



Automatic retention of records

Norwegian Research Project - LongRec

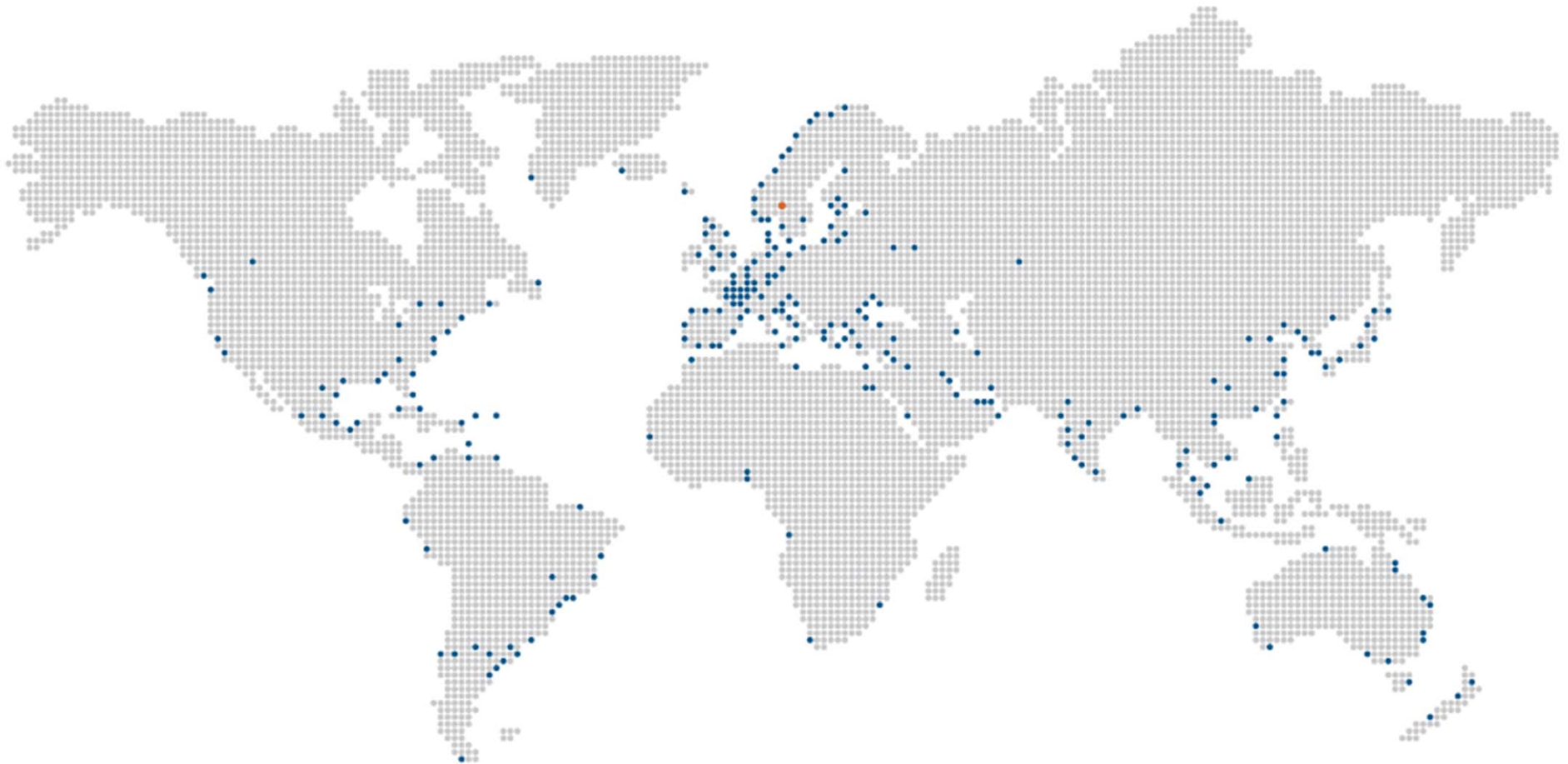
17 September 2010

Agenda

- Who is DNV?
- Why LongRec?
- Digital Trends
- Why is semantics important for Preservation?
- How context is linked related to automatic retention?
- Challenges and recommendation
- Wrap up

“Safeguarding life,
property, and the
environment”

DNVs locations

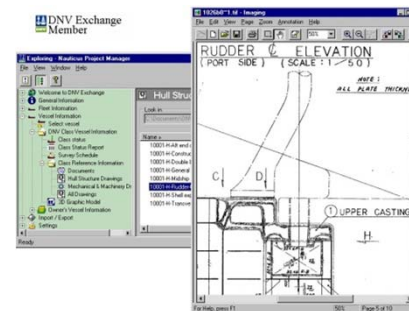


9000 employees

● Head office ● Local offices

DNVs motivation – LongRec

- Transition to digital documents and work processes
- DNV requirements
 - Documents to be stored and updated for at least 40 years
 - Textual documents, drawings, photos, multimedia information
 - High demands for availability, integrity, authenticity and confidentiality
- DNV interoperability requirements
 - Information from/to many actors (wharfs, ship owners, flag states, port states, insurance companies etc.)



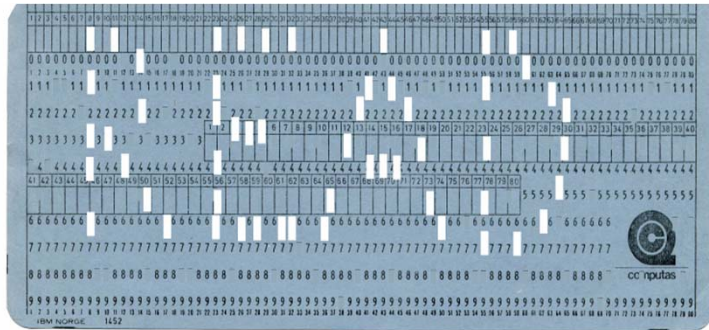
DATA = DIGITAL ACCESS THROUGH AEONS

- 3+ year project, research and case studies
 - DNV R&I lead, 10 partners
 - Start October 2006, end 2010
 - Overall budget 27,6 MNOK, Norwegian Research Council grant 9.2 MNOK
 - 3 PhD theses in progress

www.longrec.com

LongRec

DATA = Digital Access Through Aeons



Read

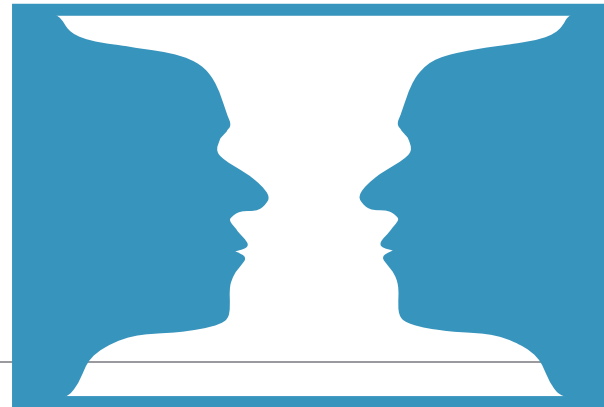


Find



Trust

Understand



+ COMPLIANCE

Project partners



MANAGING RISK



Norsk Regnesentral



Nasjonalbiblioteket



Utenriksdep.



NTNU

Det skapende universitet

Riksarkivet

StatoilHydro



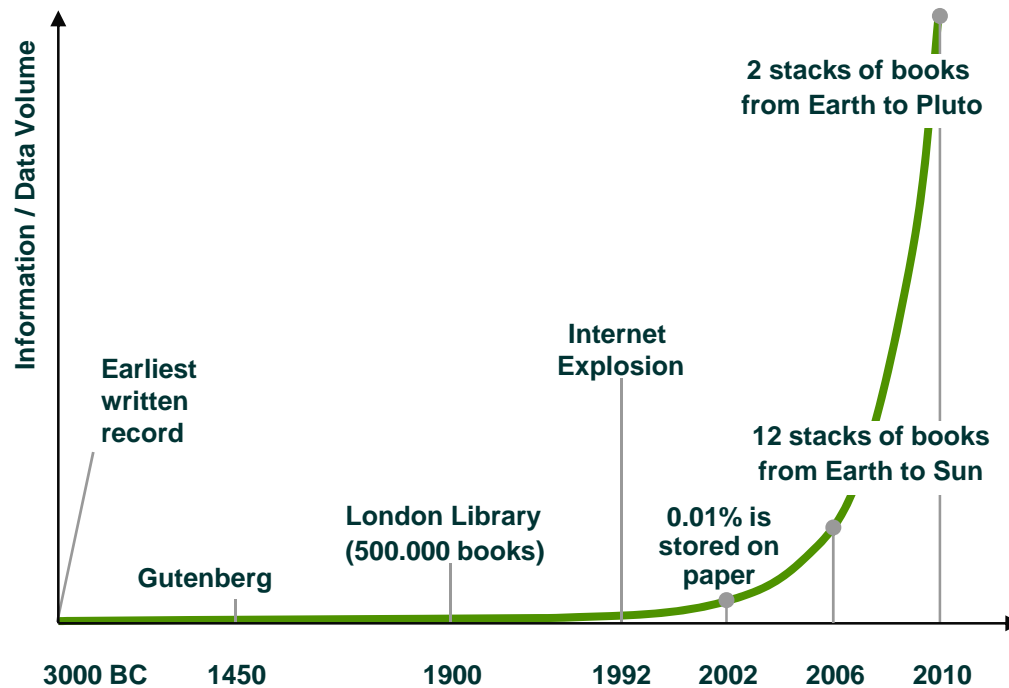
Brønnøysundregistrene

- InterPARES 3: <http://www.interpares.org>
- ICRI (Interdisciplinary Centre for Law and ICT), Katholieke Universiteit Leuven

Digital Safe (Video)

<http://research.dnv.com/longrec/digsafe.wmv>

Information explosion



TREND

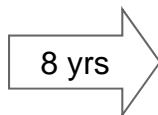
more and more is digital,
more and more is stored (temporarily),
more and more has to be documented,
more and more is non-textual

CHALLENGE

Too much to store
What to store
How to handle

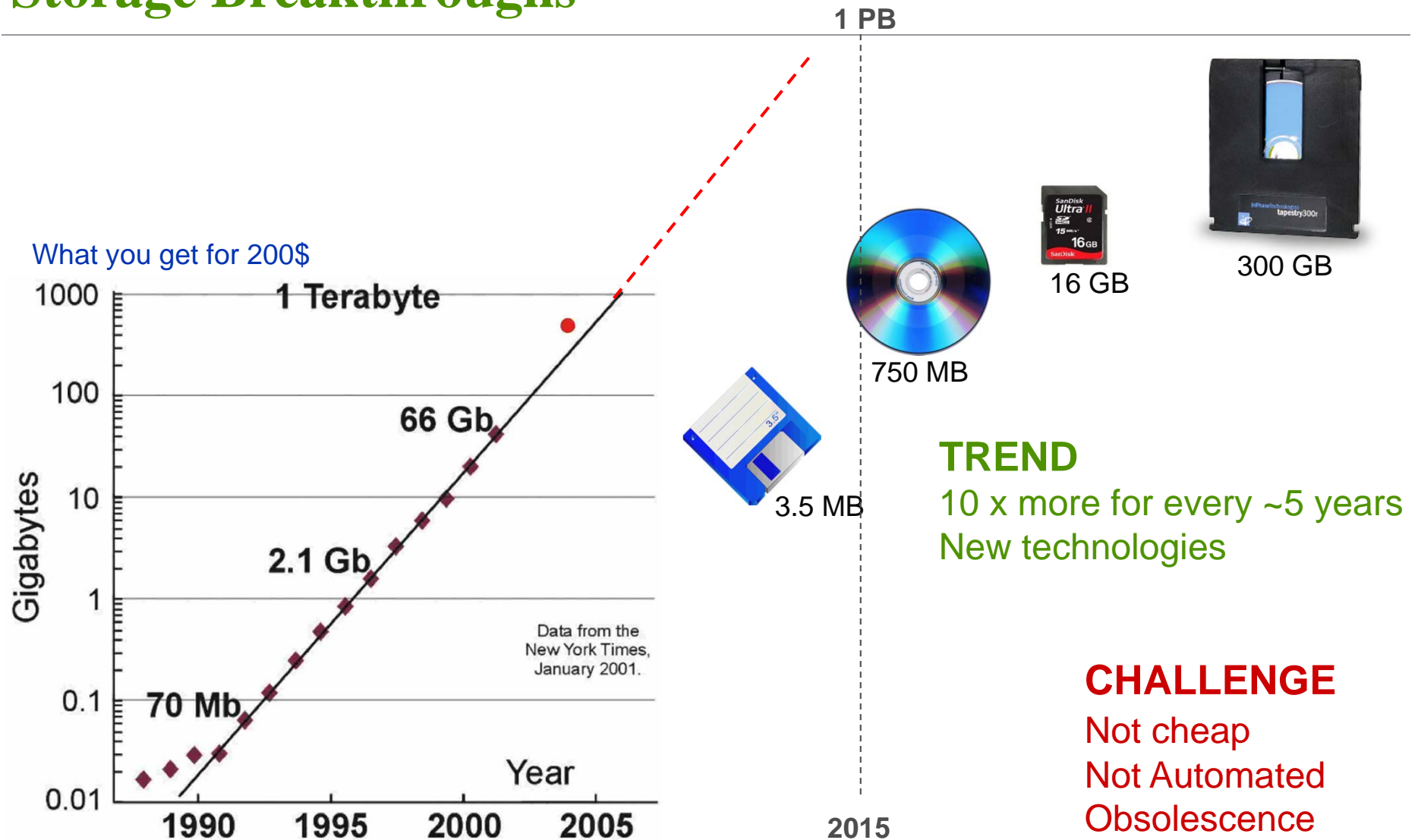


2.1 Mega Pixel



12 Mega Pixel

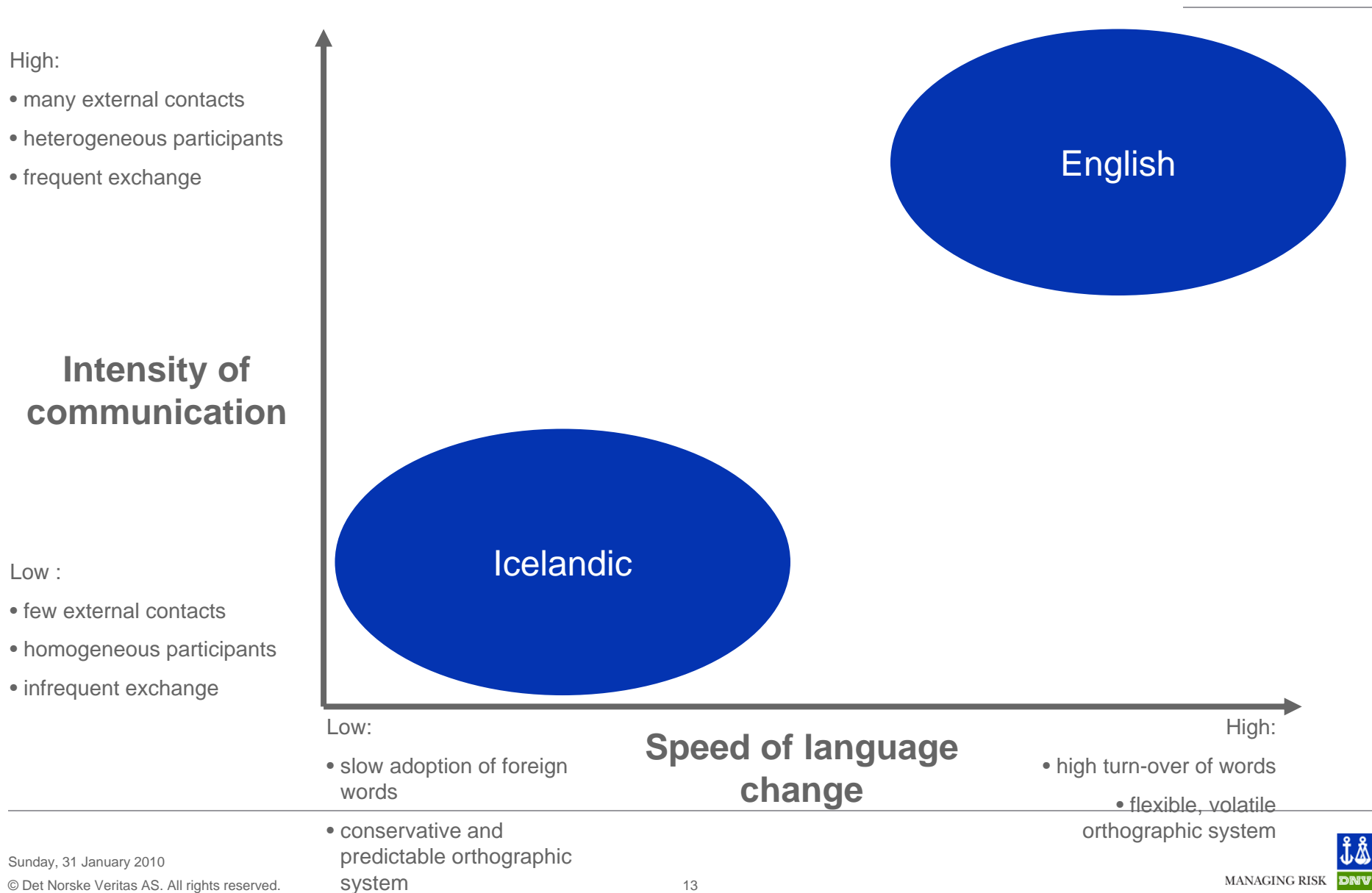
Storage Breakthroughs



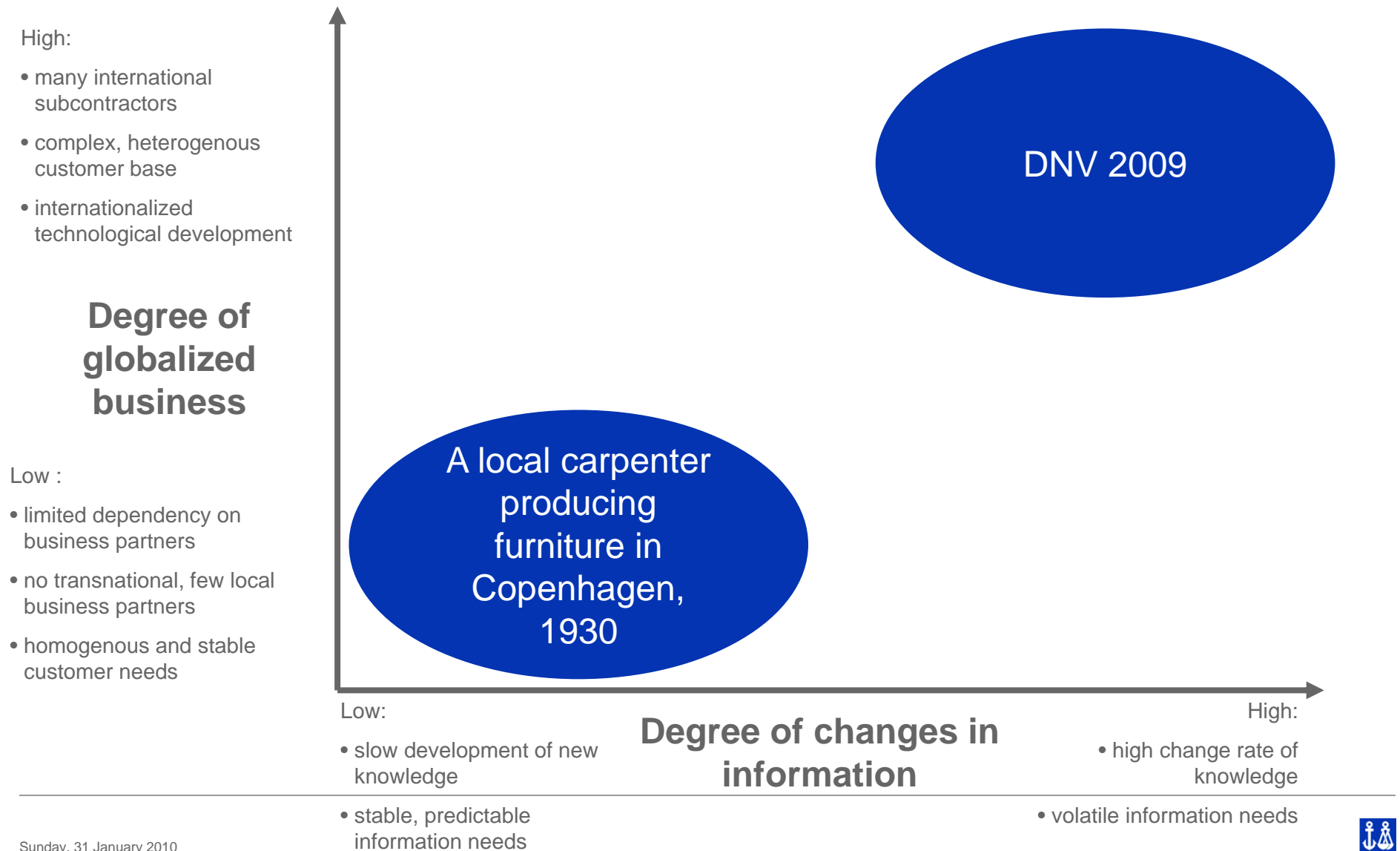
Questions

- If the record is created digitally is that the original?
- Do we think that more and more originals will be in digital formats?
- Will there be more and more tools that creates digital formats?
- Is it important to capture preservation information when the digital record is created?
- Do we believe that we can preserve the museum solution HW/SW and information?
- Is it better to preserve the original in the archive than garbage?
- Etc.

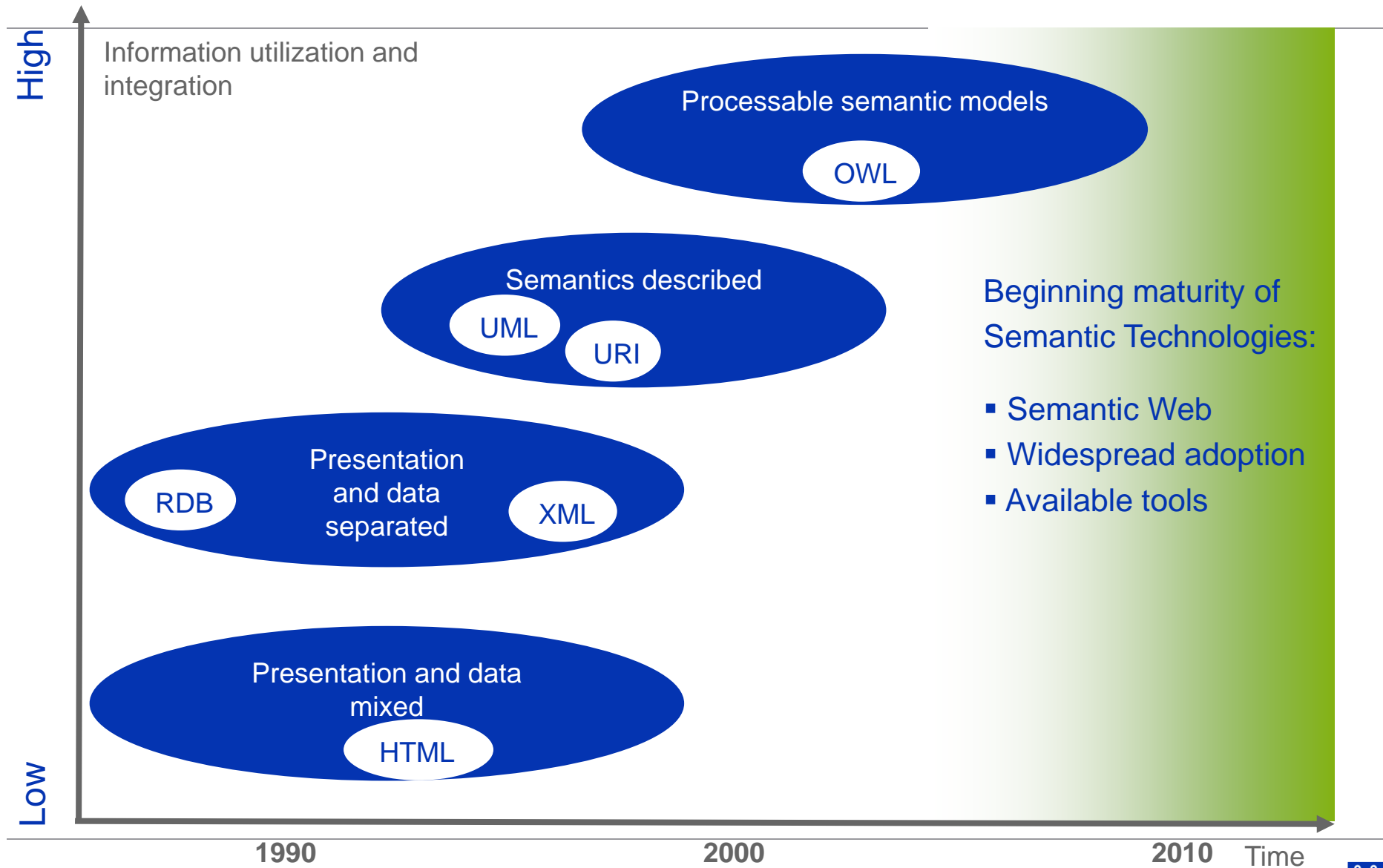
The impact of communication on language change



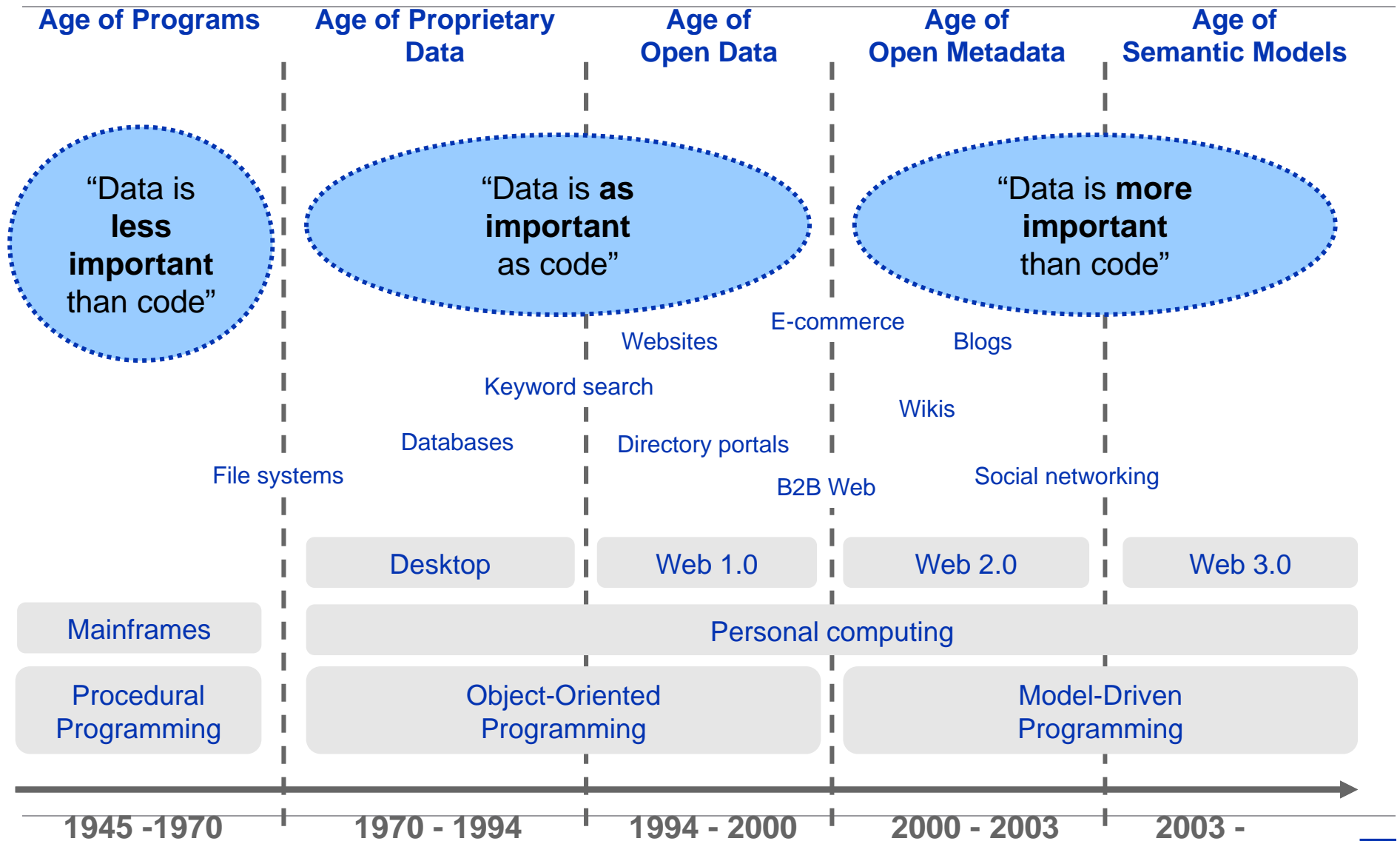
The impact of globalization on changing information needs



Maturity of the Semantic Technologies



Semantic Technologies: From code to meaning



Preserving semantic value: Two perspectives of time

1. Help information consumers understand historic data



information
consumer



information
provider

2. Help information providers make their information understandable over time

Empowering the knowledge worker (I)

Enable the interpretation of primary data over time by relating it to and presenting it with relevant secondary data

- Primary data = data in focus, e.g.
 - Norwegian business enterprise
 - Person holding a specific role in a Norwegian enterprise
- Secondary data = relevant context data, e.g.:
 - changes in law and jurisdiction
 - changes in BR's case practice
 - changes in language use (*styreformann* -> *styreleder*)(can be from both internal and external sources)
 - changes in ID used on referents, concepts, terms, records

Longrec Understand Timeline | Examples | Norsk Hydro - Mozilla Firefox

File Edit View History Bookmarks Tools Help

file:///C:/Data/Prosjekter/LongRec/08-Presentasjoner/20090520_Semantic-Days/Demofiles/index_Firefox.html

Most Visited Getting Started Latest Headlines Add To Twine

Lifespan of Norsk Hydro

Test data from the Brønnøysund Register Center

Ervind Reiten

Styre

Godkjente årsregnskap

Regnskaploven

Lov om årsregnskap m.v. (regnskapsloven).
Fri, 01 Jan 1999 00:00:00 GMT

[Discuss]

Regnskaploven

Language

AS ANS Ir
Company Reter
Norwegian Person
Foundation
Legal_Entity
Forprosjekt Altinn

BM, RS/6000.

§ Enhetsregisterloven

§ Aksjeloven, endring EØS tilpasning

Enhetsregisteret settes i drift.

BR flyttes til Næringsdepartementet

BR får fast internett-tilknytning

Sammarbeid som leder til Altinn etableres

Foretaksregisteret satt i drift.

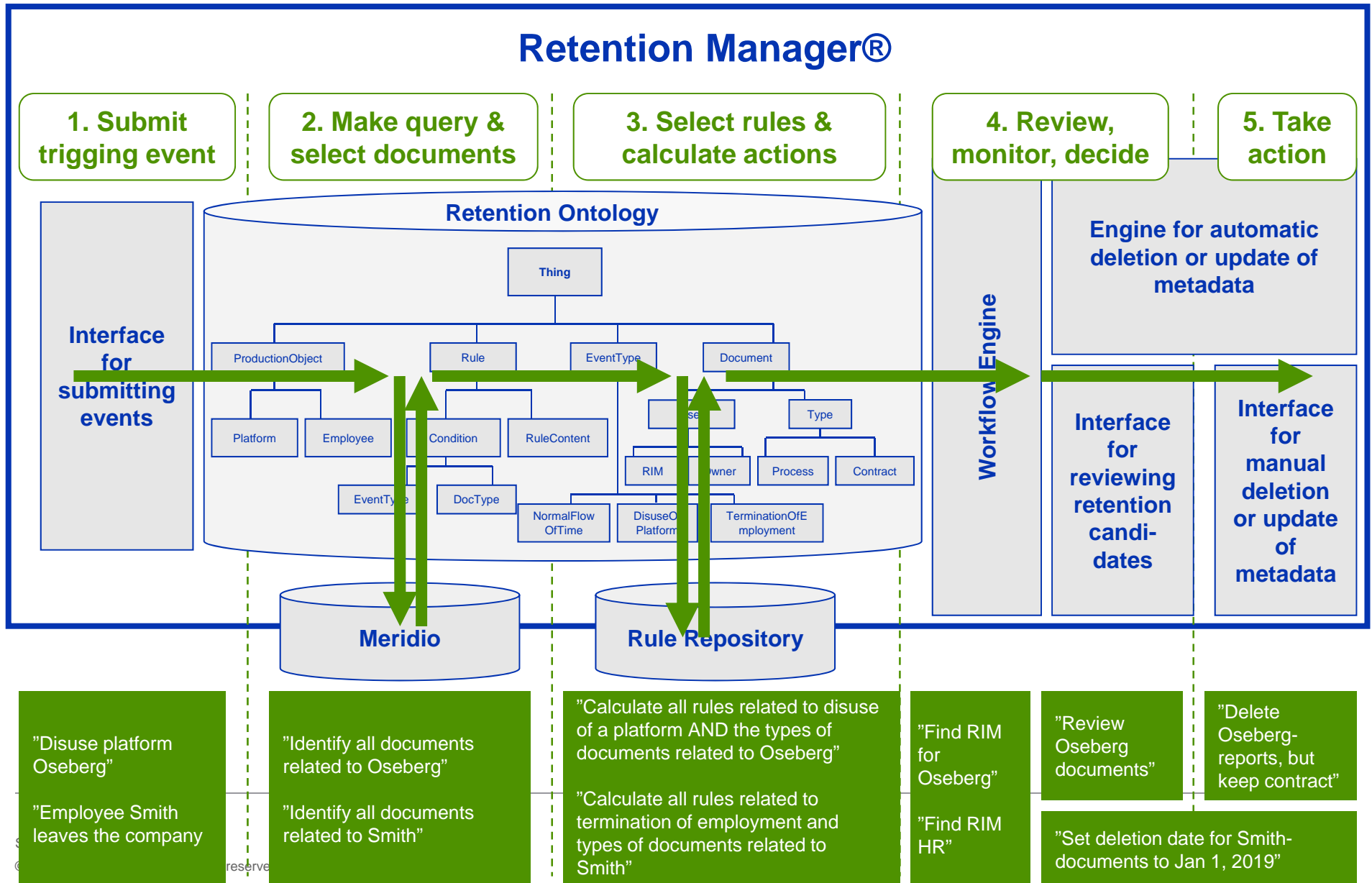
Siste ND maskin taes ut av drift

Nettbasert registrering etableres

BR starter sin metadatasatsning

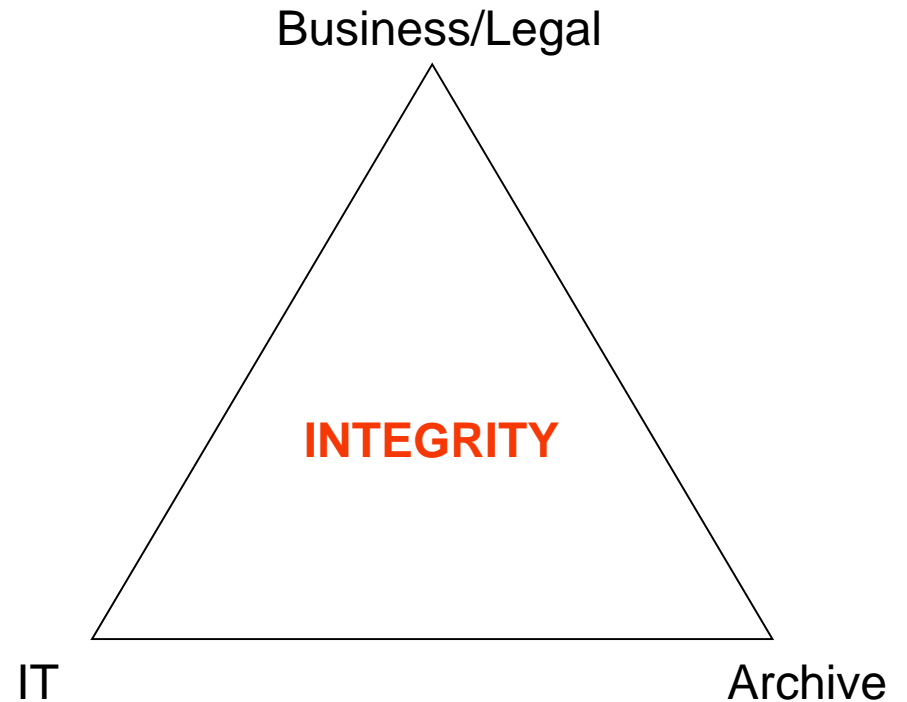
http://www.lovdata.no/cgi-wift/wiftldles?doc=/usr/www/lovdata/all/nl-19980717-056.html&emne=regnskap*&&

Basic Scenario 1: Managing retention for a given event



Competence needs automatic retention

- Archive
- Business
- Development
- Operation
- Semantics
- Legal
- Management risk evaluation
- Management risk control
- Security/access control
- Cryptation
- Migration
- Etc.



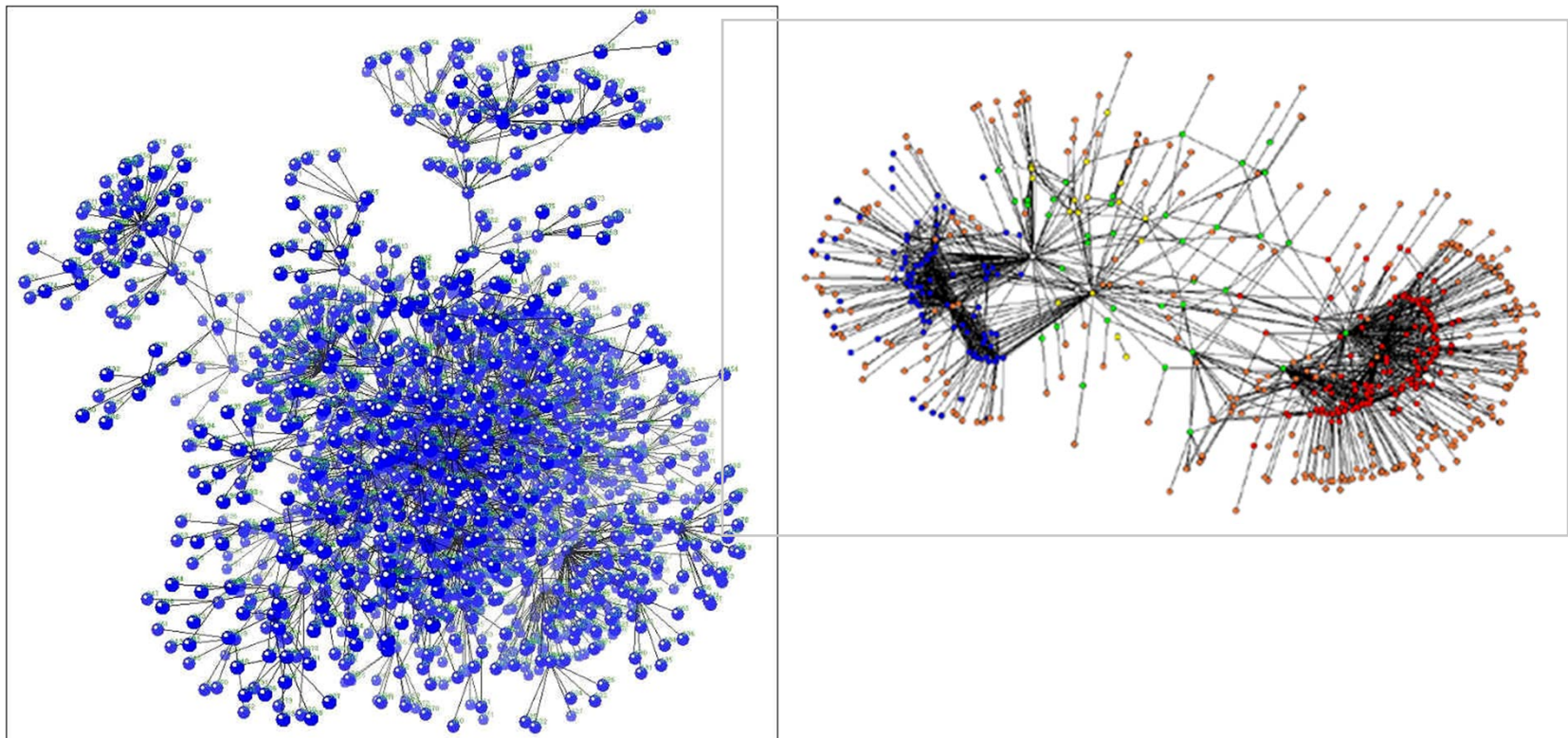
New Challenges

- Increased Volume
- We might not have enough disk space
- More and more compliance demands, even where deleting information is just as important as keeping the information
- More focus on information costs and benefits
- Critical users (response time, information about the information) – Interface
- Unawareness about companies needs related to keep original information
- Information that should be archived could be created at Twitter
- Etc



Ontology Evolution

- How to maintain/assess complex ontologies?



Su
© |



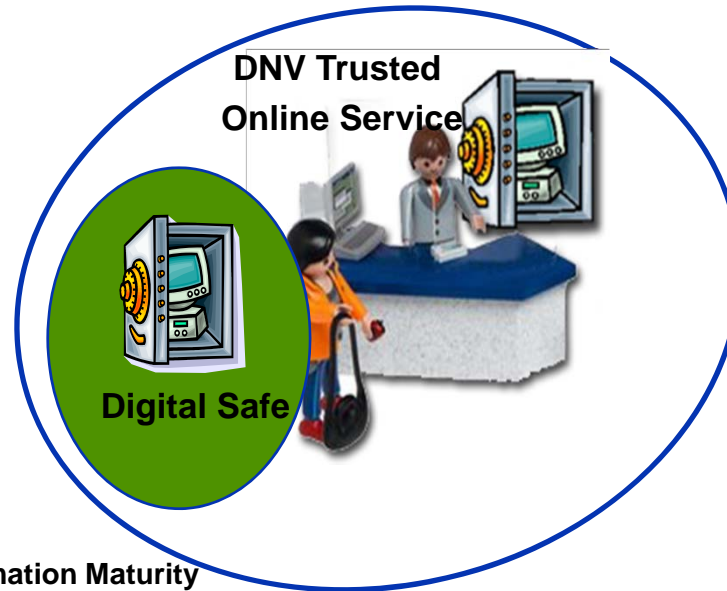
Recommendation

- Identify the information your company needs to archive and what kind of security level your company needs
- Collect your demands related to preserve an original in eternity
- Talk with the business and the IT people and find out how you can deal with these challenges together
- Be positive to Open Source, everything that can make information handling more standardized
- Increase your companies risk awareness related to information handling
- **AND OF-COURSE USE SEMANTICS BOTH TO CAPTURE INFORMATION AND TO DO AS MUCH AS POSSIBLE AUTOMATICALLY!**



DNV are at the moment considering these services

Information risk/analyse Management



Information Maturity Assessment Service



Safeguarding life, property and the environment

www.dnv.com



MANAGING RISK

DNV