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# 19<sup>th</sup> XBRL International Conference

"Reducing regulatory burden with XBRL: a catalyst for better reporting"

June 22-25, 2009

Paris, France

Track 3: Case Studies in XBRL,
Bas Groenveld & Paul Hulst
Best practices in taxonomy design using dimensions
Wednesday 24th of June

### Who are we?

Bas Groenveld, Deloitte Netherlands. Experience in performance improvement, consolidation and reporting, mainly in Financial Services Industry and Manufacturing. Involved in XBRL projects since 2004 on COREP/FINREP and XBRL processing.



Paul Hulst, Deloitte Netherlands. Experience in Business Intelligence en data integration. Involved in XBRL projects since 2007 on taxonomy design, XBRL document processing and training.



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### Goal of presentation

We like to present you best practices in taxonomy development that resulted from **our experiences** on a number of **taxonomy development** projects.

We identified **critical success factors** in the design and development of dimensional taxonomies, both in terms of project approach as well as the taxonomy design.















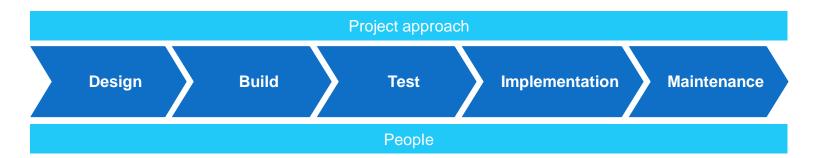






### Taxonomy creation approach

We use a phased approach to take you along the development path.





### Success factors for project approach (1/2)

#### Use an iterative approach

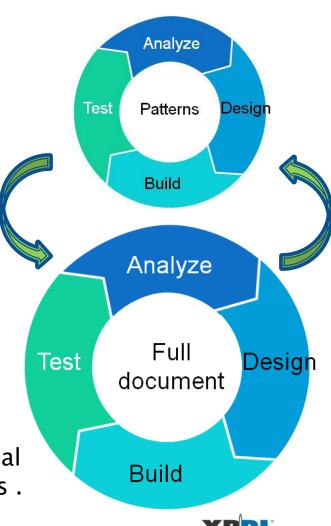
#### **Patterns**

- Analyze the documents available for patterns
- Design XBRL solutions for those patterns
- Build and test them
- Create architecture document

#### Full document

- Analyze the entire document and assign patterns to each part
- Design XBRL element based upon the solution for that particular pattern
- Build and test

Return to the patterns document if testing actual document parts reveals errors or improvements.



### Success factors for project approach (2/2)

#### Time management

- Discussing the content of the taxonomy with business users, evaluation different solutions for various problems, testing the taxonomy, et cetera will take most of the time.
- Allocate 5–10% of the time available on creating the actual taxonomy.



### Success factors for design phase

Start your taxonomy project without XBRL technicians

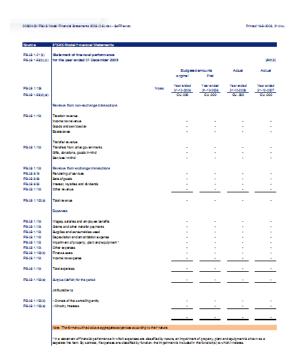
Build a data dictionary.

Focus on content, not on XBRL.

Leave your XBRL tools in the box Use a spreadsheet instead.

You aren't done when all elements are modeled: check for consistency.

Taxonomy creation is not an art form.





Design Build Test Implement Maintain

### Success factors for build phase

#### Create a naming guide

Naming concepts is difficult, create rules for this.

#### Create a structure guide

Decide on the level of modularization to break the taxonomy into different parts. Devise a sound method for naming them.

#### Set up peer review

Peer review by project members is an excellent way to improve quality.

#### Regular project meeting for discussing difficult cases

When multiple people are working on the taxonomy project have regular meetings to discuss difficult cases and results from peer review.



Design Build Test Implement Maintain

### Success factors for test phase

#### Test your patterns extensively

Any errors not found when testing the patterns will be multiplied in the actual taxonomy.

#### Make a plan

Define the goals of testing and determine when successful.

#### Test your dimensions

Create a list of all possible combinations.

#### Use multiple tools

Although all relevant tools pass the conformance suite, there are still differences in interpretations of the specifications.

#### <u>Involve the intended user</u>

Reach out to the community that will actually use the taxonomy to submit data.



### Success factors for implementation phase

#### Create a user guide

Help the intended user of the taxonomy, focus on his process of preparing the document.

#### Create sample instance documents

Illustrate the taxonomy using an example the intended users understand.



### Success factors for maintenance phase

#### **Document your decisions**

Avoid having to do the analysis again.

#### Create a versioning document

Either use the coming versioning linkbase standard or something else: just make sure it is usable.



### Success factors for people

# Educate your business project members Explain XBRL to business people.

#### Add a teacher to your team

Educational skills must be present in the project team.

#### Find the right business people

Knowledge of the processes is essential for a good understanding of the data collected.



### Closing remarks (1/2)

Creating a taxonomy is like any other project, BUT

the people creating the taxonomy will not be the primary users.

That will be the submitters!

So focus on the ultimate end user in a taxonomy creation project.



### Closing remarks (2/2)

Creating a dimensional taxonomy is like any other taxonomy, BUT

A dimensional taxonomy is much more complex than a standard (non dimensional) taxonomy.

So spend a lot more time and effort on patterns, testing and documentation.



# Best practices in dimensional taxonomy design

We hope that by sharing our experiences and the success factors based upon them you will be able to create better taxonomies for all users of it.

# Questions?



# Case: modelling a list of ships

VAK I. OPGAVE VAN DE MEERWAARDEN verwezenlijkt op zeeschepen ()										
Volgnr.	Beschrijving	Datum van vervreemding	Datum van belegging	Verkoopwaarde	Aanschaffings- of beleggingswaarde	Aangenomen afschrijvingen of waardeverminderingen	Fiscale nettowaarde (kol. 6 – kol. 7)	Verwezenlijkte meerwaarde (kol. 5 – kol. 8)		
1	2	3	4	5	6	7	8	9		
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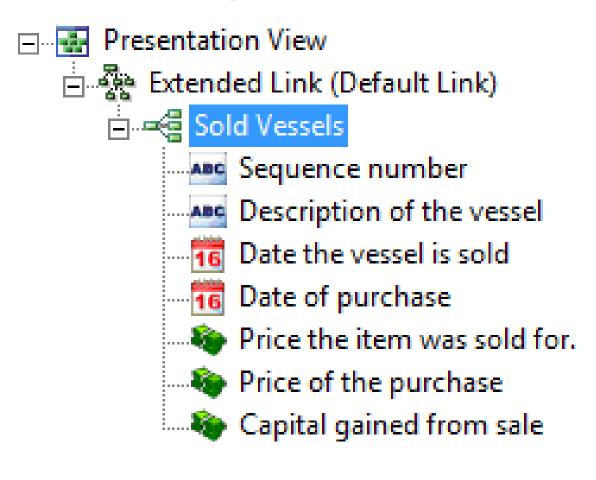
### Steps taken to model this pattern

- Determine relevant aspects for choosing the best solution
- 2. Find possible solutions
- 3. Score the solutions against the aspects
- 4. Decide

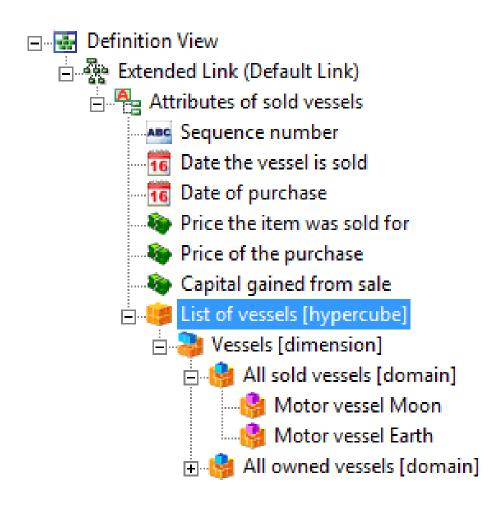
## Relevant aspects

Aspect	Importance
Need for taxonomy creation knowledge and software by submitters	Very high
Ease of use for Taxonomy creation	High
Ease of use for Instance document creation	High
Multi-dimensional structures: table of 2 or more dimensions	High
Validation and calculation through formula's	High
Extensibility	Low

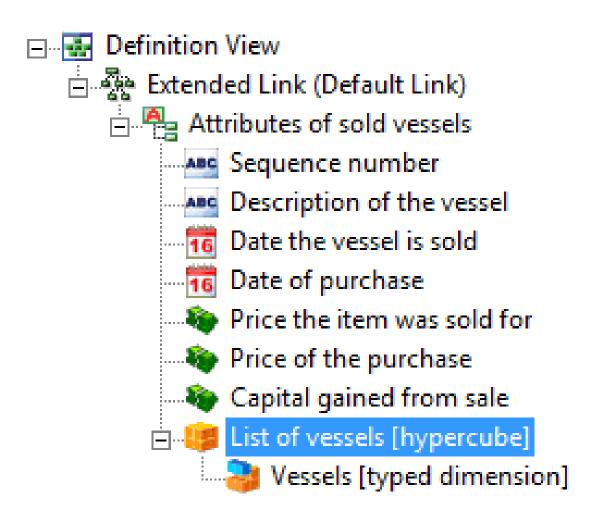
### Possible solution 1: tuple



### Possible solution 2: explicit dimension



### Possible solution 3: typed dimension



### **Evaluations of the solutions**

strong	Ea	Impact on	
weak	Tuples	Typed Dimension	Taxonomy
Taxonomy creation			•
Instance creation			
Changing a taxonomy			
Multidimensional structures			
Formula based calculation and validation			
Extensibility			

### **Decision**

Use typed dimensions to model the unlimited list pattern.

# Deloitte. @ Paris conference

We invite you to our booth in the exhibition hall.

- Contact us directly:
  - Bas Groenveld, <u>bgroenveld@deloitte.com</u>, +31 88 288 1940
  - Paul Hulst, <u>phulst@deloitte.com</u>, +31 88 288 0953

#### or

- Dave van den Ende, <u>DGvandenEnde@deloitte.com</u>
   +31 88 288 0208
- Yossef Newman, <u>ynewman@deloitte.com</u>
   +1 212 436 6424
- xbrl@deloitte.com