

Is data sharing the privilege of a few? Bringing Linked Data to those without the Web

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Because

1) it describes an outrageous situation we created

2) requires a radical shift in our mindset and technologies

On building great data sharing
technology for us only ...

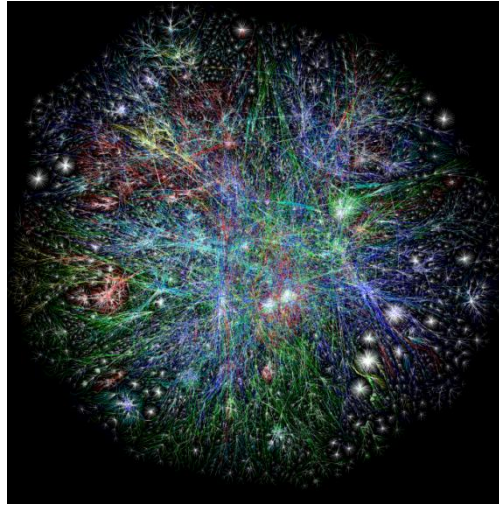


Linked Data publication/consumption =



Data center

+



Infrastructure

+



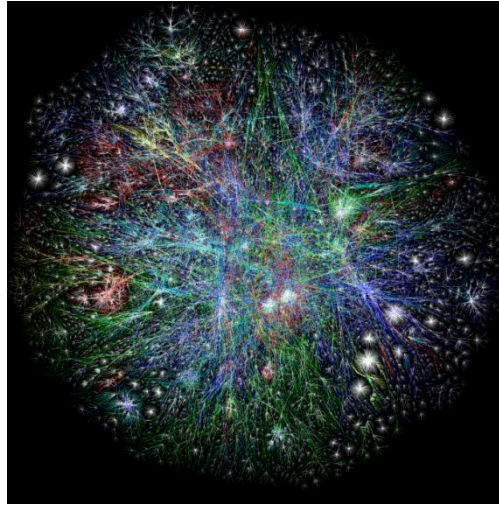
(mobile) web browser

Linked Data publication/consumption =



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+



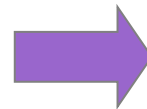
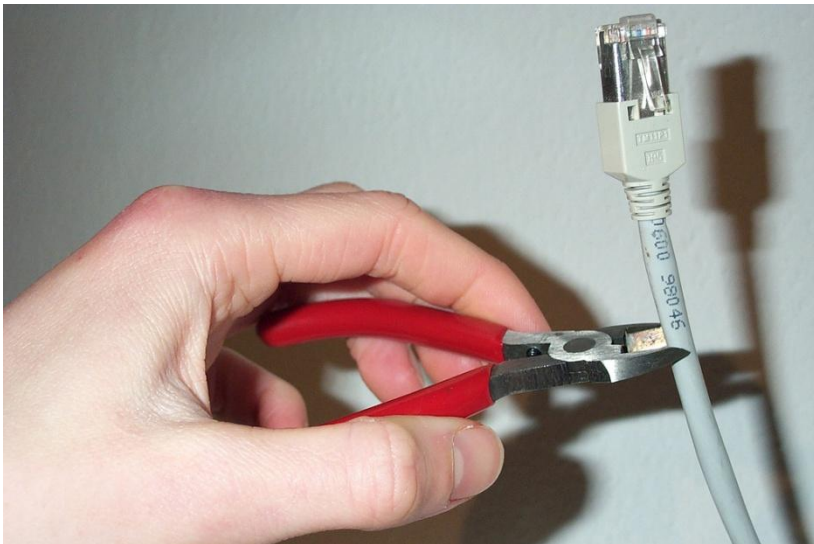
Infrastructure

+



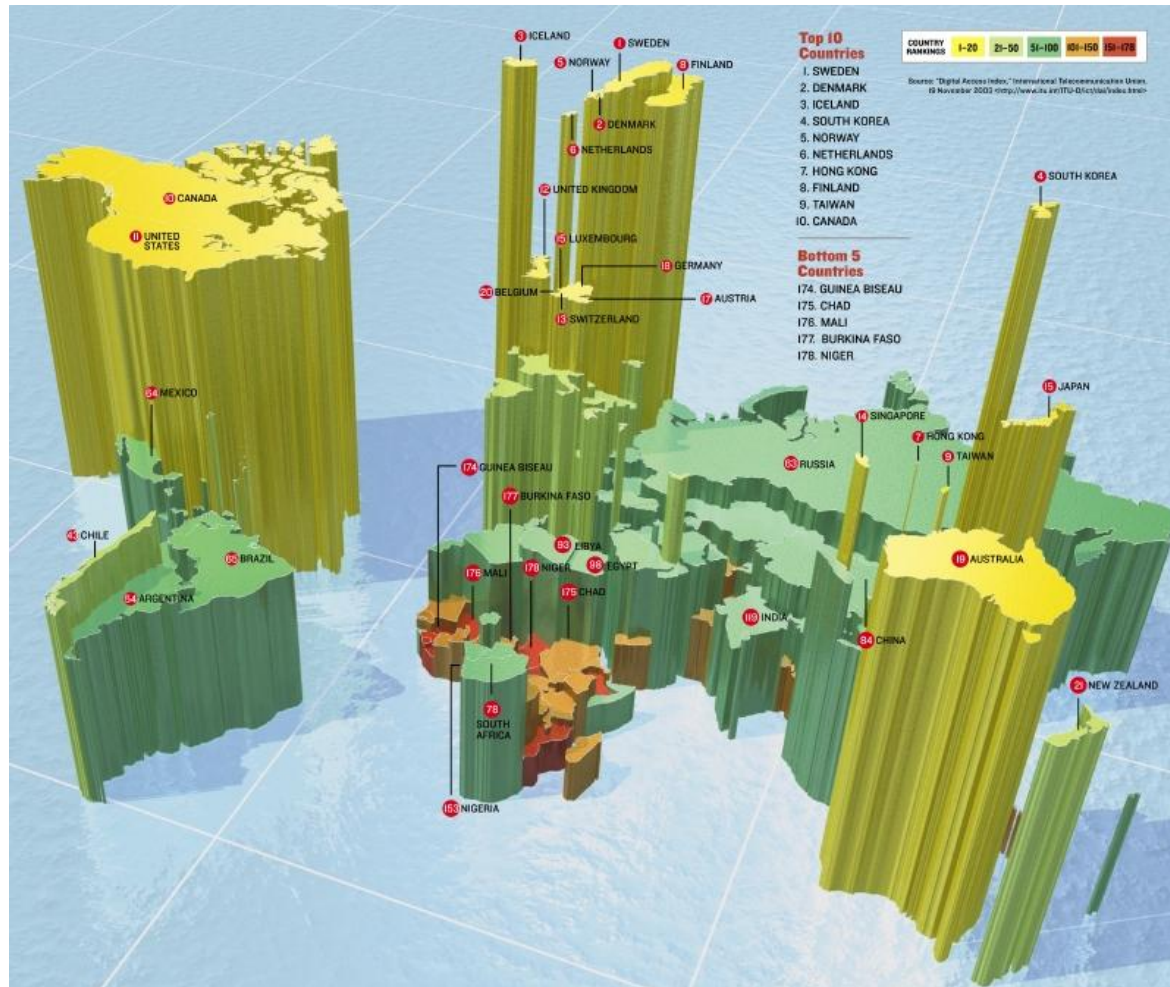
(mobile) web browser

No Web = No Linked Data



The Web is out of reach for the majority!

4.5B people don't have access to it



Main problems:

- No infrastructures
- Costly access



Not having the Web != Not sharing data



Market prices



Educational content

- They would benefit from Linked Data
 - but they can not use it!
- And we don't want a new divide, do we?

Our reaction ?

OR

Our reaction ?



OR

Come back when
you have the Web !

Our reaction ?



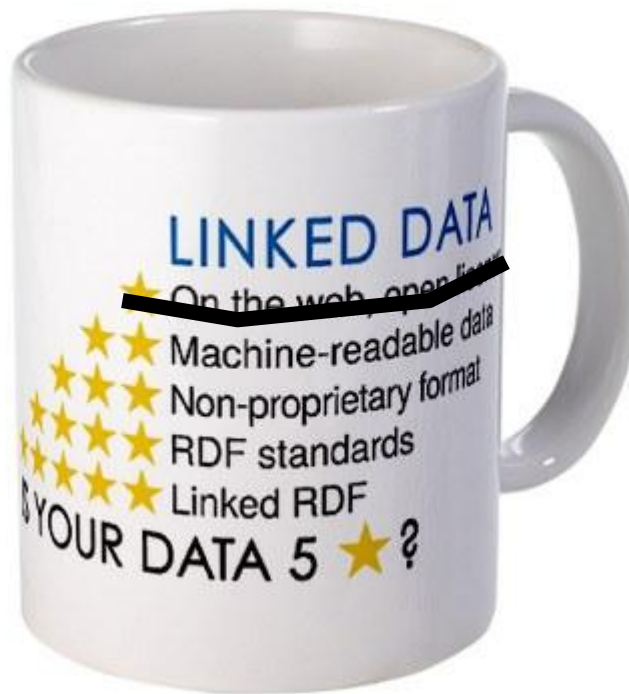
Come back when
you have the Web !

OR



Let's share this
technology *now*

For doing “Web-less” Linked Data

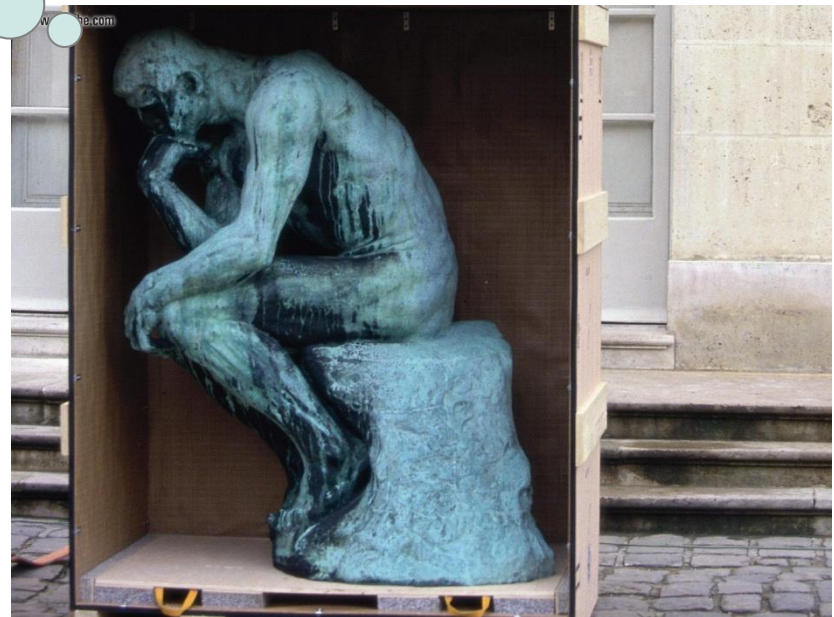


We just need two things:

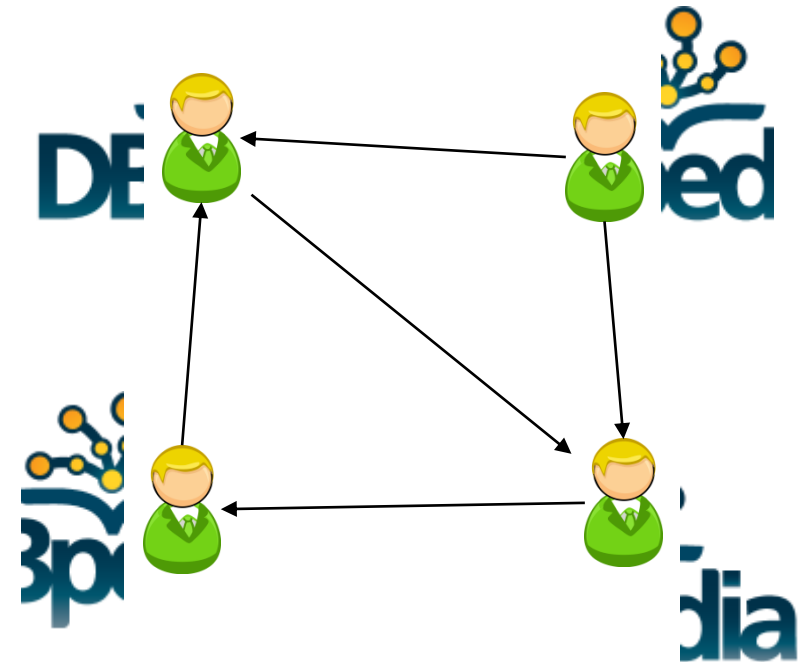
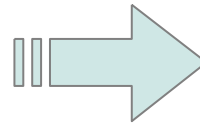
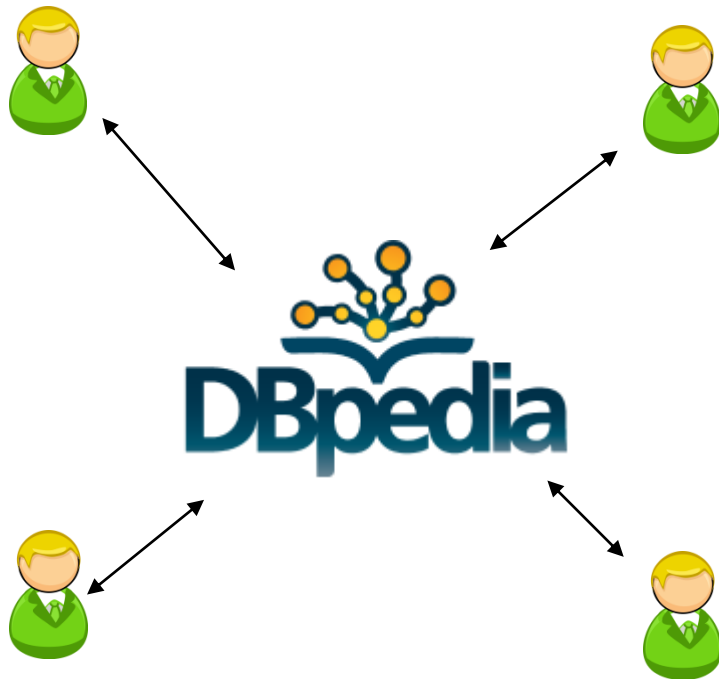
We need to change our mindset ...

Data sharing platform =

- Cloud hosted server
- Web app to consume
- Web forms to publish

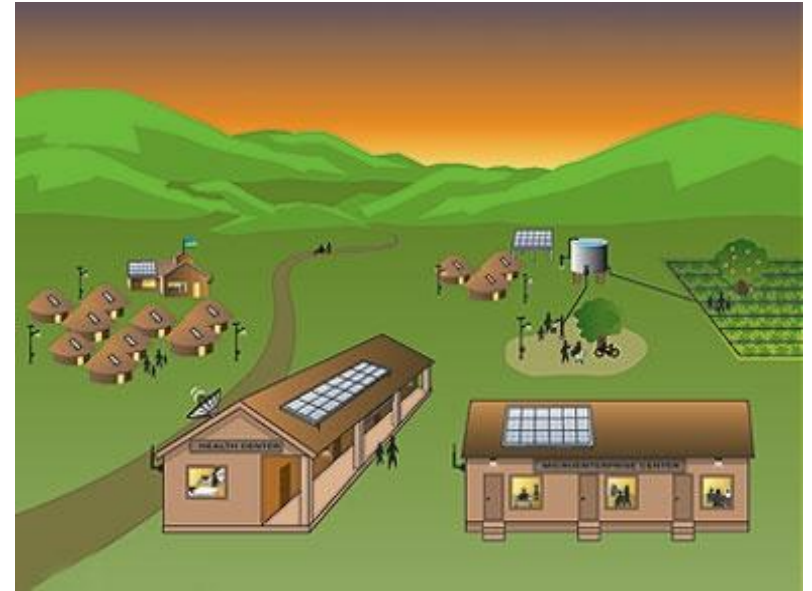
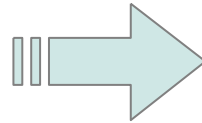
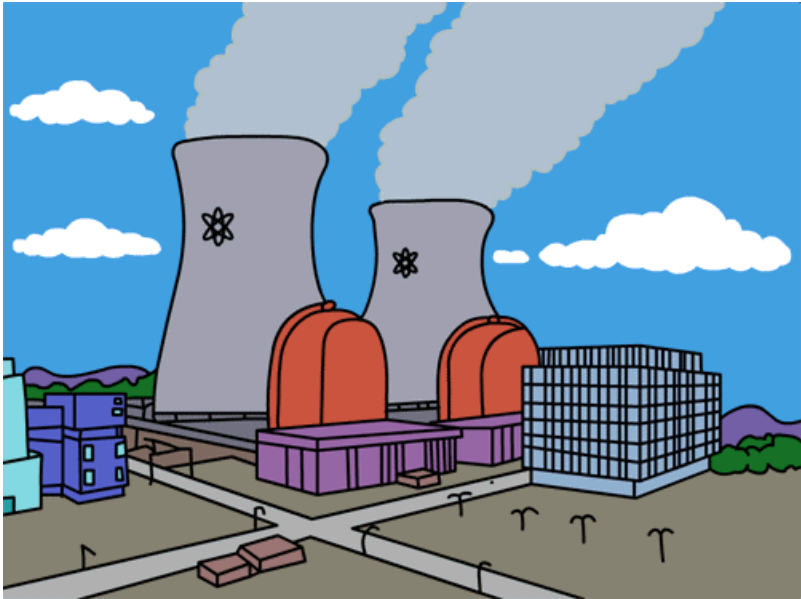


1) think de-centralised



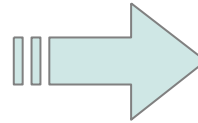
Instead: chunks of data
served by different peers

Take example on microgrids



De-centralised model for energy production and consumption

2) think small, think micro-servers



Not designed for developing countries

Multi-core fast CPU
Gigabytes of RAM
Terabytes of disk

Designed for developing countries

433Mhz x86 CPU
256MB of RAM
1GB of flash storage



Can be solar powered



Dust proof

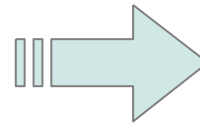


Affordable

3) think vocal

Create an Account

Email <small>REQUIRED</small>	Confirm Email <small>REQUIRED</small>
<input type="text"/>	<input type="text"/>
<input type="checkbox"/> I don't mind the occasional email about Mint and official Pepper	
Password <small>REQUIRED</small>	Confirm Password <small>REQUIRED</small>
<input type="text"/>	<input type="text"/>
Full Name or Organization <small>REQUIRED</small>	(Not displayed publicly, used only for correspondence)
<input type="text"/>	
Forum/Display Name <small>REQUIRED</small>	Current Date & Time
<input type="text"/>	July 4, 2008, 5:04 pm ▼
<input type="button" value="Create"/>	



Because not everyone can read and write

... and we need to adapt our technologies too



Challenges

- **Dereferencability:** get a route to access data ?
- **Consistency:** mint non-colliding URIs ?
- **Reliability:** get content from devices not always on ?
- **Security:** ensure legitimacy without central authority ?
- **Accessibility:** voice interfaces to Linked Data ?

It's possible! we're on it



- Provide vocal interfaces to Linked Data



SemanticXO

- Deploy Linked Data on the XO from OLPC



Let's bring Linked Data to everyone now !

<http://semweb4u.wordpress.com/category/semanticxo/>

PS: and help us by funding SemanticXO if you can :-)

Illustrations credits



Ron Leishman, <http://ClipartOf.com/439195>



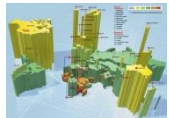
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