

Maintaining an Interoperable Internet



Nicole T.I Chan
23rd May 2023




Hello!

I AM Nicole T.I Chan

I am here because I care about the Internet.

You can find me at nicole4532@gmail.com

- 
1. Setting the Scene.
 2. The Current Situation.
 3. Put this in Perspectives.
 4. How to Respond?

1

Setting the Scene

Why do we advocate for 'one world, one Internet'?



Data protection

Cybercrimes

Geopolitics

Digital trade

2

The Current Situation.

What's happening now?

Layers of Network

The OSI Model

Layer 7 – Application

Layer 6 – Presentation

Layer 5 – Session

Layer 4 – Transport

Layer 3 – Network

Layer 2 – Data Link

Layer 1 – Physical

The TCP/IP Model

Application layer

Transport layer

Internet layer

Network layer

The WEF White Paper

Content & Transactions Layer

Application layer

Transport layer

Network/IP layer

Physical/link layer

● 3 Forms of Fragmentation

○ **Technical**

Conditions in the underlying infrastructure that impede the ability of systems to fully interoperate and exchange data packets and of the Internet to function consistently at all end points.

Governmental

Government policies and actions that constrain or prevent certain uses of the Internet to create, distribute, or access information resources.

Commercial

Business practices that constrain or prevent certain uses of the Internet to create, distribute, or access information resources

- Usually...

Content & Transactions Layer

Application layer

Transport layer

Network/IP layer

Physical/link layer

Governmental & Commercial

Technical

3

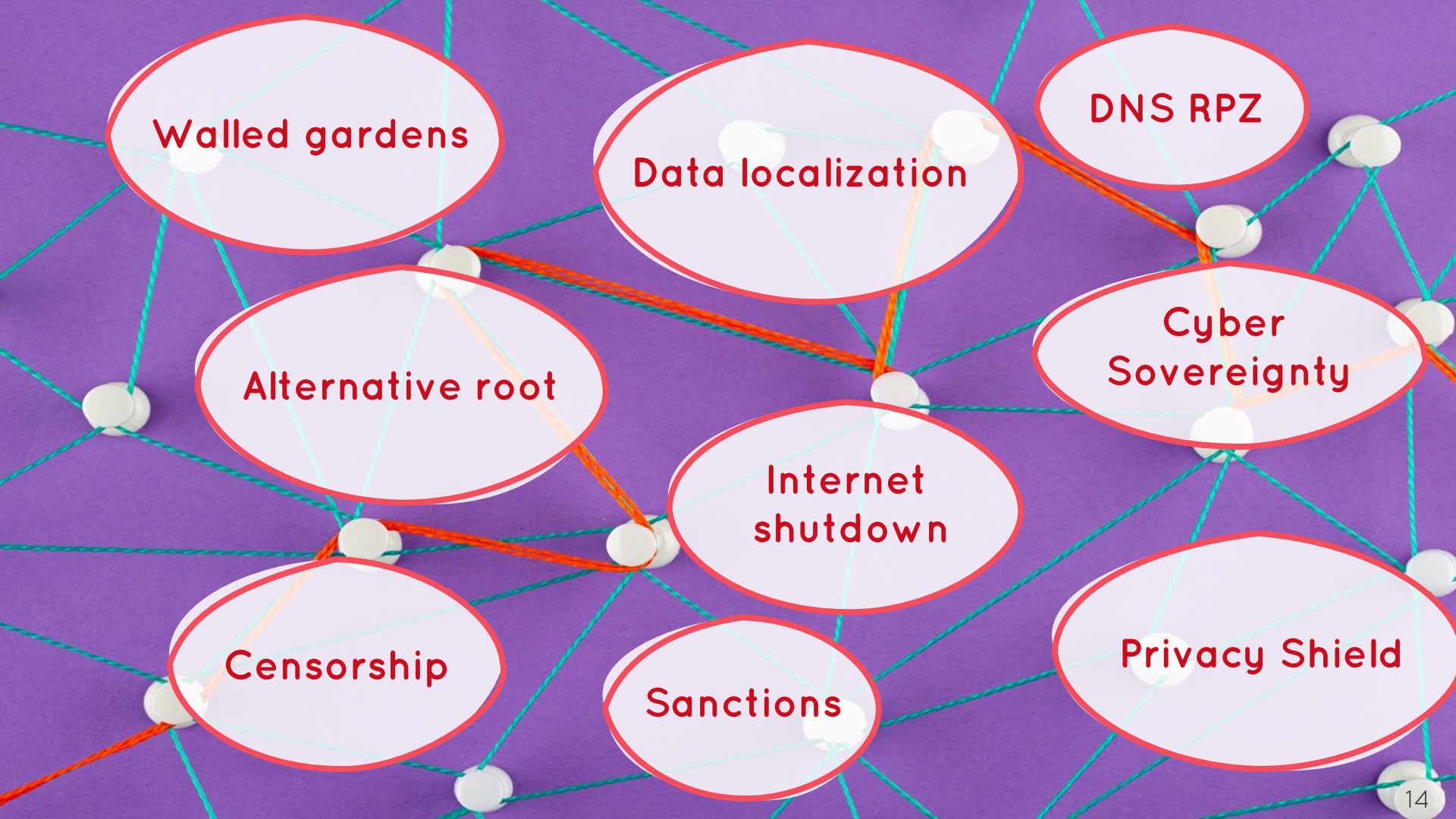
Put this in Perspectives

Examine Internet Fragmentation from different angles.



Fragmentation?

What do we mean when we're saying the Internet is fragmented?



Walled gardens

Data localization

DNS RPZ

Alternative root

Internet
shutdown

Cyber
Sovereignty

Censorship

Sanctions

Privacy Shield

- What are the consequences?



- Failure of critical infrastructure.
- Degradation of user experiences.
- User confusion.
- Business/service disruption.
- Undermining human rights.

4

How do we respond?

What can we do to counter Internet Fragmentation?

- **People have not been sitting idly...**

- - UN Open ended Working Groups/Ad-hoc committees.
 - International negotiations.
 - Discussion forums in the I* ecosystem.
 - Cross-jurisdiction cooperations.
 - Norms setting.
 - Best practices sharing.

● Some examples

- UN OEWG on Cybercrimes
- OECD's 2-pillar solution to digital tax
- Roadmap on Digital Cooperation
- Resource Public Key Infrastructure (RPKI)
- Mutually Agreed Norms for Routing Security (MANRS)
- Stands for Knowledge-Sharing and Instantiating Norms for DNS and Naming Security (KINDNS)
- Cybersecurity Tech Accord

A top-down photograph of a diverse group of people sitting on a grassy area. Their arms and hands are extended towards the center, where they are joined together in a circle, symbolizing unity and teamwork. The people are wearing casual clothing like jeans and t-shirts. The background is a lush green lawn with some small white flowers.

**We work together as the
global multistakeholder community.**



Thanks!

ANY QUESTIONS?

You can find me at
nicole4532@gmail.com

- CREDITS

- Special thanks to all the people who made and released these awesome resources for free:

- Presentation template by [SlidesCarnival](#)
- Photographs by [Unsplash](#)

● PRESENTATION DESIGN

○ This presentation uses the following typographies and colors:

- Titles & body copy: **Quicksand**

You can download the fonts on this page:

<https://www.fontsquirrel.com/fonts/quicksand>

- Dark gray **#2e3037**
- Aqua **#39c0ba**
- Salmon **#f35b69**
- Blue **#6d9eeb**

You don't need to keep this slide in your presentation. It's only here to serve you as a design guide if you need to create new slides or download the fonts to edit the presentation in PowerPoint®