Creation of a BI environment from scratch with open source software

A practical case

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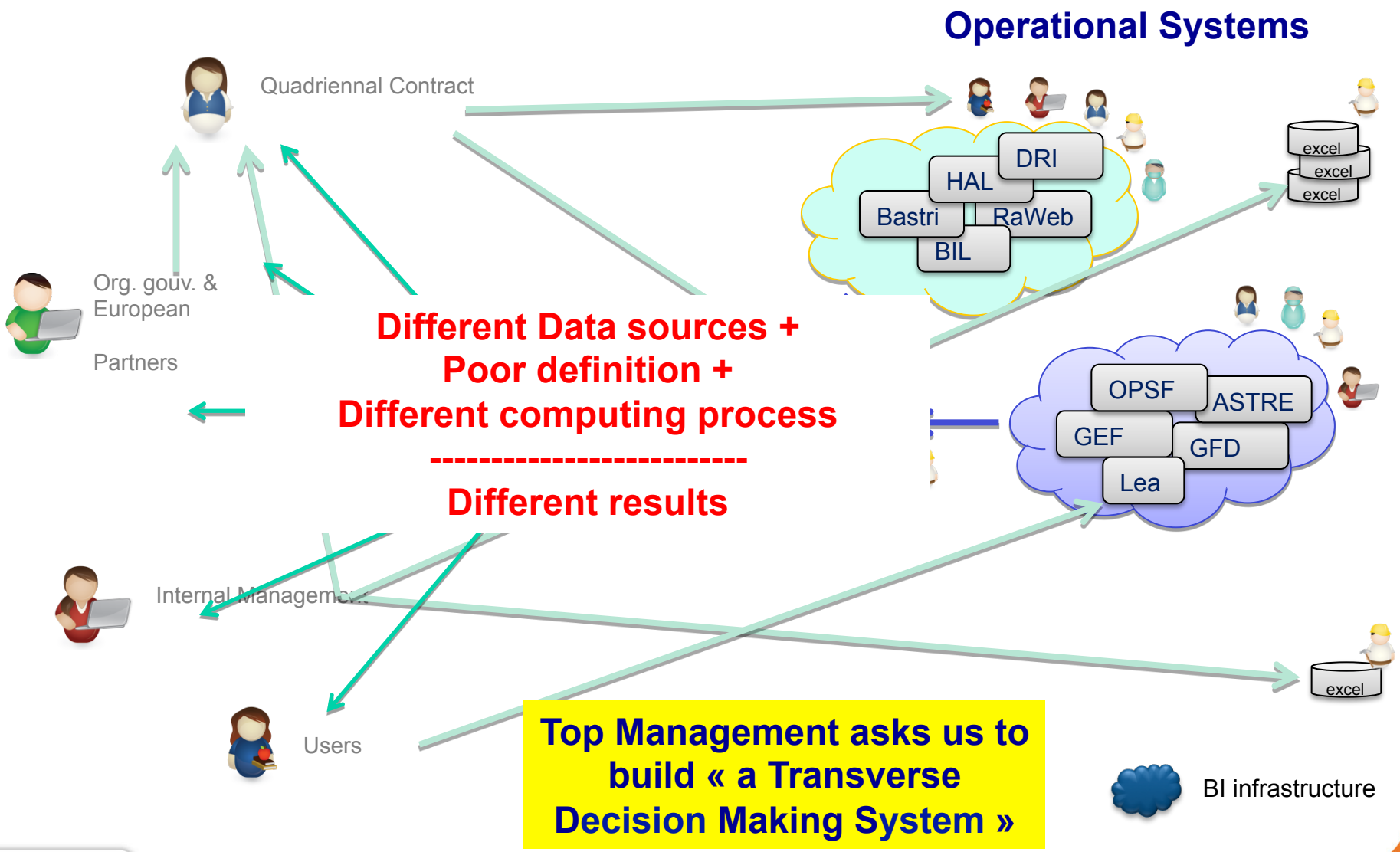
Creation of a BI environment from scratch with open source software

Agenda

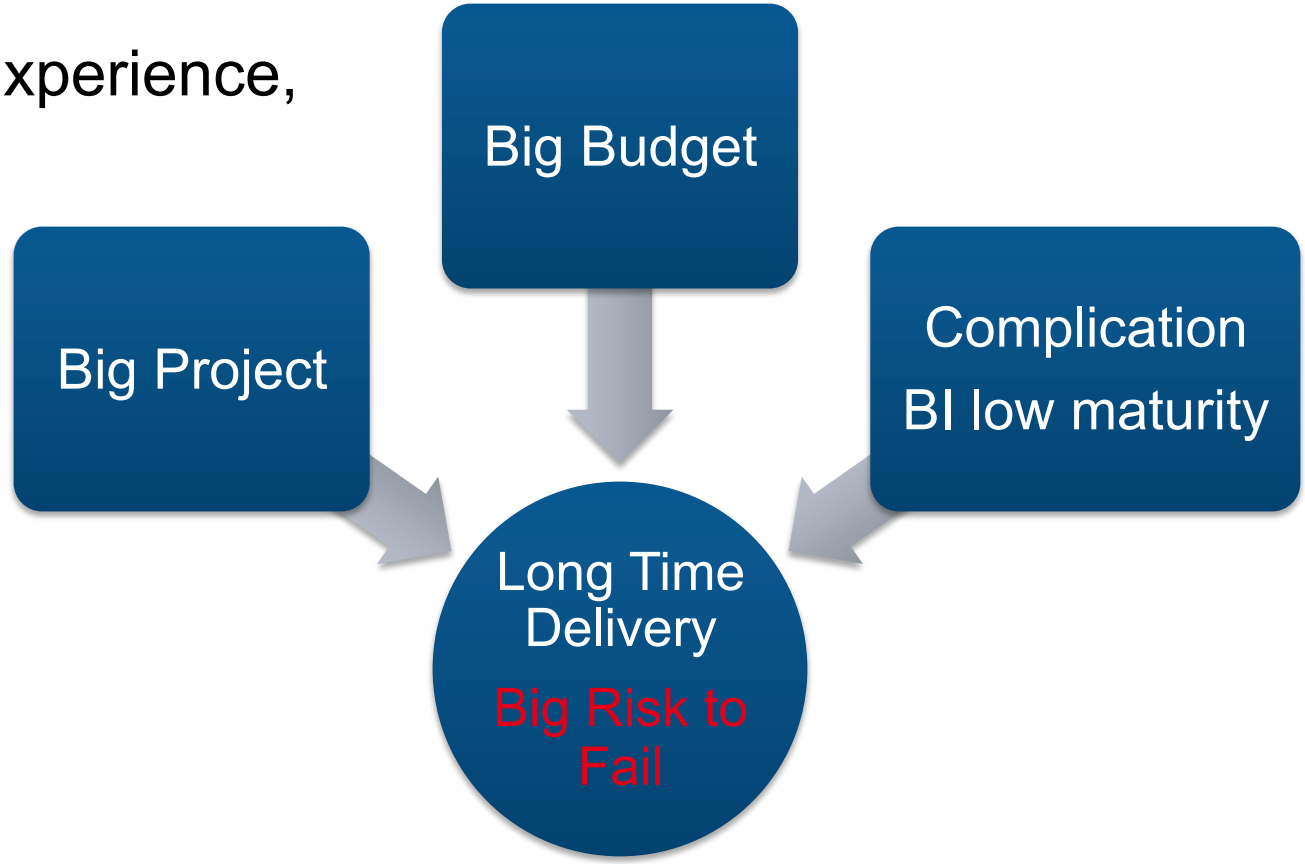
1- Context and request
2- Strategy adopted
3- Selection of Open Source Software
4- Results and Future

1- Context and Request



1- Context and **Request**

By Experience,



How to proceed ?

Choose one key indicator

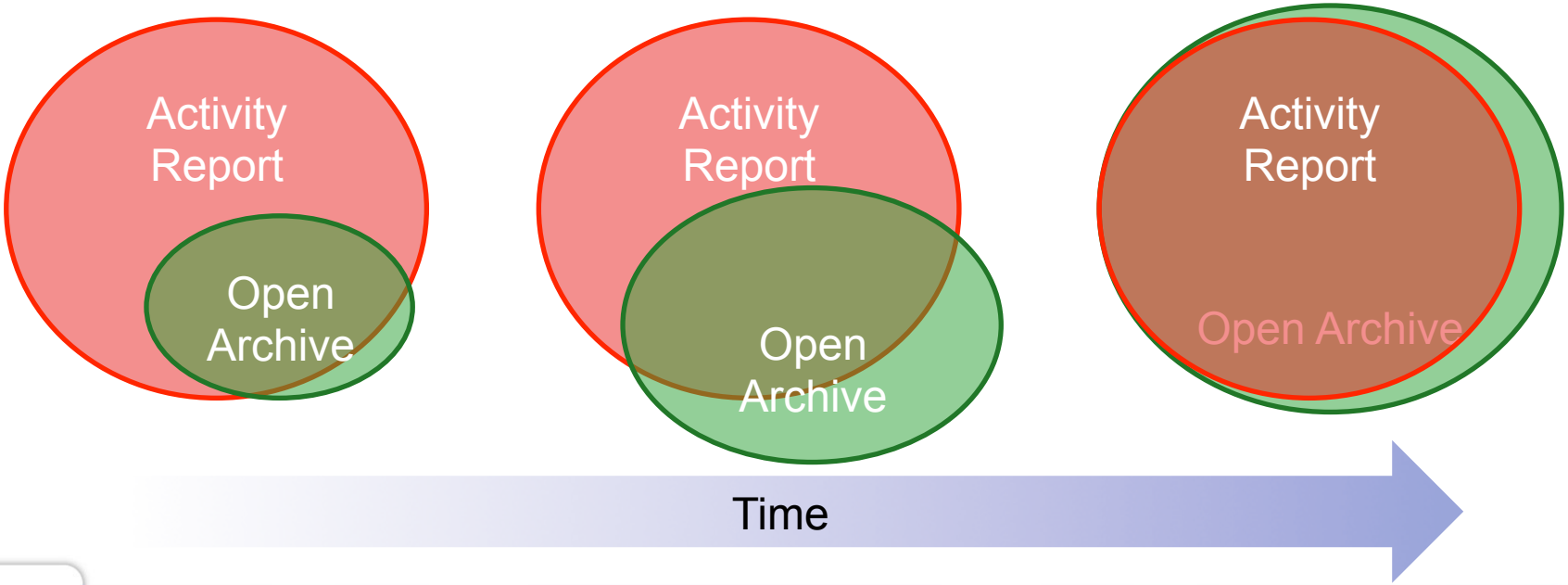
Find people to work with

Choose and build a technical BI environment

Strategy adopted
2.1- Focus on one indicator

- A key indicator not previously computed,
- A good understanding of the Organism (and strategy)

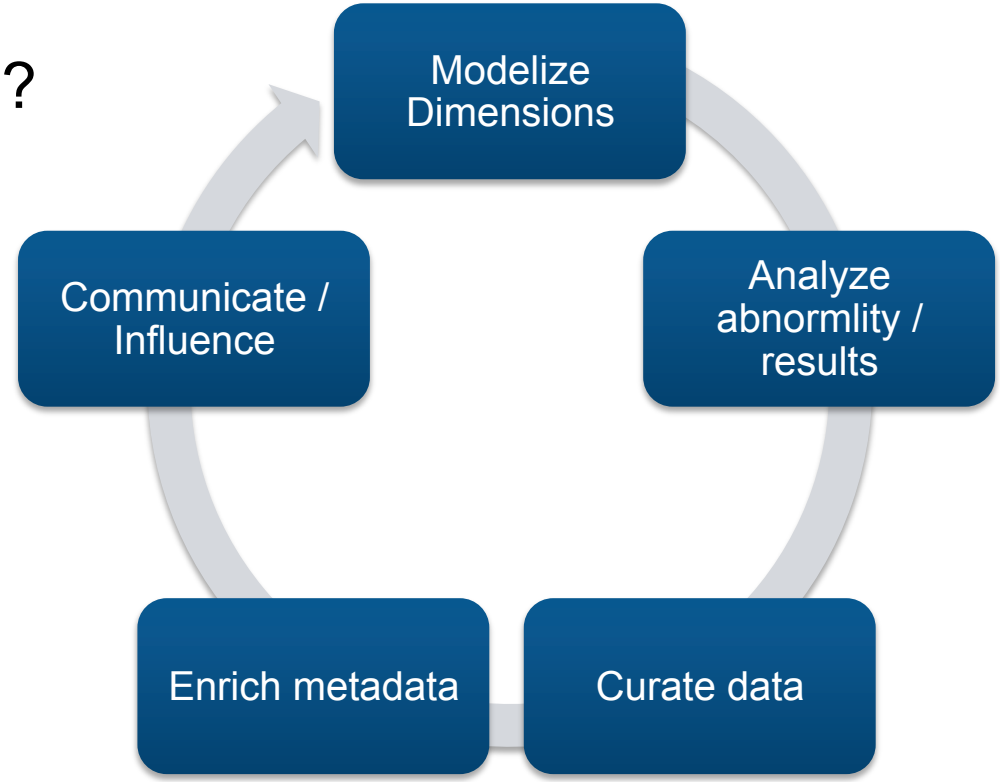
- Berlin Declaration Involvement
- Measure the publications available in the open archive -> goal 100%



Strategy adopted
2.2- Find people to work with

Subject is publication
Librarians are a relevant choice

What are their tasks ?

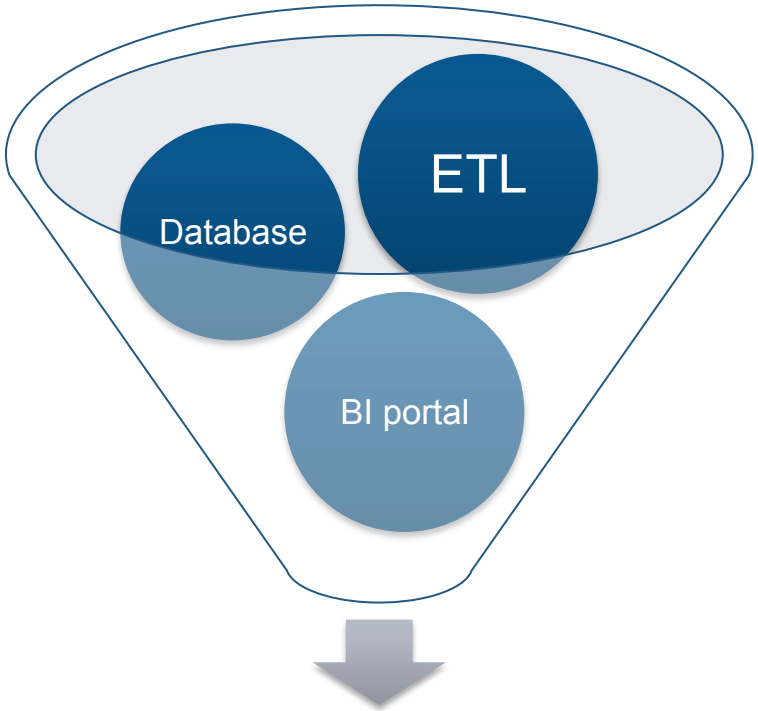


Strategy adopted

2.3- Need a technical frame as support

2 main Functions

- Create and Manage DW,
- Offer a Front End Application



BI Technical Frame

Questions

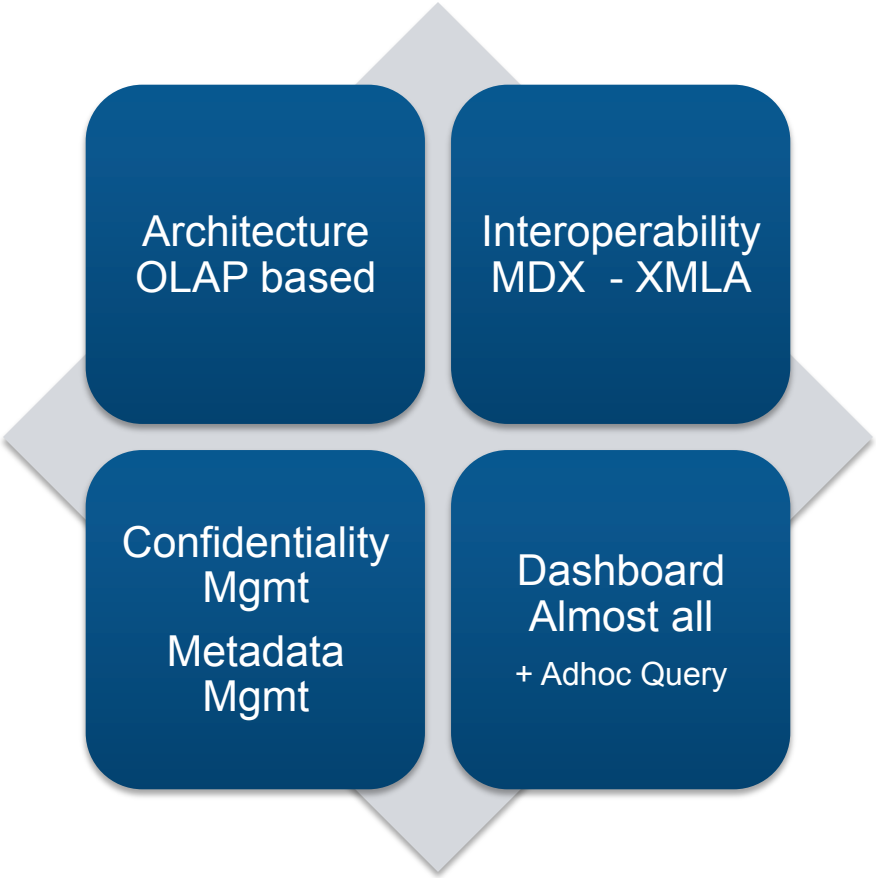
Proprietory or Open Source Software

- What are the **risks** ?
- Where is the **value** ?

Focus BI tools : 2010 excerpt of comparison

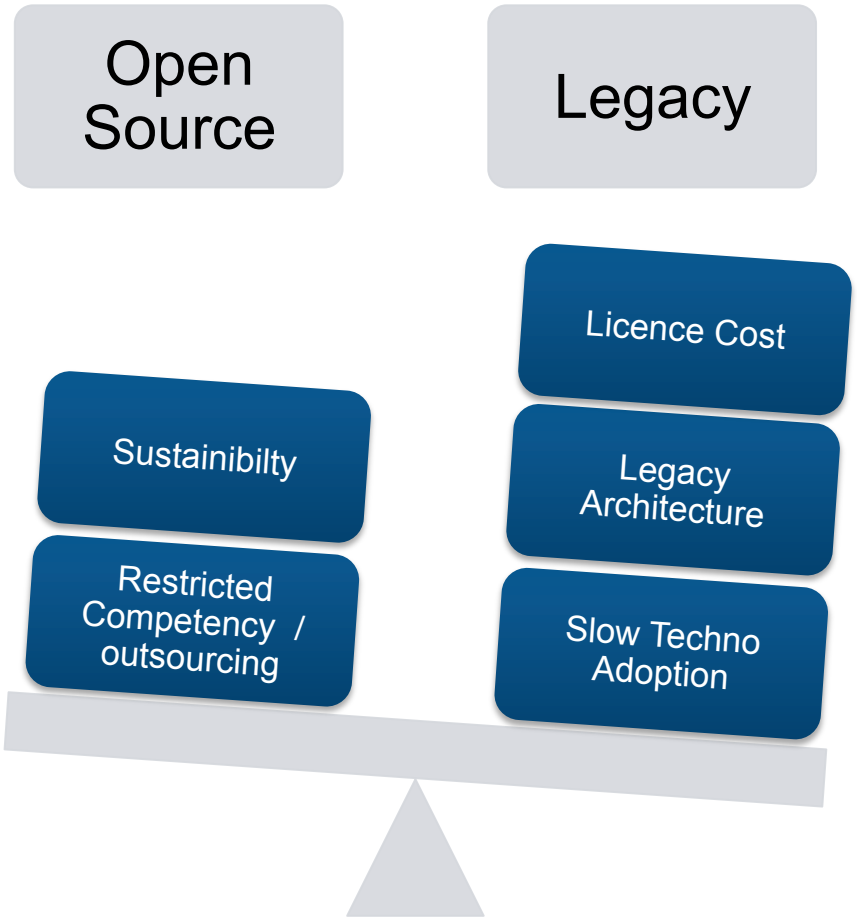
	DB	OLAP	Analytics & Retrieval		Dashboard
SAP-BO	-	InfoCube (ROLAP)	BO voyager	BO, BEX	BO Xcelsius Dashboard Builder
ORACLE	11G	Oracle OLAP Hyperion Essbase	Essbase via excel	OBI EE	Interactive Dashboard
IBM	DB2	Cognos 8 Infosphere WareHouse, DB2 OLAP server	Cognos8	Cognos8	Cognos8
Microsoft	Sql Server	SSAS	Performance Point server	SSRS	Performance Point Service
SAS	Legacy	Legacy SAS	SAS WRS	SAS WRS	Sas Performance Management
Pentaho	MySql, Postgres, Oracle…	OLAP Mondrian	Jpivot	Pentaho Ad hoc Query	Pentaho Dashboard
SpagoBI	Mysql, Postgres,..	OLAP Mondrian, SSAS	Jpivot, jpalo	QBE	Dashboard interactive and KPI
Jasper BI suite	Mysql, Postgres,..	?	Jasper Analysis	Jasper Report	Jasper Report Dashboard

BI functions : short summary



BI tools : Open Source vs Proprietary software

What are the Risks ?



BI environment : Open Source vs Proprietary

And what are the Long Term Value ?

Results

	annee			
	2010	2011	2012	2013
	Mesures	Mesures	Mesures	Mesures
indicateurs	pourcentage	pourcentage	pourcentage	pourcentage
−Publications de référence	81 %	83 %	86 %	100 %
Actes de colloques	82 %	83 %	85 %	100 %
Livres	63 %	66 %	83 %	100 %
Revues et chapitres de livres	80 %	83 %	87 %	100 %

Slicer: [source=RaWeb]

In 2013 Goal hit

On publications, more than 15 analytic dimensions are available

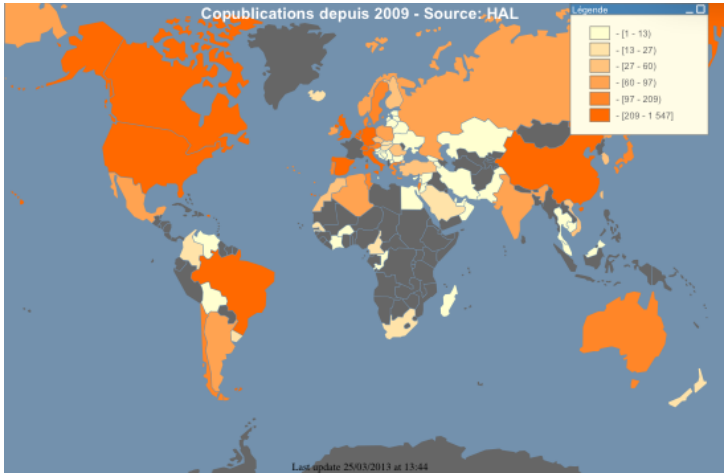
- Time dimension
- Organisational dimension
- Document type (congress, article, thesis, …)
- Geographical (by affiliation of authors)
- …

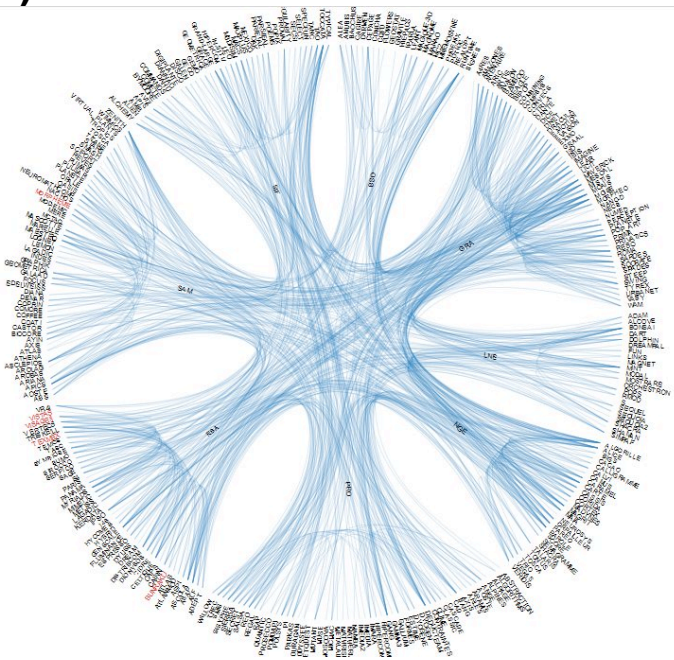
Results

From 2010 until now

More than 10 subjects by incremental building

- ✓Publication (type, author, affiliation, …)
- ✓Funding on research programs : International, European, National, ...
- ✓Mobility Research Exchange (in/out)
- ✓Software, …





And create different graphic representations with analytic data

And now, where to progress

Find strong(er) Sponsorship resources, new roles defined,

Improve communication and large diffusion

Capitalize on services,
Datawarehouse is not only a media for indicators,
it also models IT, as provider of digital services.

The effort made on the quality of data has to benefit all the users.

Thanks for your listening

Comments and/or Questions ?

Digital services

Presentation | HAL publications | Activity reports

CARAMEL Research team

CARAMEL team publications 2014

In peer reviewed journal articles

Computing class polynomials for abelian surfaces

Andreas Enge; Emmanuel Thomé

Experimental Mathematics, Taylor and Francis, 2014

Root optimization of polynomials in the number field sieve

Shi Bai; Richard Brent; Emmanuel Thomé

Mathematics of Computation, American Mathematical Society, 2014

In peer reviewed conference proceedings

Sparse Gröbner Bases: the Unmixed Case

Jean-Charles Faugere; Pierre-Jean Spaenlehauer; Jules Svartz

ISSAC 2014, Jul 2014, Kobe, Japan. Proceedings of the 39th International Symposium on Symbolic and Algebraic Computation (ISSAC 2014), pp. ??-??

A heuristic quasi-polynomial algorithm for discrete logarithm in finite fields of small characteristic

Share

Archives

- 2014
- 2013
- 2012
- 2011
- 2010

Find out more

You will find in HAL Inria all the scientific publications of our research teams

See also

- Presentation
- Activity reports

Examples


Publications
Kpi Production scientifique
Valeur courante
MODEL
KPI production scientifique publication
01 - Dépôt publications INRIA dans HAL 38.62 [1.0]
BOR - Bordeaux - Sud-Ouest 68.34
LIL - Lille - Nord Europe 31.22
LOR - Nancy - Grand-Est 71.53
RAL - Grenoble - Rhône-Alpes 41.62
REN - Rennes - Bretagne-Atlantique 46.87
ROC - Paris - Rocquencourt 16.81
SAC - Saclay - Île de France 37.08
SOP - Sophia Antipolis - Méditerranée 29.62
02 - Domaines prioritaires
BIO - Bio Informatique 1.33
Mesures
2008
2009
2010
Σ CRI.2006.
Σ CRI.2007.
Σ CRI.2008.
Σ CRI.2009.
Σ CRI.2010.
Slicer: source=HAL
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full text
liens
notices
type
EPI
Mesures
structure
equipe (today)
progression (4 ans)
tous 207 43 % 171 23 %
BOR 18 260 % 16 220 %
LIL 13 160 % 10 100 %
LOR 23 15 % 17 -11 %
RAL 33 50 % 25 14 %
REN 31 15 % 25 -4 %
ROC 38 15 % 34 17 %
SAC 27 125 % 22 83 %
SOP 35 17 % 33 10 %
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Publications domaine 'Mathématiques...' par CRI
Nombre publication, domaine 'Mathématiques ...' (ROC)
Copublications par CRI et par année avec ES