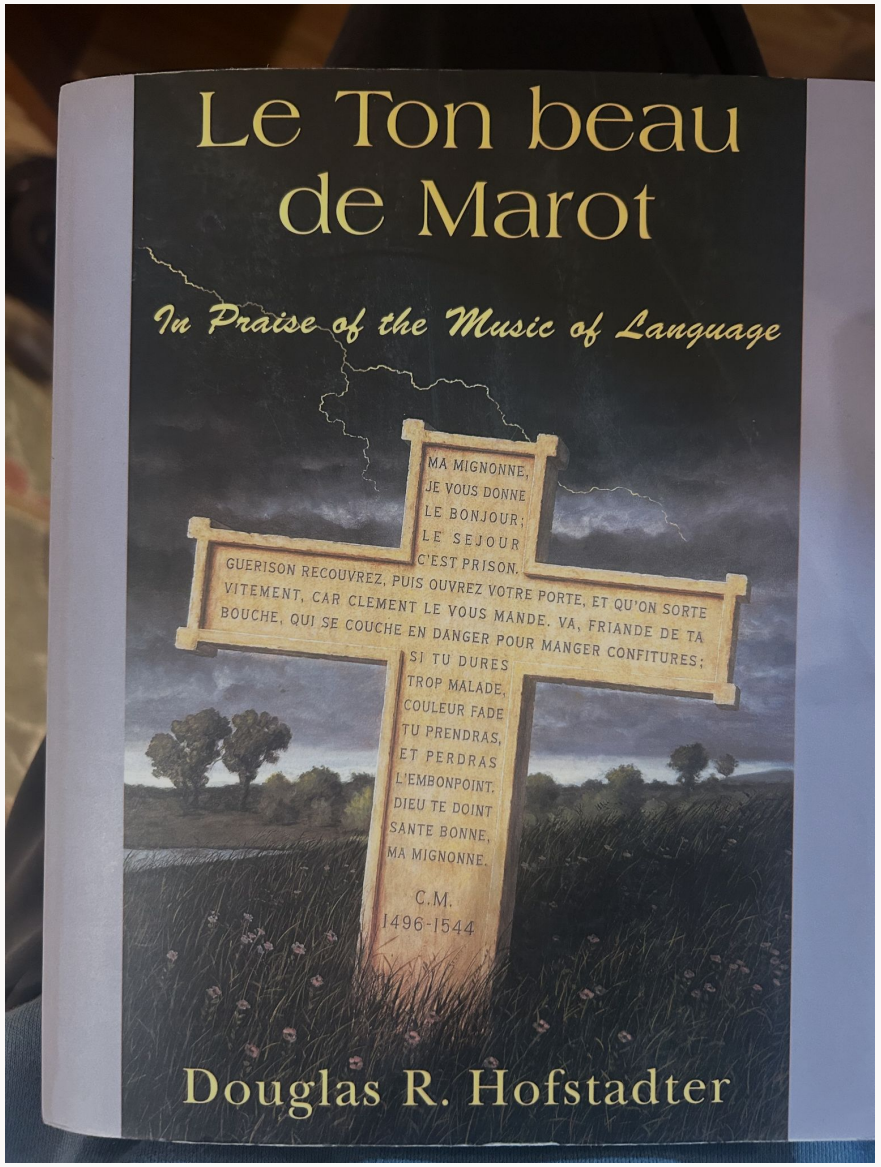
Constraint, creativity, and collaboration

Dr. Katherine Skinner, Director of Programs, IOI
Digital Preservation Coalition - Risk Management | November 18, 2026

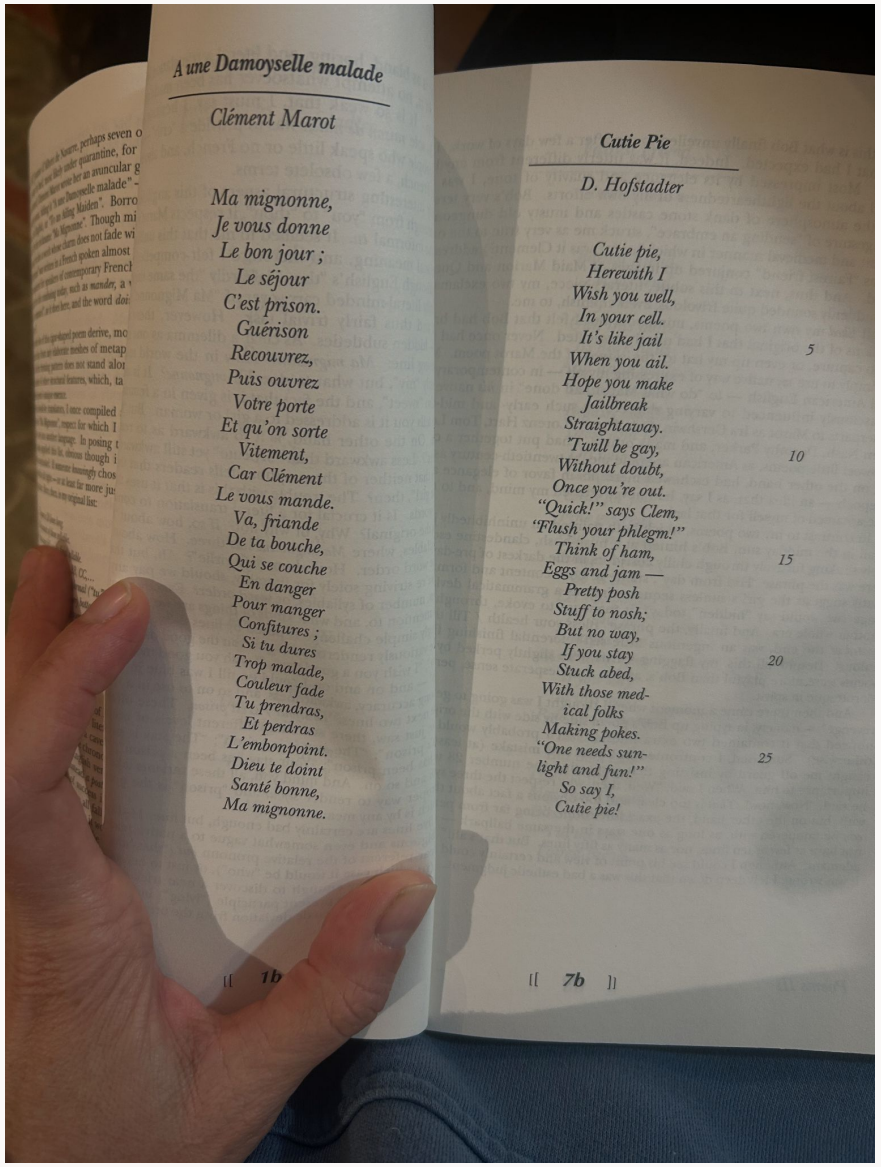
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circa 1537

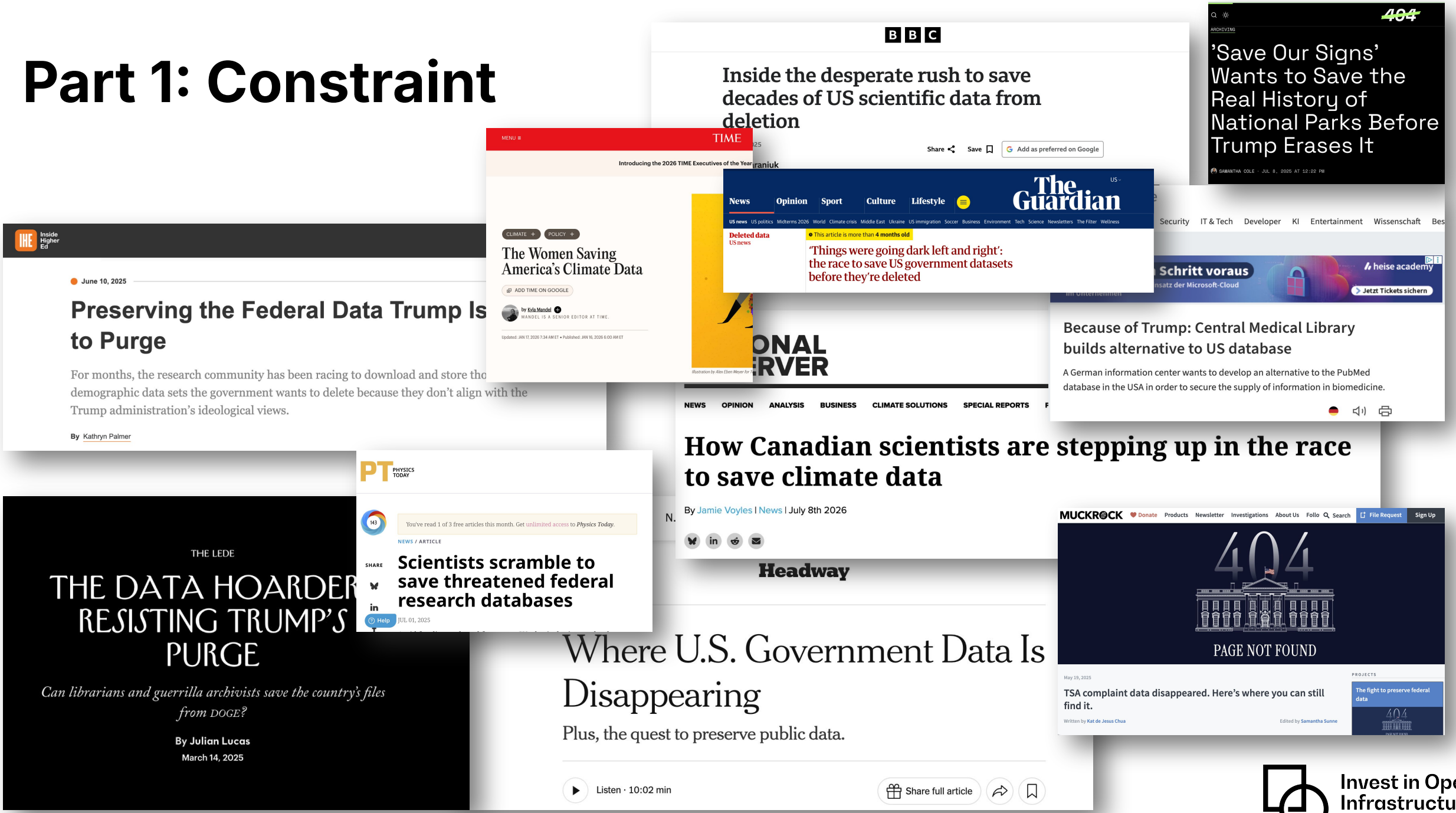
28 lines

3 syllables



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Part 1: Constraint



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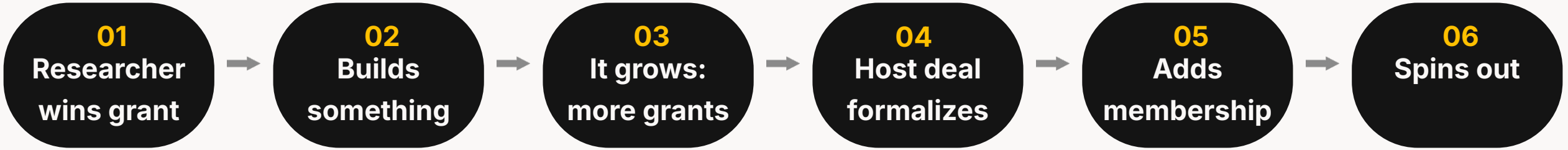


We keep talking about **survival infrastructure**: getting the bytes somewhere safe, right now.

What we actually need is **perpetuity infrastructure**: systems built so that data stays usable and accessible.

A chain of dependencies

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Federal subsidy — This was the foundation undergirding every link — and the thing nobody priced

What the data shows

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For every dollar tracked in open infrastructure grant funding...

$1.00 tracked in grant funding

$0.29 reaches the infrastructure directly



$0.10 keeps it running — the rest funds new features



$42.1M in active US federal grants to open infrastructure that we track in *State of Open Infrastructure* have been under direct threat since January 2025.

Source: State of Open Infrastructure 2026 (October 2026), Invest in Open Infrastructure.

CCSDS
Recommended
Practice for an
OAIS Reference
Model,
December 2024

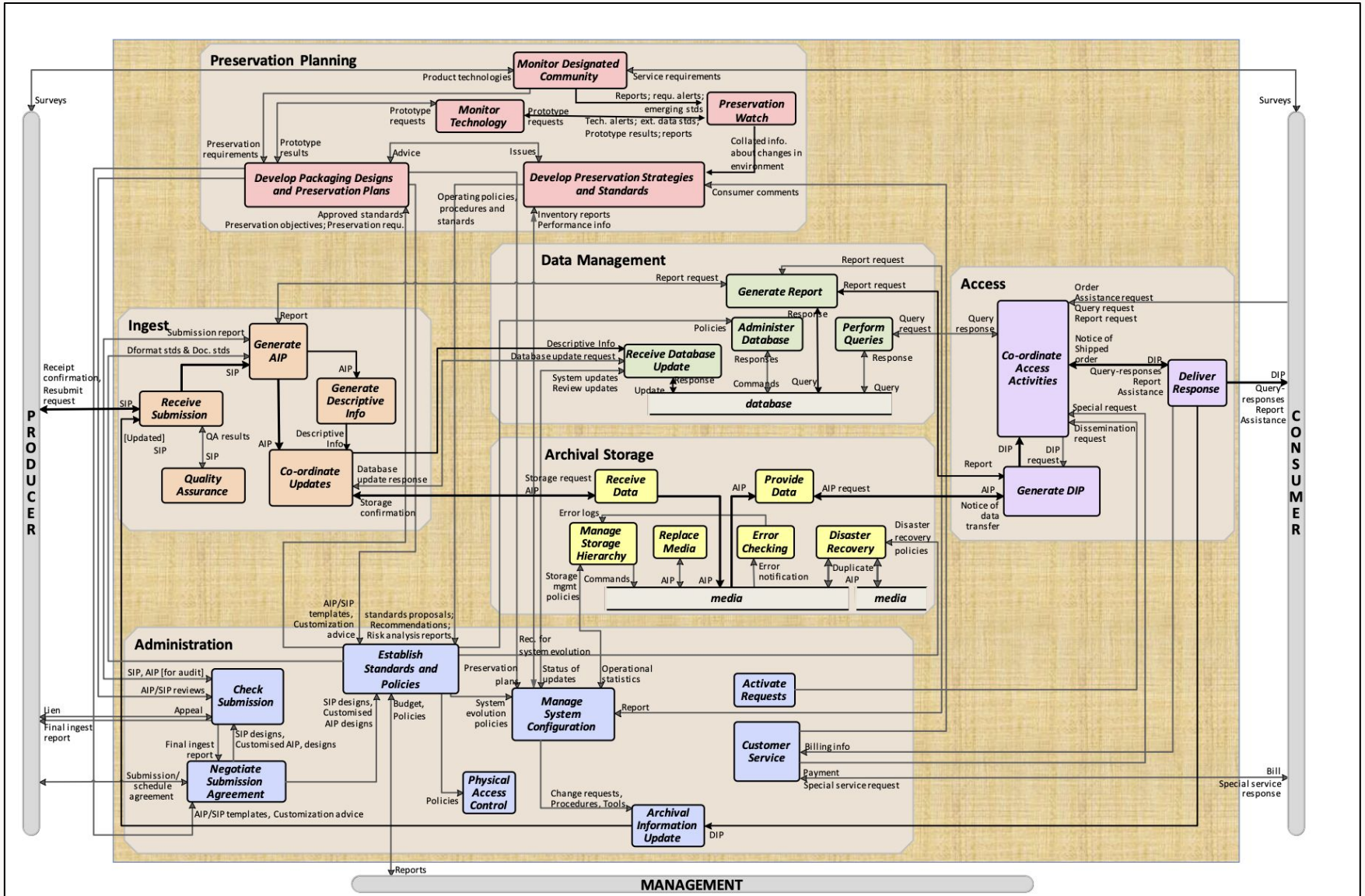
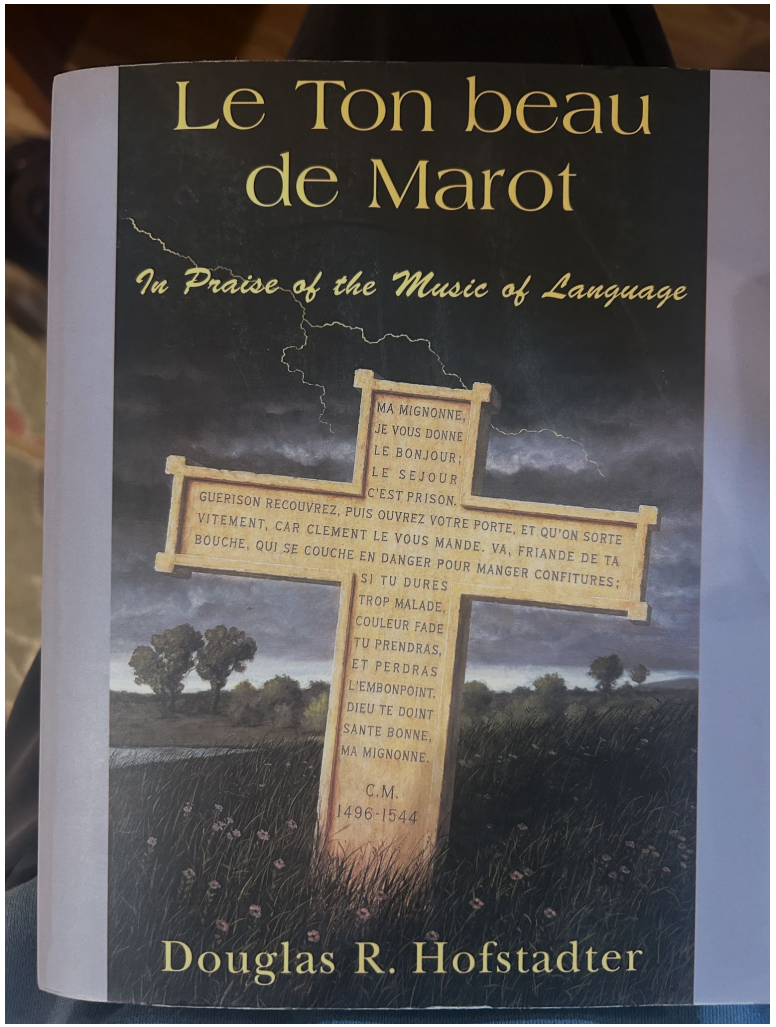


Figure A-1: Composite of Functional Entities

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Part 2: Creativity



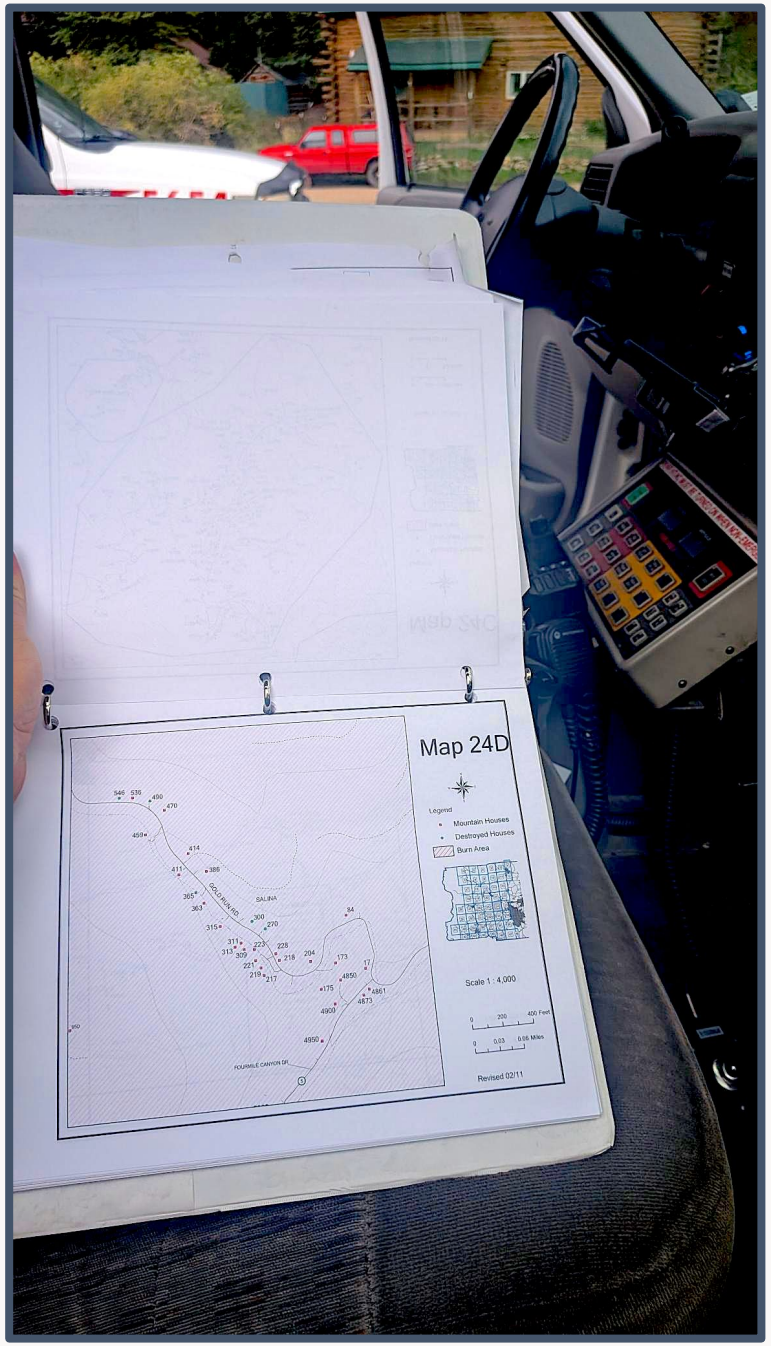

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We Rescued the Data!
Is this the only copy or are there others?
What tools will I need to use it?
Did anyone ever use it?
How do I know it's been rescued?
What skills do I need in order to use it?
Wait, where is it?
I need the data but don't have power. Am I out of luck?
Hold up! The staff who curated this and know what it is and how I can use it…they're gone?
What is this data?
How do I know I can trust the rescued copy?
Does it connect to anything?
I'm working on a slow connection; can I get to it?

No battery, no network connection…

"We operate in a small rural district with limited roads, and … if you're lost in the woods in our district there is very little chance you have cell phone reception.

The map books are hilariously janky, but that is what we train on and what you find our Standard Operating Procedures on **because they are 100% reliable. No battery, no network connection, nothing that can be hacked.** This is a common theme with fire service tools and tactics."

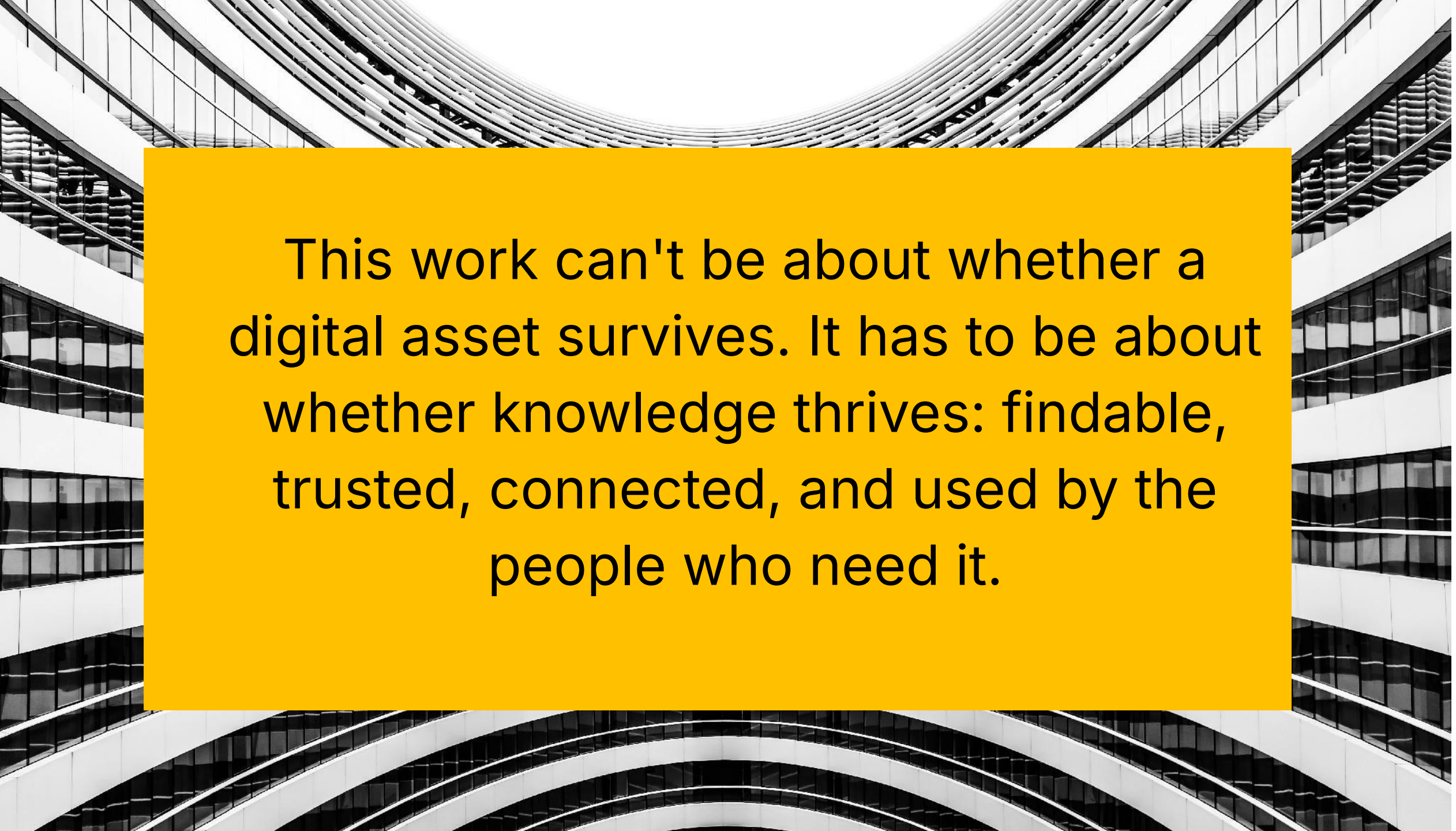
Invest in Open Infrastructure's Wildfire Demo:

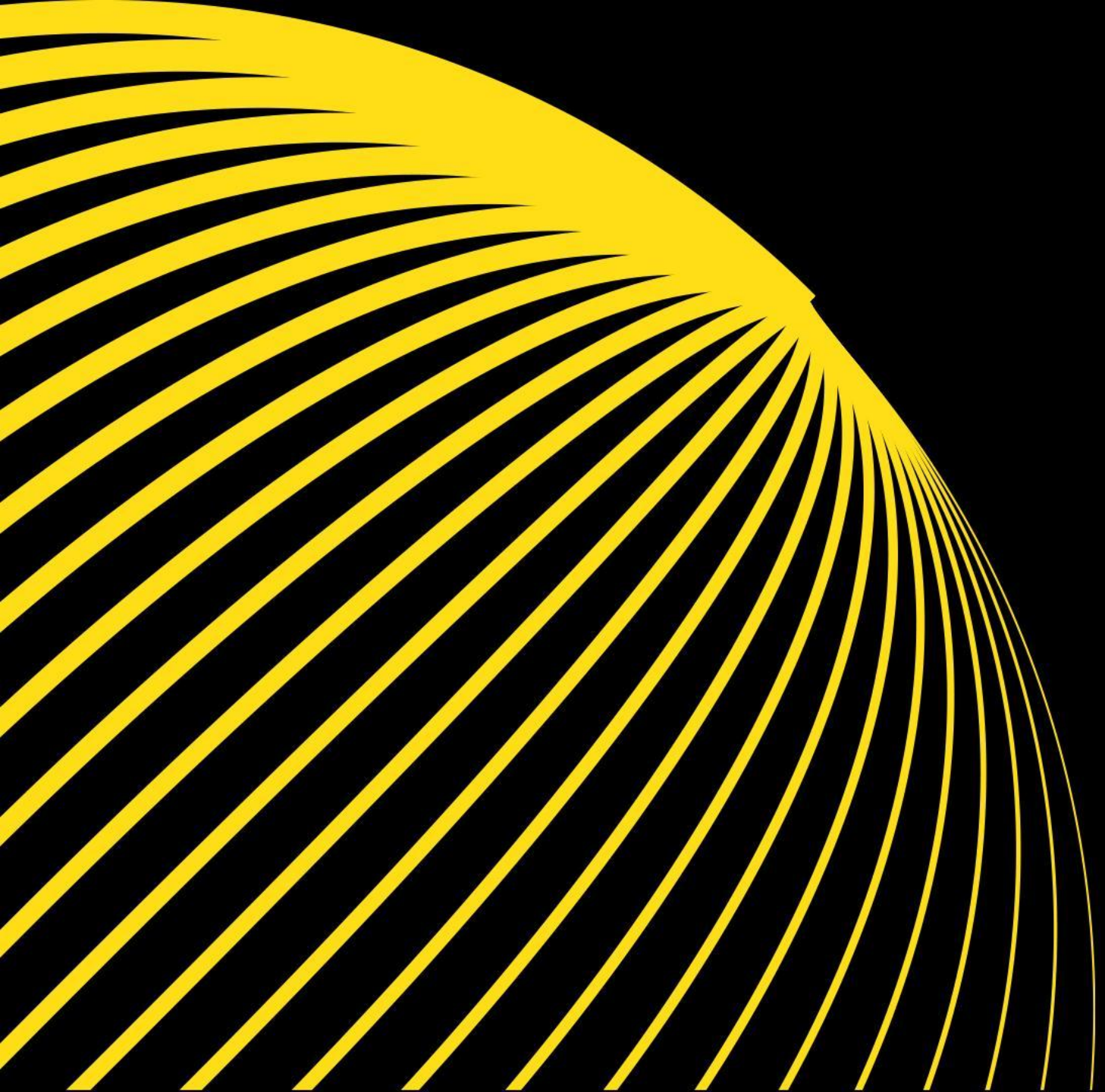


Part 3: Collaboration



Photo by Michał Parzuchowski on Unsplash


This work can't be about whether a digital asset survives. It has to be about whether knowledge thrives: findable, trusted, connected, and used by the people who need it.



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Thank you

Help us forge new pathways!

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