Linked Data: The Story So Far (or, What Happens Next?)

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Context


- The Story So Far

- What Happens Next?
Part 1: The Story So Far
The Story So Far

“Semantic Web, what Semantic Web?”
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*Design Issues: Linked Data*
The Story So Far

“Semantic Web, what Semantic Web?”

Design Issues: Linked Data

Existing Open Data Sets
The Story So Far

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Design Issues: Linked Data

Existing Open Data Sets
A Cloud with a Silver Lining?
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As of May 2007
A Cloud with a Silver Lining

- A great success indicator
- 4.5 billion triples, millions of links between data sets!
- It's so big we can't really count the triples anymore!
- Barely fits on one slide!
- A great marketing tool
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→ “Oh...”
Counter-arguments

• We don't want to count the number of triples anyway!

• Who bothers to count the number of pages on the Web anymore, now the pissing matches are over?

• We can't meaningfully fit all the blobs on one slide anymore, anyway!
After the Cloud has Dissipated...

- Can we function without it?
- How do we market Linked Data without eye candy?
- Can the Web of Data evolve beyond just growth?
Part 2: What Happens Next?
The 'Open' in 'Linking Open Data'
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- **Linked Data** is a style of publishing data on the Web
- **Linking Open Data** is a project
- **Open Data** is complementary but orthogonal to **Linked Data**
- Let's not put openness on the critical path to Linked Data adoption
- Let's get our house in order re licensing:
  - Facts are not creative works
  - Data needs a separate licensing framework (Creative Commons often does not apply)
- **Places to start:**
  - http://www.opendatacommons.org/guide/
  - ISWC2009 Tutorial on Data Licensing
The 'Links' in 'Linked Data'
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- Relax (for now) about the `owl:sameAs` problem
- It's only a problem when users tell us it's a problem
- Data quality is the overarching issue
The 'Links' in 'Linked Data'

Depictions of dbpedia:Atonement_(film)
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Fundamental Requirements for Linked Data
Fundamental Requirements for uptake of Linked Data

- Quality data
- Availability and stability of data sets
- Publishing at source
- Clarity re. licensing (i.e. terms of reuse)
- Applications!
The 'Killer App' Question
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• Question: “What will be the Linked Data killer app?”

• Answer: If I knew, I wouldn't tell you.
• Answer: There may not be one. Get over it.
• Answer: Killer apps are just post-hoc rationalisations
  – What is the killer app of electricity? Lighting? TV? Who cares?

• No more obsessing or speculation allowed, principled analysis only!
Where do we Focus our Efforts?

- Sustaining innovation
- Disruptive innovation
  - Low-end disruption
  - New-market disruption

(Christensen and Raynor, *The Innovator's Solution*, 2003)
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• “If your idea for a product or business appears disruptive to some established companies but might represent a *sustaining* improvement for others, then you should go back to the drawing board.”
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• **Risky business ideas?**
  – A new search engine that exploits structured data
  – A reviewing and rating site that publishes data in RDF
  – A new CMS with Linked Data support
Where do we Focus our Efforts?

• Low-End Disruption

  – “Address overserved customers with a lower-cost business model”

  – “Are there customers at the low end of the market who would be happy to purchase a product with less (but good enough) performance if they could get it at a lower price?”

  – “Can we create a business model that enables us to earn attractive profits at the discount prices required to win the business of these overserved customers at the low end?”

  – What can we do less well with Linked Data, but at significantly less cost than with existing approaches?
Where do we Focus our Efforts?

• New-Market Disruption
  
  – “Compete against non-consumption”
  
  – “New-market disruptive products are so much more affordable to own and simpler to use that they enable a whole new population of people to begin owning and using the product, and to do so in a more convenient setting.”
  
  – What can we enable with Linked Data that a large number of people aren't doing right now because it's too hard, expensive or inconvenient?
Conclusions

• Linked Data: by all accounts a great success

• The success criteria are changing

• Time to change up
  – Quality
  – Stability
  – Clarity
  – Applications
Questions?

Slides

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  – Ian Davis and Justin Leavesley