyment of human rights on the Internet.” The resolution specifically “[c]ondemns unequivocally measures to intentionally prevent or disrupt access to or dis- semination of information online in violation of international human rights law and calls on all States to refrain from and cease such measures.”

All in all, governments should recognize the serious consequences of disrupting network access and see shutdowns through a human rights and development lens, not solely through a political or security lens. The government-mandated disruption of communications networks—including social media, Internet messaging services, mobile, VOIP and SMS—is a growing global problem. GNI Executive Director Judith Lichtenberg, aptly summed it up when she was quoted as saying that the economic and human rights harms of network shutdowns reinforce each other, and are of particular concern in developing countries, emerging and fragile democracies, and jurisdictions with weak rule of law.

Developments in the Internet and the services it supports have created an ecosystem around which people and businesses’ daily lives revolve. From connecting with friends and businesses, to obtaining information or making sales, the Internet has made carrying out different tasks much easier and efficient. For businesses, the Internet has made day to day activities such as selling or purchasing less stressful and costly. Disrupting the Internet ecosystem therefore limits the opportunities for people and businesses, and hampers the economy. On a personal level, Internet disruptions can inhibit social interactions.19

Internet disruptions have widespread impacts on people and the economy with even partial disturbances affecting productivity, souring business confidence, and leading to lost opportunities. The impacts of a temporary shutdown of the Internet grow larger as a country develops and as a more mature online ecosystem emerges.

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References


