YOUTH 4 DIGITAL SUSTAINABILITY

YOUTH INTERNET GOVERNANCE FORUM

BACKGROUND PAPER

GREENING THE INTERNET

Greening The Internet

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Introduction

Over the last decade, the incremental utility of digital technologies has transformed the world in a multitude of aspects. It has reshaped more than just our lives - economic and social structures.
We fathom this because of the increase in access to information; the Internet. We recognise the Internet as the backbone of the transformation, and thereby seek to govern it.

Digitisation has phenomenally increased consumption of natural resources. This trend is only going to increase. The Internet may be digital, but the infrastructures that allow data to travel through it are not. It is time we actively address the internet's environmental footprint to mitigate the climate crisis. It is estimated that the digital world corresponds to 3.8%[1] of the total greenhouse gas emissions. From 2010 to 2025, the digital segment of humanity's environmental footprint will increase from 2.5% to just under 6%, the largest increase coming precisely from greenhouse gas emissions.

Stakeholders must act in the best interests of both their futures and the futures of others. This increase in GHG emissions is linked to the occurrence of extreme weather events[2], food supply chain disruptions[3] and loss of biodiversity[4].

We ask - What is necessary to "green" the Internet? How can digital transformation progress sustainable development? How can we make this process more participatory?

We have an answer. We urge you to prioritise the concerns raised in these three messages:

Recommendation

1

We should actively strive to mitigate the environmental impact of the Internet and ICTs. Both public and private stakeholders should strengthen collaboration by following a framework that allows for responsible growth, consumption of digital resources, and promotion of innovation.

To green the Internet and ensure that digital transformation occurs sustainably, we believe the collaboration between public and private stakeholders is of paramount importance.

We echo the concerns raised by various initiatives and climate-related public debates.
Our first focal point relates to advancing sustainable practices and structures to promote social and economic growth. As more people and devices get connected to the Internet, the energy transition becomes all the more relevant. We need to switch to cleaner sources of energy for internet consumption. The making of user equipment and its electricity use corresponds to the greatest share of the digital world's environmental impact, followed by that of network infrastructure and data centers[2]. It's estimated that in 2025, 35% of digital GHG emissions will come from networks' manufacturing.
We understand that the environmental impact of the digital world consists of a complex network of invariants. We urge stakeholders to do more than just acknowledge this urgency. They need to push for transition in their respective roles and also identify synergies with other stakeholders. Even though the digital technologies' environmental footprint is expanding, we also understand that information and communication technologies can proxy as innovative solutions to counter the environmental crisis. In this sense, we applaud initiatives like

- the search engine Ecosia, which donates 80% or more of its profits to non-profit organizations that focus on reforestation.

- SaveEcoBot is another example of the innovative use of ICTs. This environmental chatbot assembles information on air quality by using independent sensors, in addition to monitoring the Environmental Impact Assessment Registry.

We believe that support for such innovative solutions must be given.

Recommendation

2

Promoting access to the Internet and other ICTs is inherently a matter of sustainability. If we want to connect the next billion, we must do so in an eco-friendly way, taking into consideration the significant environmental impacts that digitalization comprehends.

It is estimated that there will be 7.5 billion Internet Users by 2030 where 90 percent of the human population, aged 6 years and older, will be online5. In tapping into the benefits of a connected world, it is important to recognize the need to manage emerging risks, challenges and opportunities of rapid growth of the internet on the environment to enhance sustainability. This should be the focus of every stakeholder. The ITU6 for example has prioritised these targets to achieve SDG3 for their 2030 agenda:

- Target 3.3: By 2023, raise the percentage of countries with an e-waste legislation to 50%

- Target 3.4: By 2023, net telecommunication/ICT-enabled Greenhouse Gas abatement should have increased by 30% compared to the 2015 baseline.

Environmental conservation cannot be reserved for only the privileged and wealthy — everyone must be able to save the planet within their own means. This means not only making environmental education a high priority, but also creating the technologies that allow for mass uptake and making conscious efforts to democratise access to these green technologies. We need to strengthen digital democracy.

A retrospective look at the impact of the COVID-19 pandemic would confirm how it has adversely hindered governments' capacity to trace populations in the remote regions; and thus, contain the spread of the virus. Further, if these regions had better digital infrastructure, couldn't we have made greater progress in sustainable development? This is why we have to actively promote internet accessas a mandatory component of sustainable development.

Recommendation

3

The environmental impact of the Internet and ICTs must be communicated in an accessible and effective language. It's important to compel stakeholders to action by framing the environmental crisis as an opportunity for change, while being based on scientifically accurate information.

Despite the alarming nature of the environmental crisis, we must not succumb to drive apocalypticnarratives and perpetuate toxic mindsets that decay into avoidance and inaction. When we engage insuch "doom framing", stakeholders begin to disengage, due to the feelings of lack of control andguilt associated with the magnitude of the environmental crisis we face7. Messages conveyed in sucha way have not been proven to successfully compel people to action8.

Instead, we have to encourage action by highlighting their personal stake in the pervasive issue of theenvironmental crisis. One way to make the impacts of the climate crisis more "digestible" is toenable stakeholders to derive personal value:

- It could be the loss of biodiversity – their revered animal going extinct? or the direct impactof extreme weather events on their local region or their families?

- Can we achieve it by avoiding a reference to the environment? We could focus on otherpersonal benefits of "going green". This would compel stakeholders into climate action9.

Conclusion

It is only when we treat internet as an element of sustainable development; public and private stakeholders follow an established framework; and we communicate the crisis through this framework to the masses, we mitigate internet's environmental impact.

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