

# Another Cloud Is Possible

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[aspirationtech.org/publications/manifesto](http://aspirationtech.org/publications/manifesto)

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# What are we talking about?

- ▶ What is “The Cloud” and why care?
- ▶ What I love (and love less) about cloud
- ▶ Case studies on the same
- ▶ Pictures real and imagined
- ▶ Control of destiny in the cloud
- ▶ Security issues in the cloud
- ▶ NGO solidarity in the cloud
- ▶ Whatever you all want to talk about

# Who is Aspiration?

- ▶ We work with stakeholders across the nonprofit software supply chain:
  - We advise NGO technology decision makers on how to employ tech sustainably and affordably
  - We advise vendors and developers on how and what to build for NGO users
  - We advise grantmakers on technology strategies

# Who is Aspiration?

- ▶ Most importantly, we support & advise
  - **Nonprofit and Foundation Staff**  
on how to apply technology
  - **On Their Terms**  
to
  - **Achieve Impact**  
in their
  - **Program and Mission Work : ^)**

# What is this talk about?

- ▶ Movement Solidarity
- ▶ Collective Buying Power
- ▶ Shared Responsibility
- ▶ Paying Attention to Infrastructure
- ▶ Looking more than one step ahead
- ▶ In short, doing the cloud on your terms, not somebody else's terms

# What Is the “IT” Problem?

- ▶ IT is damn hard and ever-changing
  - And it's probably not your core mission
- ▶ IT is expensive, hard to cost manage
  - Tough to budget stuff that keeps changing
- ▶ IT staffing is too often a struggle
  - Tough to find and retain talent
  - Social and communications skills an issue
  - Personal hygiene also a risk factor

# What Is the “IT” Problem?

- ▶ (Sound of trumpets!)
- ▶ “The Cloud” to the rescue!!!
  - “The Cloud Is Easier”
  - “The Cloud Saves Time and Money”
  - “The Cloud Reduces Staffing Needs”
  - “The Cloud is More Secure”
  - “The Cloud Tucks Me In At Night”
  - “The Cloud Slims & Tones Me While I Sleep”

# What is the Cloud to Us?

- ▶ Apps running online, available remotely
  - Maintained, improved by somebody else
- ▶ Data stored on web-accessible servers
  - Collaboratively edited and curated by permissioned folks
- ▶ Access to all of the above from anywhere you have internet access
  - Client devices play a simpler role
  - Organizations can focus on workflow

# Things I Love About the Cloud

- ▶ Real time collaboration
  - ...co-creating documents on a call...
- ▶ Open-ness
  - Inviting others into my work and thinking
- ▶ Focus-ability
  - Someone else manages technology pieces I don't want to think about

# Things I Love About the Cloud

## ▶ Availability

- e.g. when my primary device and I are in separate locations
- Rich support for “oops, I forgot to bring...”

## ▶ Serendipity

- Due to all of the above, interesting things just happen

# Cloud Changes the Game

- ▶ Establishes new collaboration zones
  - Private places to throw it all together
  - Relatively “organizational culture neutral”
- ▶ Reduces collaboration boundaries
  - No fighting firewalls for access to servers
- ▶ Preserves organizational memory
  - Across fire drills and turnover
- ▶ Drives accountability and transparency
  - Your laundry is on(the)line

# Case Study - Mozilla Etherpad

- ▶ Etherpad is a collaborative text editor
  - Like Google Docs without the overhead
- ▶ Mozilla uses it for conference call notes
  - Call host sets up template, shares link
  - Notes are available in real time, no waiting
  - Call participants can contribute notes, fixes
  - Chat feature enables parallel commenting
- ▶ Cloud lesson: New Things Are Possible

## Public Pad

Pad Options

Import/Export

Saved revisions

Time Slider

**B** *I* U ~~S~~   

100%

gunner

[Invite](#) other users and they will show up here.

Share this pad

Well

Tara Tiger Brown: Fabulous. Thanks Sunny and Carla. I'll ping you. 8:49

Laura: thanks gunner, nice to hear you again 8:49  
thornet: bye! but talk to all you DML folks still 8:49  
^^

Sunny: @tara sounds good! 8:49

OpenMatt: If you're going to DML, stay on 8:49

Carla: Tara, I believe we may have met already at a transmedia event 8:49

Sunny: chau chau folks! 8:49

Chris: so stay on if you are going to dml 8:49

Tara Tiger Brown: Oh great Carla. 8:49

Tara Tiger Brown: I think I might go to DML. Should I go? Mimi Ito said it will be good. 8:49

Chris: yes tara you should 8:50

Philipp: i'm here (philipp) 8:50

Sunny: @tara a lot of us will be there 8:50

Carla: @tara it's worth it. 8:50

Sunny: myself, carla, erin knight, jess klein, chris lawrence, lainey 8:50

OpenMatt: <https://etherpad.mozilla.org/DML> 8:50

Tara Tiger Brown: Bye Mozilla folks. It was fun. Talk to some of you soon. 8:51

January 31, 2012

Mari: <https://etherpad.mozilla.org/January-back-up> 8:16

February 16, 2012

Chat:

150 together. Test and iterate with users. Share outputs with global community. 2hr - 2  
151 days.

- See also: <http://michellethorne.cc/2012/01/mozilla-event-menu-lite/>
- QUESTION: Is "Hack Jam" the right term? If not, what are the alternatives. Discuss.

- Hack Day
- Hack Fest
- Hackathon
- ...
- "Meet-up" is missing from this list. Small, super informal, self-organized. e.g., A bunch of like-minded people who just want to get together at a cafe or bar to talk about \*maybe\* organizing a more robust event together.

157  
158 **Toronto Youth Hackjam - February 18th, 1 pm - 4:30 pm (Heather)**

159 Related to above: thoughts on lingo, messaging, etc.?

160 <http://torontoyouthhackjam.eventbrite.com> pw: firefox

161 Looking to open registration tomorrow, if all goes well

162 Where should a city's youth activities "live"? On a website? The wiki? etc.

- Notes and Feedback
  - Do we want to start trying to brand and message this as a "Hive Toronto Pop-up"?
  - We've had three successful "Hive Pop-up events" now:
    - London
    - Toronto (though we didn't necessarily brand it that way)
    - Tokyo
      - Let's steer towards "Hive Toronto" / a bigger "Hive Pop-Up Toronto"?

- **Big Blue Button update (Michelle + Matt)**
  - Blog post coming on this soon -- but save the date:
  - "How to host awesome online events" learning lab slated for

- ...
- ...

176 **Help request: Popcorn dev site**

- Can anyone (like ross or brian) help us make the dev.mozillapopcorn.org site more awesome? Finally added popcorn to the popcorn site, but it looks poor
  - dev.mozillapopcorn.org, advance video to around 0:40 seconds
  - needs css love. popcorn events are all added

180  
181 **Calendar:**

182 <http://lanyrd.com/profile/mozilla/>

183  
184 List upcoming events you're attending, hosting, or think would be of interest to the Mozilla community:

- **Please include event name, date, location, link and who's participating.**

185

186

187

188 - February 11: Fireside Chat with Cathy Davidson: "Teaching the fourth 'R'"

# Case Study: SF BART Protests



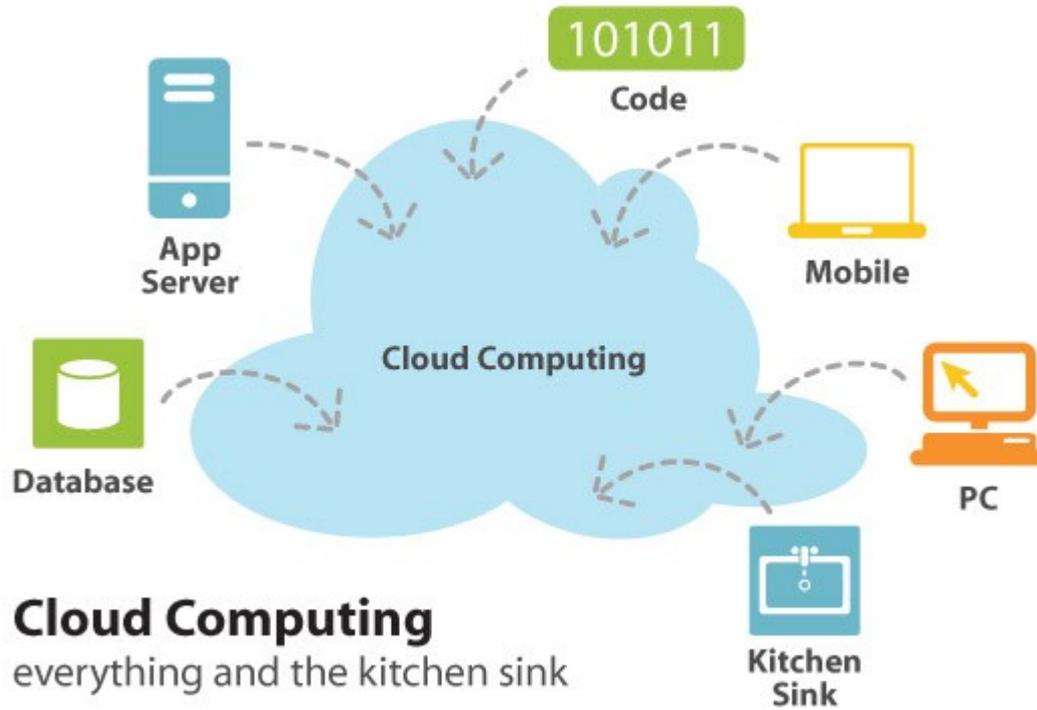
# 2011 SF BART Protests

- ▶ Activists used social media and other cloud platforms to organize, coordinate
  - Enabled rapid turnout, adaptation of tactics
  - Dramatic (annoying) successes achieved
  - So the next time around...
- ▶ SF Police cut off internet in stations
  - Instantly eviscerated the network
  - Neutralized rapid response, coordination
- ▶ Cloud lesson: Have a Plan “B”

# Let's get conceptual...

- ▶ There are 2 ways of envisioning Cloud
  - The way it is sold
  - The way it works in practice
  - ...and we've got pictures
- ▶ We look at cloud through a lens of organizational development
  - Goal: .orgs control their technology destiny
  - The path to the same is workflow-driven
  - Our mantra: “Sort the Technology Last”

# The Cloud of Lore



Source: <http://crenk.com/the-cloud-in-the-classroom/>

# Our Cloud of NPTEch Reality



# Control in the NPTech Cloud

- ▶ NGOs should follow cloud strategies that maximize their control over long-term destiny
- ▶ Much comes down to what routes through your domain name
  - “Why Facebook=Enterprise #FAIL for us”
  - <http://www.politico.com/news/stories/0910/42364.html>
- ▶ The game is figuring out what makes sense to store at what layer of control

# It's all about the Data

- ▶ Tragedy of the NGO financial reality
  - There are budget line items for software
  - There are budget line items for hardware
  - There are budget line items for labor
  - There are rarely line items for DATA
- ▶ Tech is a vessel to story & carry data
  - As you consider cloud, it's about the DATA
  - Your DATA is your digital power
  - Center your cloud thinking on this truth

# Control in the NPTech Cloud

- ▶ We look at the cloud as 4 layers of enterprise leverage
- ▶ (1) Stuff behind your domain name on remote servers you own and administer
  - Outside of your walls, it's the highest level of control
  - eg, cloud CRM at [civicrm.aspirationtech.org](http://civicrm.aspirationtech.org)
  - Cloud factor: “meh”, but an essential option to know you have

# Control in the NPTech Cloud

- ▶ We look at the cloud as 4 layers of enterprise leverage
- ▶ (2) Stuff behind your domain name on remote servers you contractually control on terms you like
  - Someone else handles the lower levels
  - e.g. our Drupal and Wordpress sites hosted at [www.rochen.com](http://www.rochen.com)
  - Cloud factor: “woof”, “yum”, “yay”

# Control in the NPTech Cloud

- ▶ We look at the cloud as 4 layers of enterprise leverage
- ▶ (3) Stuff behind your domain name on application servers you don't control
  - e.g. Wordpress.com, Google for Domains
  - The idealized cloud of “I don't think about IT or hosting hassles”; limited control
  - Concerns: Redundancy, long-term support
  - You “retain” your ability to migrate
  - Cloud factor: hmmm

# Control in the NPTech Cloud

- ▶ We look at the cloud as 4 layers of enterprise leverage
- ▶ (4) Behind “their” domain/”the rest”
  - A.K.A. “minimal control of your destiny”
  - Basecamp, Facebook, Bit.ly, YouTube ...
  - Your mileage is guaranteed to vary
  - If you love yourself, keep local copies of anything that matters
  - Cloud factor: psychic required

# How Most Cloud Companies See Their Priorities

- ▶ #1 Major investors/shareholders
- ▶ #2 Major revenue sources
- ▶ #3 Primary user bases who drive major revenues
- ▶ #4 Data gleaned from users, revenue sources to drive follow-on revenues
- ▶ ...
- ▶ #n+1 NGOs, aka "Us"

# Moral: Don't Get Locked Out



# Aspiration's Cloud Fatalism

- ▶ All tech relationships should be predicated on divorce
- ▶ Apply the “Hollywood Marriage” rule:
  - Nothing tech lasts forever. Nothing.
  - “Pre-nup thinking” becomes critical
  - Model for eventual (or sudden) migration
  - Verify data export on a regular basis
  - Show restraint towards “lock-in” features

# Aspiration's Cloud Checklist

- ▶ Relationship questions to ask about cloud options
  - Can we put it behind our (sub) domain?
  - Can we talk to other clouds in this relationship?
  - Who else is this cloud hanging out with?
  - Can we leave when we want?
  - Are they like us?

# Aspiration's Cloud Checklist

- ▶ Asset questions to ask...
  - Can we export our data on demand in open, complete formats?
  - Is our data really our data?
  - Is our data secure, encryptable, private?
  - Who else can look at our data?
  - In what legal jurisdiction is our data stored?
  - What is your policy regarding government requests for data?

# Aspiration's Cloud Checklist

- ▶ Why ask all these questions???
  - Because “Single Points of Failure” are not as cool as they used to be
  - Most cloud solutions represent uniquely un-leveraged relationships
  - There's “looking”, there's “leaping”, and there's “having a Plan B”, and the sequencing of those matters

# Security in the Cloud(s)

- ▶ Security of cloud-based systems
  - There is no simple yes/no answer to the question of “is it more/less secure?”
  - The only safe statement is “it is a tradeoff”
- ▶ Security is a process, not a state
  - Redundancy is the golden rule
  - Develop cloud competency before putting mission critical data there
  - Take a “threat matrix” approach when assessing risk and security

# Cloud Security: Threat Matrix

## ▶ Threat: Data loss

- Is your data redundantly backed up? S3?
- Have you practiced test restores?

## ▶ Threat: Governments

- Who are your grantees, where are they?
- What jurisdiction does your data live in?
- Are you funding in areas of “national security”? e.g. Immigration?
- Let Wikileaks and MegaUpload be lessons

# Cloud Security: Threat Matrix

- ▶ Threat: Intelligence seekers
  - Who are your opponents and assailants?
  - Who wants to know more about how and with who you are working?
- ▶ Threat: Disgruntled staff
  - Have a proactive password policy
  - Have a smart account ownership protocol
  - Staff turnover should trigger thorough password changes

# Paths to Cloud Security

- ▶ Employ redundant multi-vendor backup
  - And don't forget local download
- ▶ Force SSL connections or VPN access
  - Preclude "snooping" of data and passwords
  - Assert your expectation of privacy
- ▶ Have well-thought-out data policies
  - Have clear and enforced exclusion and retention policies for cloud
  - Understand "3rd party" privacy issues

# Empower Yourself on Privacy

- ▶ Mozilla for User Sovereignty
  - Collusion - [www.mozilla.org/en-US/collusion](http://www.mozilla.org/en-US/collusion)
  - Firefox Browser Sync
  - Mozilla Social Share
- ▶ TOR for anonymity
  - [www.torproject.org](http://www.torproject.org)
  - Make sure your site works with TOR
- ▶ Off-The-Record Messaging
  - <http://www.cypherpunks.ca/otr>

# Mozilla Collusion

## Collusion

[about](#) | [site info](#) | [credits](#)

Keep browsing the web. As you do so, the graph on this page will change. Each circle represents a website.

Sites with a halo are sites that you have visited. Sites in grey are sites you have not visited. An arrow from one to the other means that the former site has set one or more third-party cookies to inform the latter site about your visit.

This add-on is still in development and is not guaranteed to be entirely accurate.

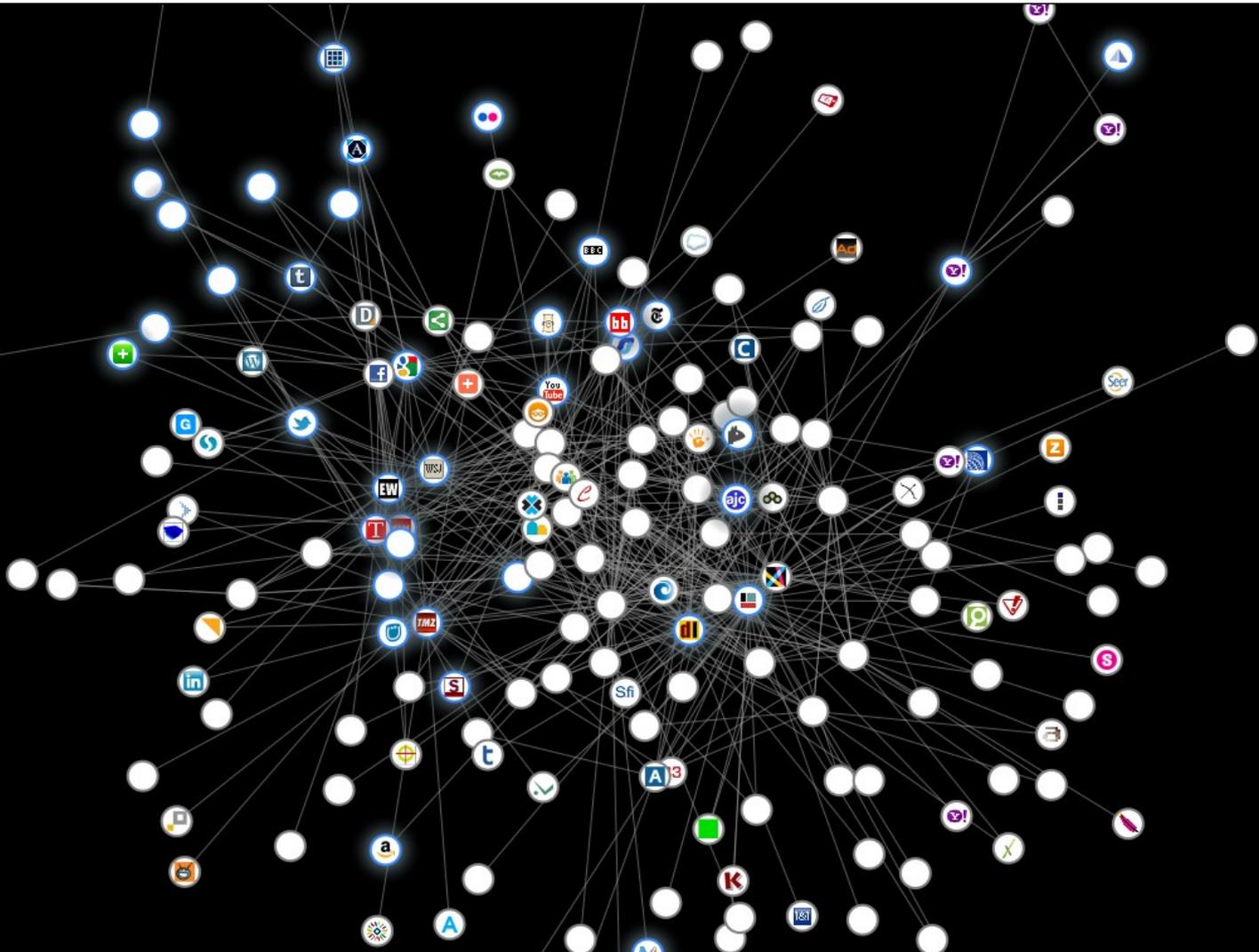
Hover your mouse over the circles to learn more about them.

Reset Graph

Export Graph

Hide UI

**Privacy Policy** When you're using the add-on, we collect information from sites you visit solely to show you how they're connected. This information is stored locally on your computer and you can delete it by resetting the graph. We don't give away this information to anyone except you.



# The Other Thing: The Big “I”

- ▶ Online enterprise identity is unsolved
  - We all manage dozens of credentials
  - “Fragmented” is an understatement
  - Battle for control of online identity rages
- ▶ The other other “I” thing online
  - Org identity and individual identity blur
  - “Can you invite my @GMail, not my @.org”
  - You need clear policies for distinguishing

# The Other Thing: The Big “I”

- ▶ Judge cloud companies by their primary unit of identity
  - Google, Facebook: Centered on The Individual, aka The Consumer
  - Basecamp, Salesforce: Centered on The Organization
- ▶ Is your cloud platform using you as a gateway to your users?
- ▶ Favor cloud providers that give The Org their due

# So What to Do?

- ▶ Focus on three poles of NPTEch
  - First People
  - Then Process
  - Last Technology
- ▶ Do incremental research and migration
  - Acknowledge that cultural change is hard
  - Leverage opportunity to improve processes
  - Don't make any big cloud bets right away

# The NPTEch Cloud is young

- ▶ Enterprise data management
  - We need more than just newer data silos
  - Many apps don't understand how NGOs and nonprofits work
- ▶ Identity, identity, identity
  - Stuff needs to talk to stuff on OUR terms
  - It's a tough, unsolved problem
  - This is where to be wary in placing bets

# The NPTEch Cloud is young

- ▶ Interoperability, interoperability, inter...
  - Prioritize open standards, long-term APIs, free/open source-based solutions
  - Don't adopt anything browser-specific
- ▶ Establish rich offline synchronization
  - Single-points-of-failure are **so** 1970's
- ▶ Don't trailblaze
  - Copy/model others' successes, learnings
  - Unless you're a trailblazer

# The Outlook for Cloud

- ▶ Cloud is not a fad
  - And it really can deliver benefits
- ▶ Intentionality is key to migration
  - Involve all users in process from Day 0
  - Base migration on workflows, not tools
  - Assert control and portability of your data
  - Maximize control of your online identity
  - Have fallback plans at the ready
  - Rinse and repeat

# The Outlook for Cloud

- ▶ The cloud gets NGOs to better places
  - Innovative ways of engaging supporters
  - New modes for building allies, support, awareness
  - Collaboration, cost savings, convenience
  - Ability to focus on impact, not on IT
  - Paving the way for mobile

# Another Cloud is Possible

- ▶ Technology Decisions are Political Decisions
  - You are what you use
- ▶ Don't let your organizational tech knowledge atrophy
  - Don't let cloud tactics sap tech vitality
- ▶ Demand cloud tools that meet NGO needs on our terms

# Another Cloud is Possible

- ▶ Prioritize values-aligned hosting
  - Store your data with people in solidarity with your causes
  - [ElectricEmbers.org](http://ElectricEmbers.org), [NPOGroups.org](http://NPOGroups.org)
  - [Riseup.net](http://Riseup.net)
  - [FluxxProject.org](http://FluxxProject.org)
- ▶ Practice Sector-Level Solidarity
  - "First they came for the communists, and I didn't speak out because I wasn't a communist..."

# Another Cloud is Possible

- ▶ These are exciting times for new paradigms
  - There is more than one way to get there
  - The journey should be the .org reward
  - Make your organization's path one of greatest sustainability, not least resistance :^)

# Thank You!

# Questions?