



Unlock Your Content



With NoSQL and Semantics



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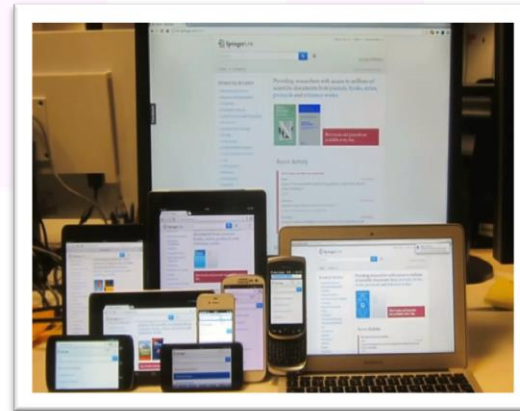
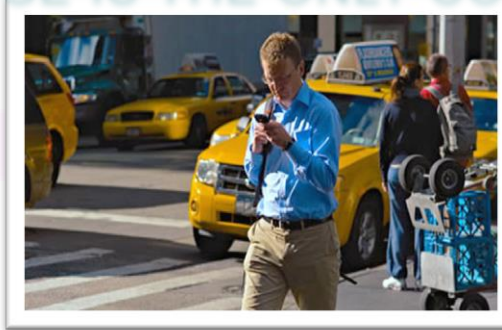
Introductions

Me: Matt Turner, CTO Media and Publishing, MarkLogic

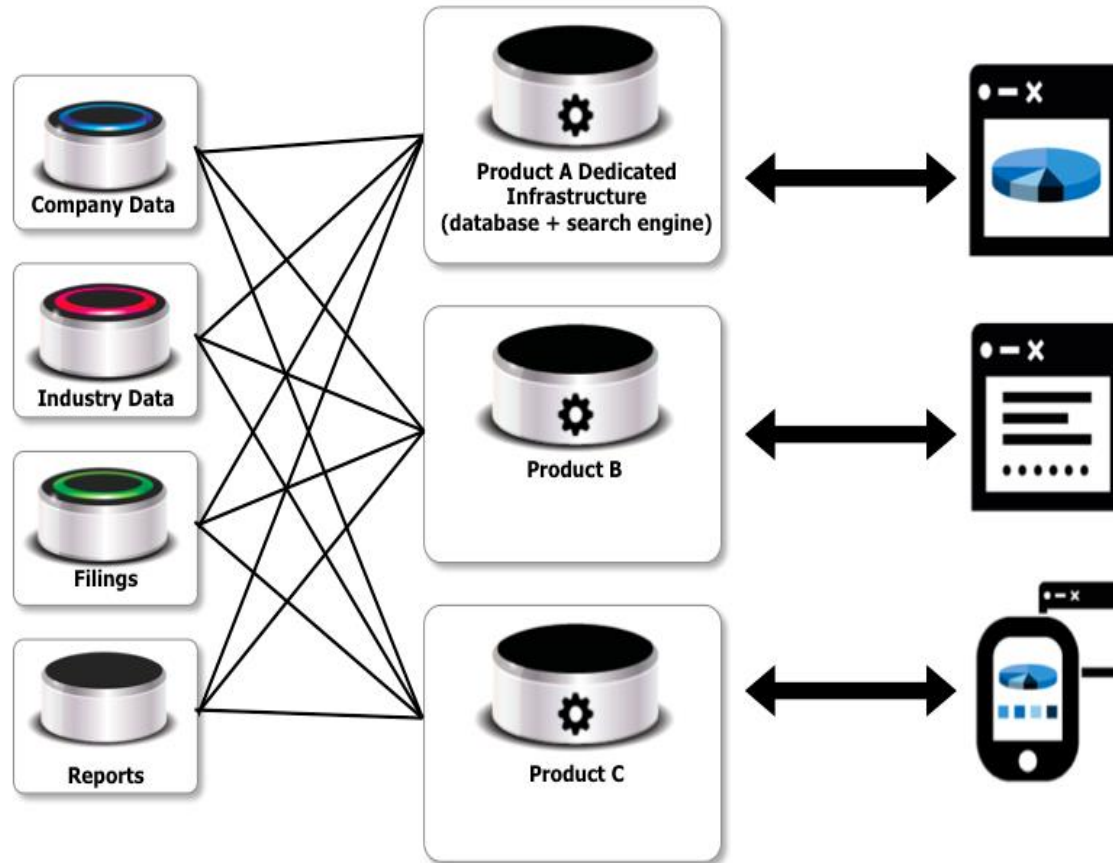
MarkLogic: New generation database software powering information products and mission critical applications

PUBLISHING

CHANGE IS THE ONLY CONSTANT



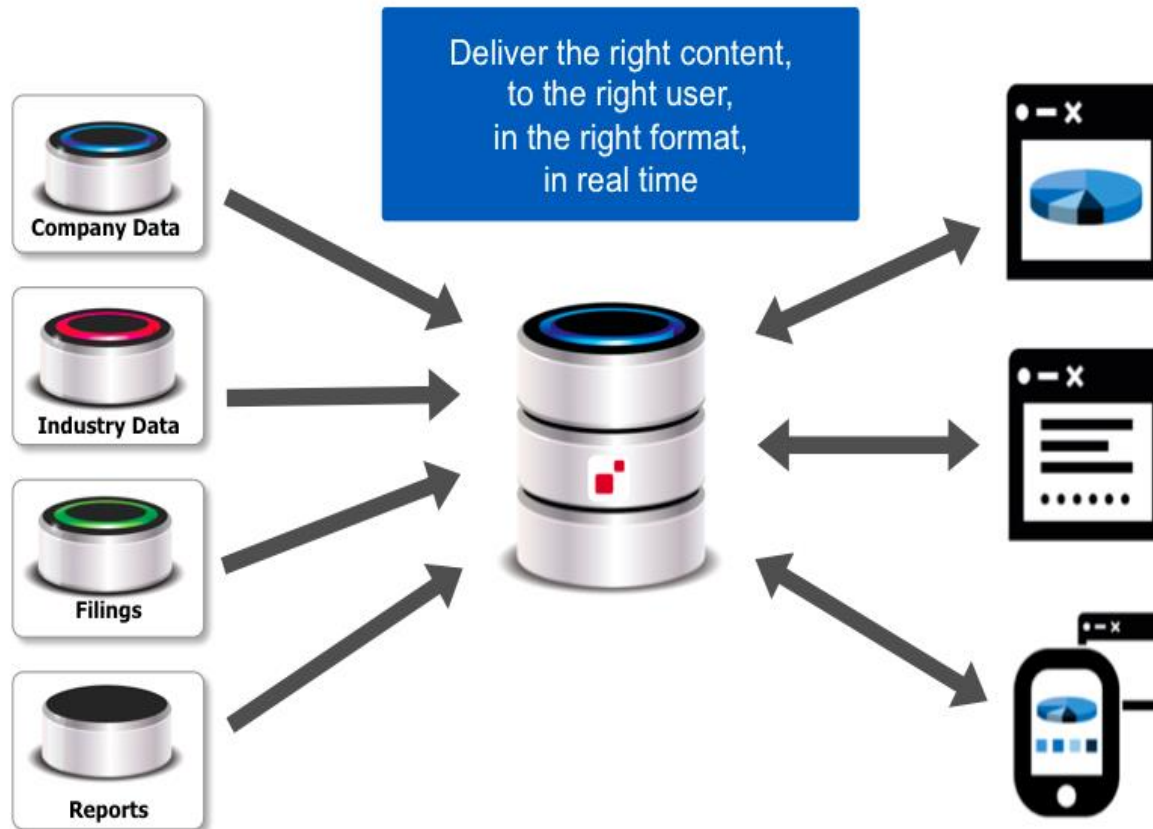
FROM PUBLISHING



FORM BASED
PRODUCTS

DEDICATED
PRODUCT
INFRASTRUCTURE

TO INFORMATION PROVIDERS



FORMAT
INDEPENDENT

INFORMATION
CENTRIC

DYNAMIC
DELIVERY

Top 5 Requirements for Information Publishers

- 1 Getting data *IN* fast isn't the problem – it's getting insights *OUT Faster!*
- 2 Data is complex – but users want complexity hidden!
- 3 Not everyone has permission to access all the data...
- 4 Repurpose, repurpose, repurpose. Repeat
- 5 Once you attract them – you must be reliable

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Traditional Technology

Rows and columns
for content strip
information



Title	Publication Date	Category	Abstract	Section	Section 2?
Science Article 1	3/1/14	Biology	Abstract text . . .	Section text	Section text
Research Book	6/4/13	Surgery	Abstract text . . .	Section text	Section text
Science Article 2	6/4/05	Chemistry	Abstract text . . .	Section text	Section text

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Traditional Technology

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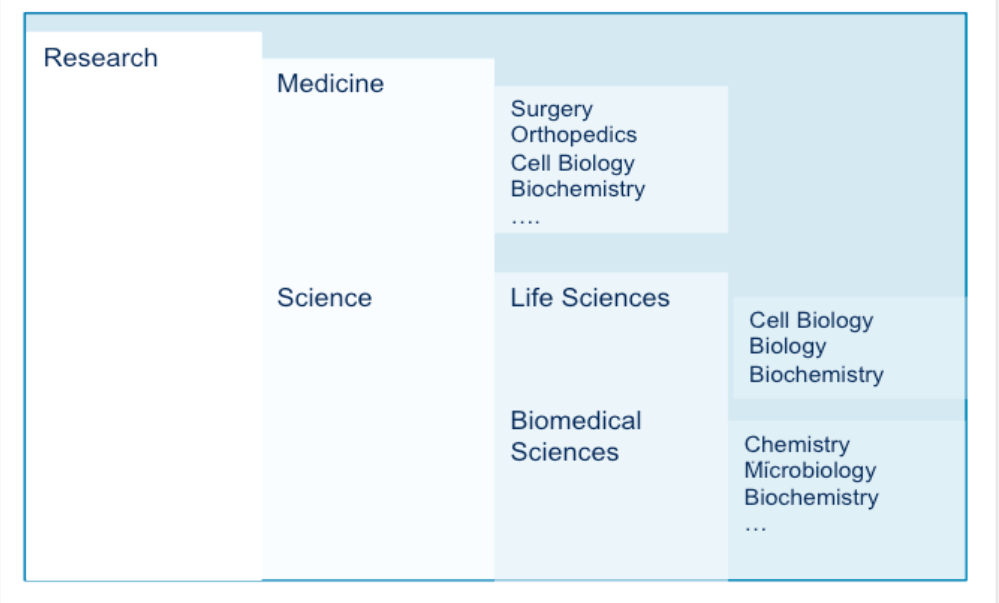


Hierarchical
taxonomies
overlap and don't
capture the
complexity



Title	Publication Date	Category	Abstract	Section	Section 2?
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We Are The New Generation Database

HIERARCHICAL ERA

"For your application data!"

- Application & hardware specific

The IBM logo is displayed in a stylized, white, blocky font. It is positioned to the right of the 'HIERARCHICAL ERA' text and is partially overlaid by a large, light blue arrow pointing to the right.

RELATIONAL ERA

"For all your structured data!"

- Normalized, tabular model
- Application-independent query

The ORACLE logo is displayed in a bold, black, sans-serif font. It is positioned to the right of the 'RELATIONAL ERA' text and is partially overlaid by a large, light blue arrow pointing to the right.

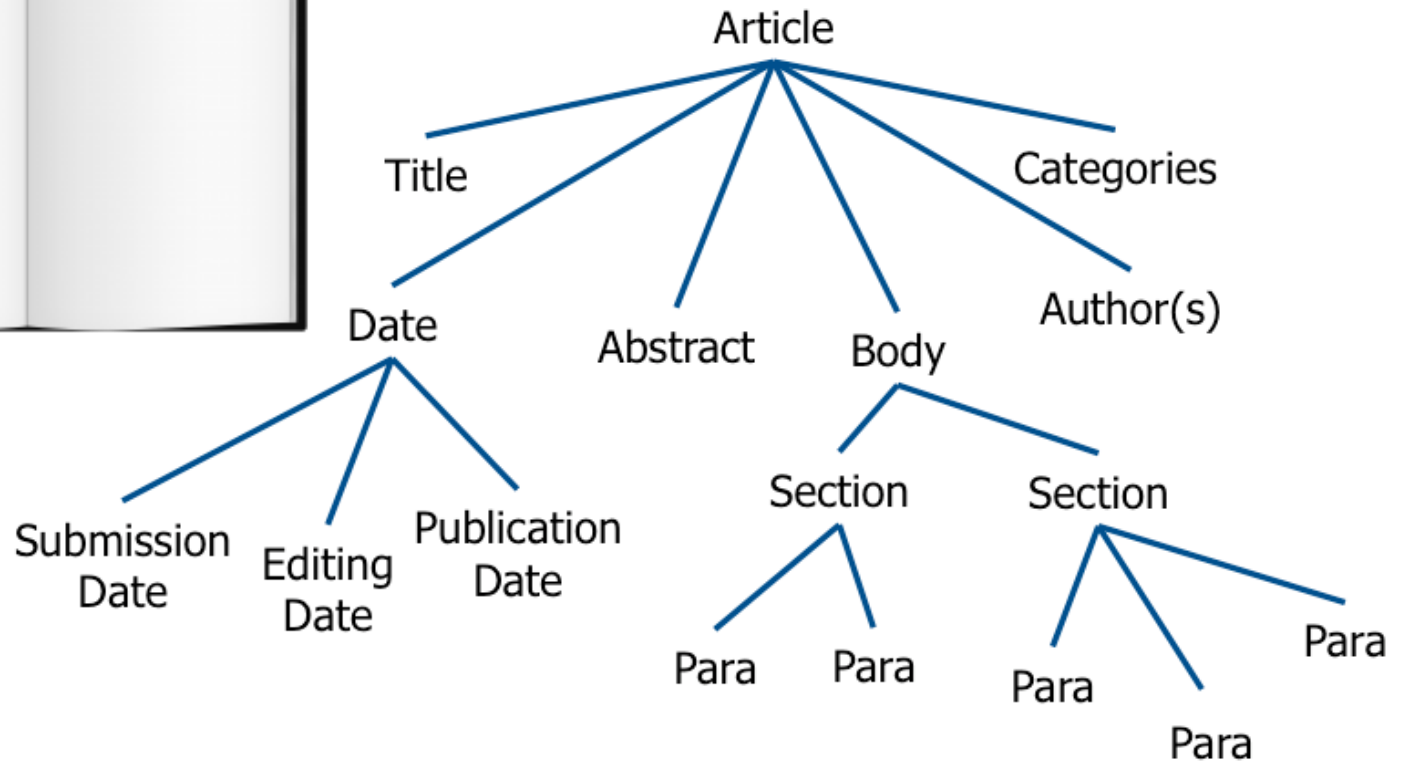
ANY STRUCTURE ERA

"For all your data!"

- Schema-agnostic
- Massive scale
- Query and search
- Analytics
- Application services
- Faster time-to-results

The MarkLogic logo consists of a small white square icon followed by the text 'MarkLogic' in a white, serif font. It is positioned to the right of the 'ANY STRUCTURE ERA' text and is partially overlaid by a large, light purple arrow pointing to the right.

Model Content with NoSQL



Semantics to Model Relationships

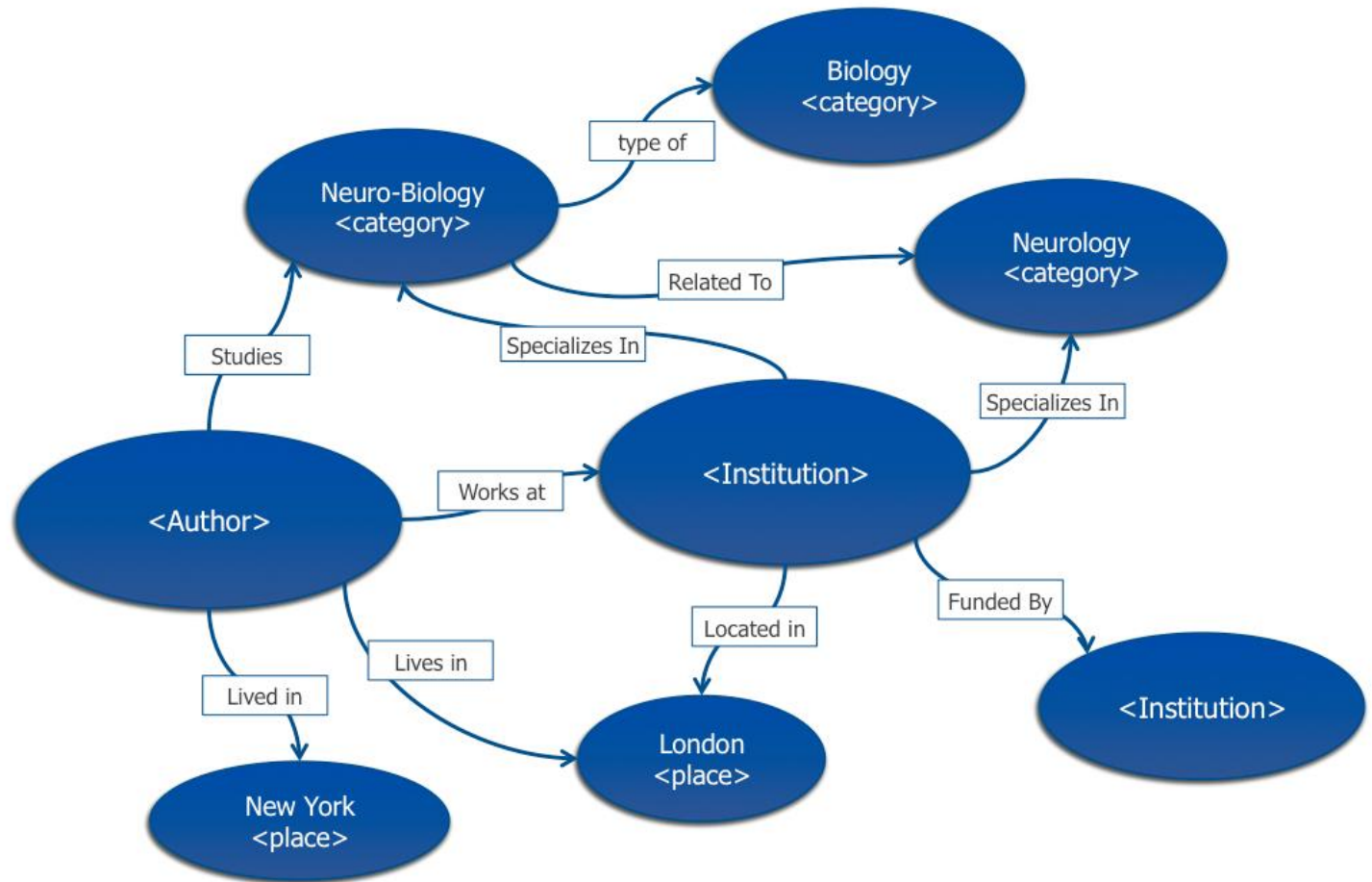
Data model to manage relationships and link together data

'triples' describe single facts

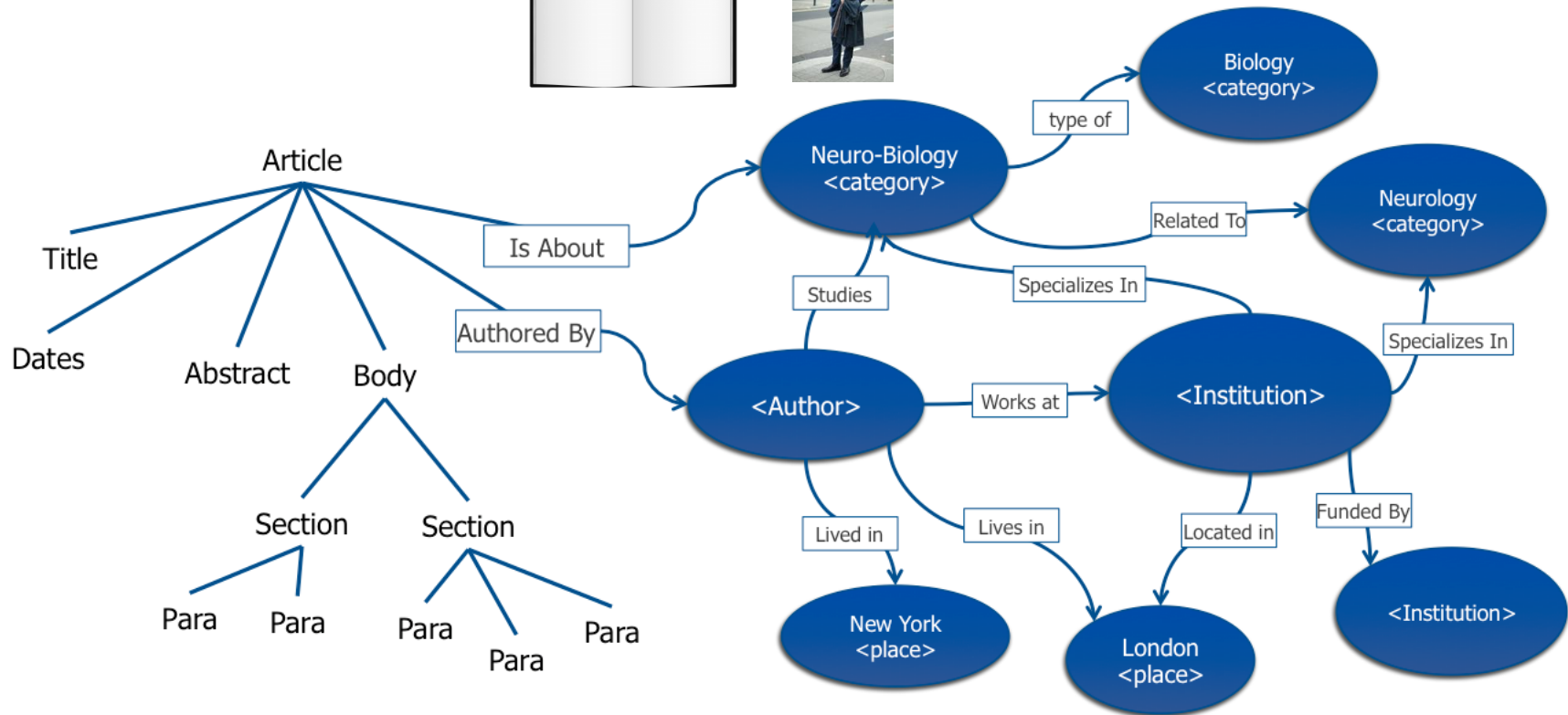
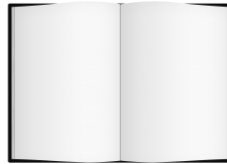
Collections of facts describe complex real-world scenarios



Ontologies Instead of Taxonomies

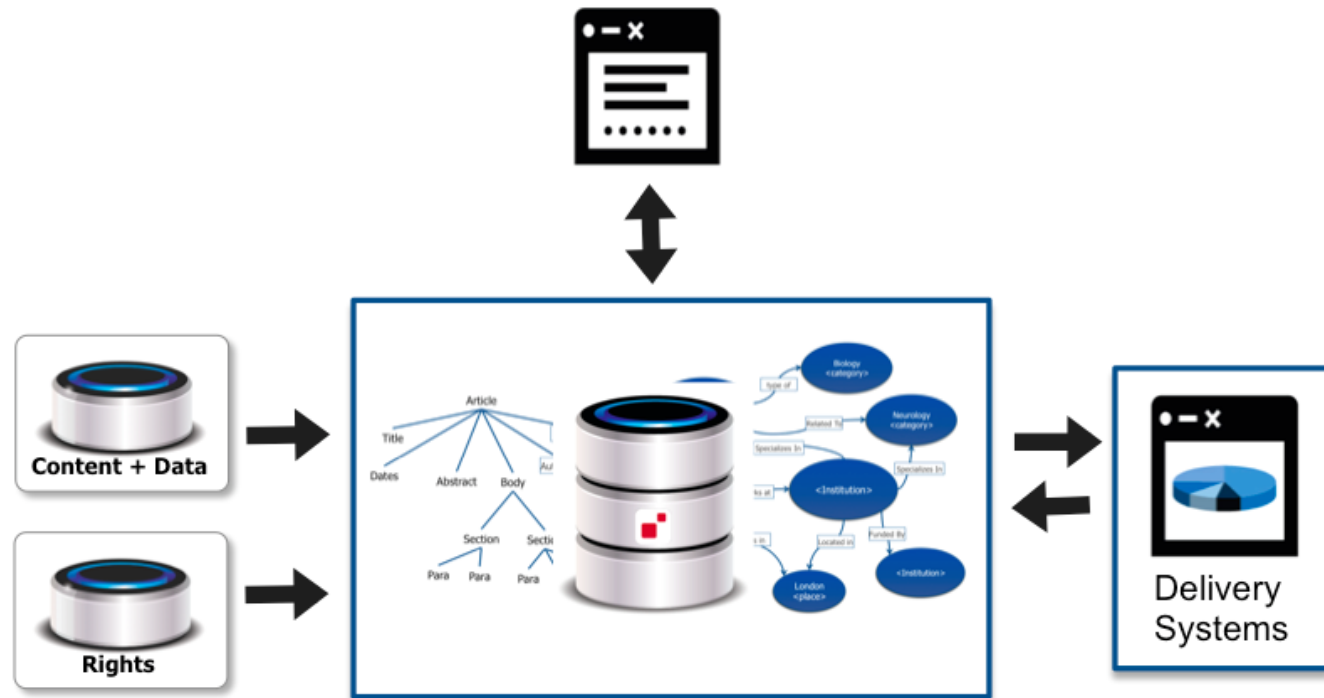


NoSQL and Semantics Unlock Content



Flexibility + Efficiency = Complete Picture

Use Case: Master Data



Foundational data to drive product development and innovation

Use Case: Enhance Digital Products

The image shows a screenshot of the BBC Sport Football website as of April 29, 2014. The page features a navigation bar with categories like News, Sport, Weather, Capital, Future, Shop, TV, Radio, and More... The main content area includes headlines such as 'Real thrash Bayern to reach final', 'Mourinho attacks critics of defensive style', and 'Chelsea Rivals are just jealous - Schurrle'. A 'Video & Audio' section shows clips of Ronaldo and the Brazil World Cup. A 'Scores, Results & Fixtures' section displays the latest football result: Bayern 0-4 Real Madrid.

Overlaid on the right side of the screenshot is a diagram of a 'Sports Ontology' for 'Olympics 2012 Track Cycling'. The ontology includes the following elements and relationships:

- Classes:** cycling, Summer Olympics (sport:RecurringCompetition), Great Britain (sport:CompetitiveSportingOrganisation), GB Olympic Team 2012 (sport:CompetitiveSportingGroup), cyclistRole (par:Role), Chris Hoy (sport:Person), Park (something).
- Instances:** Great Britain, GB Olympic Team 2012, cyclistRole, Chris Hoy, Park (something).
- Relationships:**
 - Great Britain *is a* sport:CompetitiveSportingOrganisation
 - GB Olympic Team 2012 *is a* sport:CompetitiveSportingGroup
 - GB Olympic Team 2012 *has a* cyclistRole (par:Role)
 - Chris Hoy *is a* sport:Person
 - Chris Hoy *is a* cyclistRole (par:Role)
 - Park (something) *is a* cyclistRole (par:Role)

Link together and present content with relationships

Use Case: Go Beyond Search

The Gospel Topics Explorer [Home](#) [Search](#) [Relate](#) [Explore](#) [Sources](#) [Enrich](#) [About](#) [Sign in](#)

Search

Wealth (10) ▾

Misery (14) ▾

Relate topics

3148 nodes examined

Getting started: In the Search box above, enter two terms or phrases separated by a comma, then click Search. Select other topics from one or both dropdowns to refine your search.

Examples
atonement, joseph smith
wealth, misery
inspiration, worthiness
sacrament, atonement
worthiness, mission
cleanliness, ordines

```
graph TD; Wealth --- Riches; Riches --- Parable1[Parable of the Sower and the Seeds, Part 1]; Riches --- Parable2[Parable of the Sower and the Seeds, Part 2]; Parable1 --- Tribulation; Parable2 --- Tribulation; Tribulation --- Misery;
```

Concepts, ontologies drive rich discovery experiences

Use Case: 'Everything Else'



Tailored to the users role, activity and location

Top 5 Requirements for Information Publishers

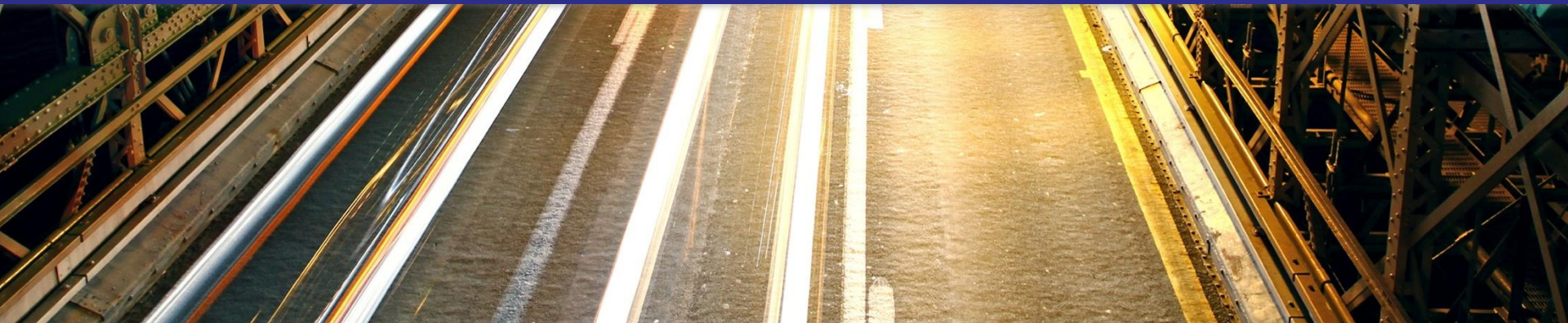
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- 4 Repurpose, reuse, recombine. Repeat
- 5 Once you attract attention – you must be reliable





MarkLogic 8, New Features, New Features

Partnering with You



stm

Time's Up!

About your speaker:

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Email: matt.turner@marklogic.com

Social Media: @matt_turner_nyc

Link:

<http://www.marklogic.com/blog/listicle-top-5-requirements-todays-information-providers/>

**FREE
BEER**

After the Event
Bloomsbury Tavern
2 minute walk