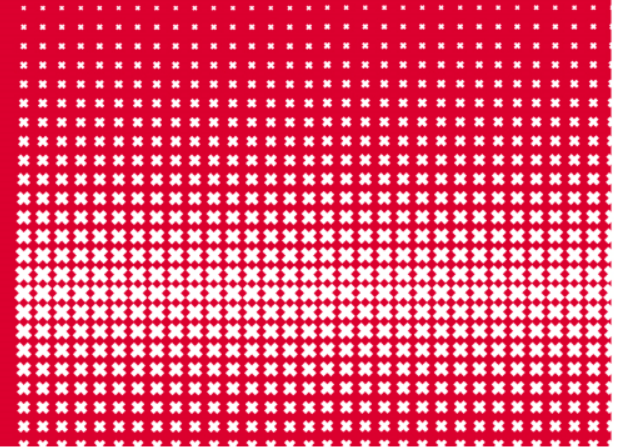




Making data talk

Pieter-Jan Aartsen, Corporate Controller

Porto EUA Funding Forum

October 7th 2016

Agenda

- Information systems landscape
- Information as derivative
- Paradox
- Common denominator
- Data collection
- UvAdata – an Amsterdam approach
- Summary

Information systems landscape



Characteristics information systems

- Single domain oriented (T / R / F / HR / RE / S)
- Mainly supportive to (massive) transaction processing
- Integrated in workflow along different parties involved
- Many interfaces to avoid redundancy

Information as derivative

■ Information systems:

- Primarily meant for convenience in daily “ground floor” struggle
- Ability to provide condensed information:
 - often closing entry in design or / and in use
- “*Local process needs*” often conflict with “*structured central view*”
- Information for evaluation and “contemplation”
 - deriving from data generated and processed in the heat of the struggle
- Cross domain information: in general out of scope
- Reports on overall organization health : fata morgana

Paradox

In spite of the name:

Most ***information*** systems generate ***data***

Without a dictionary and a shared vocabulary:

meaningless

How to solve the paradox?

How to dig the hidden treasure?

How to make it shine?



Common denominator

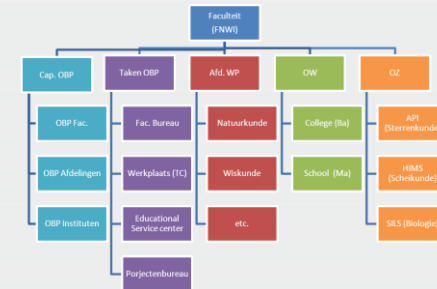
■ UoA decision (2000)

- All systems have to share the same organization view

■ Set up Central Organization Register

- Holding all organization levels from “executive board” to “sub-department”
- Applied to faculties as well as to Shared Services and Central Staff
- Mandatory for administrators to implement in all information systems
- Regardless of domain (T / R / F / HR / RE)
- Maintained by dedicated employee / changes only on authorized decisions

■ Result: start in establishing a climate with converging vocabularies



Data collection (data warehouse)

[illegible]

Data collection (detecting alerts)

[illegible]

Data collection (information providing)

[illegible]



UvAdata

An Amsterdam approach

Seven development principles UvAdata

- 1 *Transparent*
- 2 *Confidential*
- 3 *Full-scope activity-related*
- 4 *Analytical*
- 5 *Reproducible*
- 6 *Management oriented*
- 7 *Performance*

UvAdata: Management information online

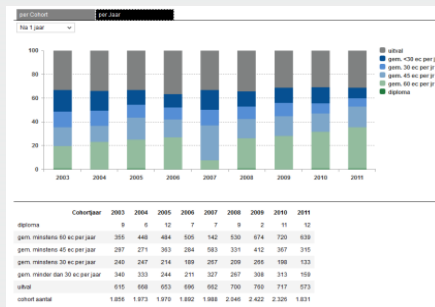
Some basics on UvAdata

- First release delivered 2008, 2 updated versions a year on average
- Software Business Warehouse (SAP Business Objects / Design Studio)
- Easy to access (Employee Self Service - UvAweb)
- Covering all relevant domains and Cross domain information
- KPI oriented in dashboards (internal and external “performance” indicators)
- Data source: different information systems (added to data layer SAP)
- Speaking common language (Avoiding domain-specific codes)
- Focus on consistency (closed periods), data protection (authorized access)

- One presentation style : Go MAD : **M**onitoring – **A**nalyzing – **D**rill to detail



Go MAD!



Monitor: Simple graphics report drawing attention to overall development “at a glance”

Focus group: academic management

Analyse studievoortgang

Huidige selectie: Faculteit: FGW, Bachelor: bachelor, Cohortjaar: 2008, Stand na Na 3 jaar.

Vooropleiding	□ VWO		□ HBO		□ WO		MASTER WO		BACHELOR WO	
	man	vrouw	man	vrouw	man	vrouw	man	vrouw	man	vrouw
Opleiding / Geslacht	A									
Algemene Cultuurwetenschappen (Ba)		15	2	6		3			1	
Arabische Taal & Cultuur (Ba)		4		1						
Architectuur & Planning (Ba)		5	3	2						
Duitse Taal & Cultuur (Ba)		1		2	1	1				
Engelse Taal & Cultuur (Ba)		1	6	1	4					
Europese Studies (Ba)		4	22	1	3	2	1	1	1	
Franses Taal & Cultuur (Ba)		1	4		1		1			
Geschiedenis (Ba)		10	9	3	5	2	1	1		
Griekse & Latijnse Taal & Cultuur (Ba)		1	2			1		1		
Italiaanse Taal & Cultuur (Ba)					1	1		1		
Kunstgeschiedenis (Ba)		2	12	2	5	1	2		1	
Latijnse Taal & Cultuur (Ba)		1	2		2	1				
Literatuurwetenschap (Ba)		3	7	2						
Media & Cultuur (Ba)		8	24	2	8	3				
Muziekwetenschap (Ba)		1	2	1		1		1		
Nederlands Taal & Cultuur (Ba)		2	22	1	4	1				1
Rechtsgeleerdheid (Ba)		1	2		2					
Slavische Taal & Cultuur (Ba)		2				1				
Spaanse Taal & Cultuur (Ba)		2	1			1				
Taalwetenschap (Ba)			4	1						
Theaterwetenschap (Ba)			7	1						
Vrijgeleerdheid (Ba)		8	7	4	3	1	2	1		



Analysis: Flexible report with all relevant filter and navigation options

Focus groups: ‘adventurous management’, controllers, policy makers, analysts

Studievoortgang per student

Huidige selectie: Faculteit: FGW, Cohortjaar: 2008, Ba/Ma: ba; Status (nu): Diploma na 1jr; Studentnummer: 0545538 Fischer;

Faculteit	Status (nu)	Studentnummer	Aantal studenten	Gem Focus (nu)	Gem EC Totaal (nu)	Gem EC's vooraf	Gem EC na 1e jr	Gem EC na 2e jr	Gem EC na 3e jr	Gem EC na 4e jr	Gem EC na 5e jr	Gem EC na 6e jr
Totaalresultaat			1	0,5	70	180	70	-	-	-	-	-
FGW	Resultaat		1	0,5	70	180	70	-	-	-	-	-
	Diploma na 1jr	0545538	Fischer	1	0,5	70	180	70	-	-	-	-

Detail: flexible report with lowest detail information (atomic data: €, EC, stud., fte, m2, hrs, publications)



Dashboard



Student



Onderwijs



Financiën



Dossier



Onderzoek



Personeel



Huisvesting



Informatie

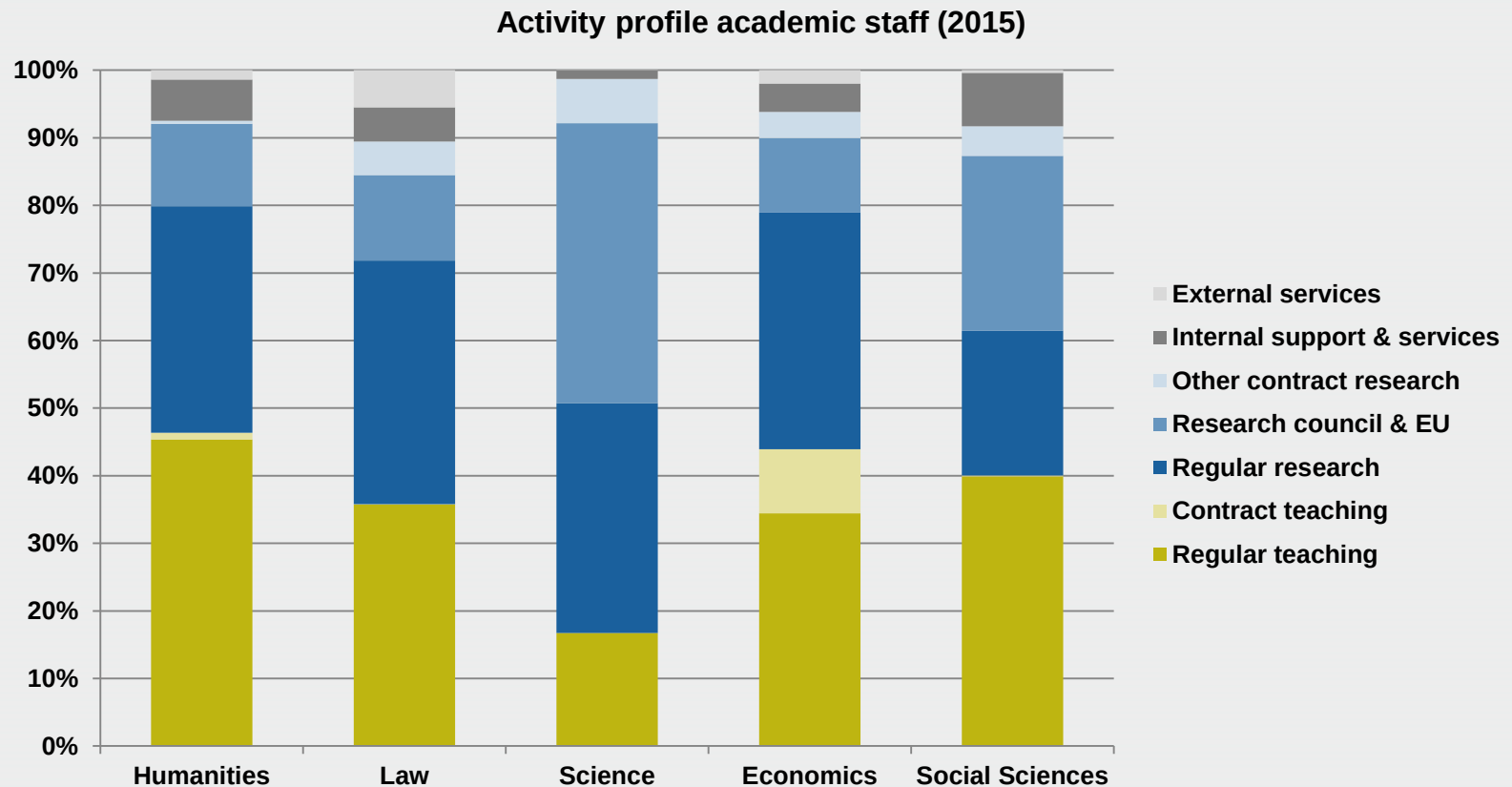
Nieuw

Favorieten

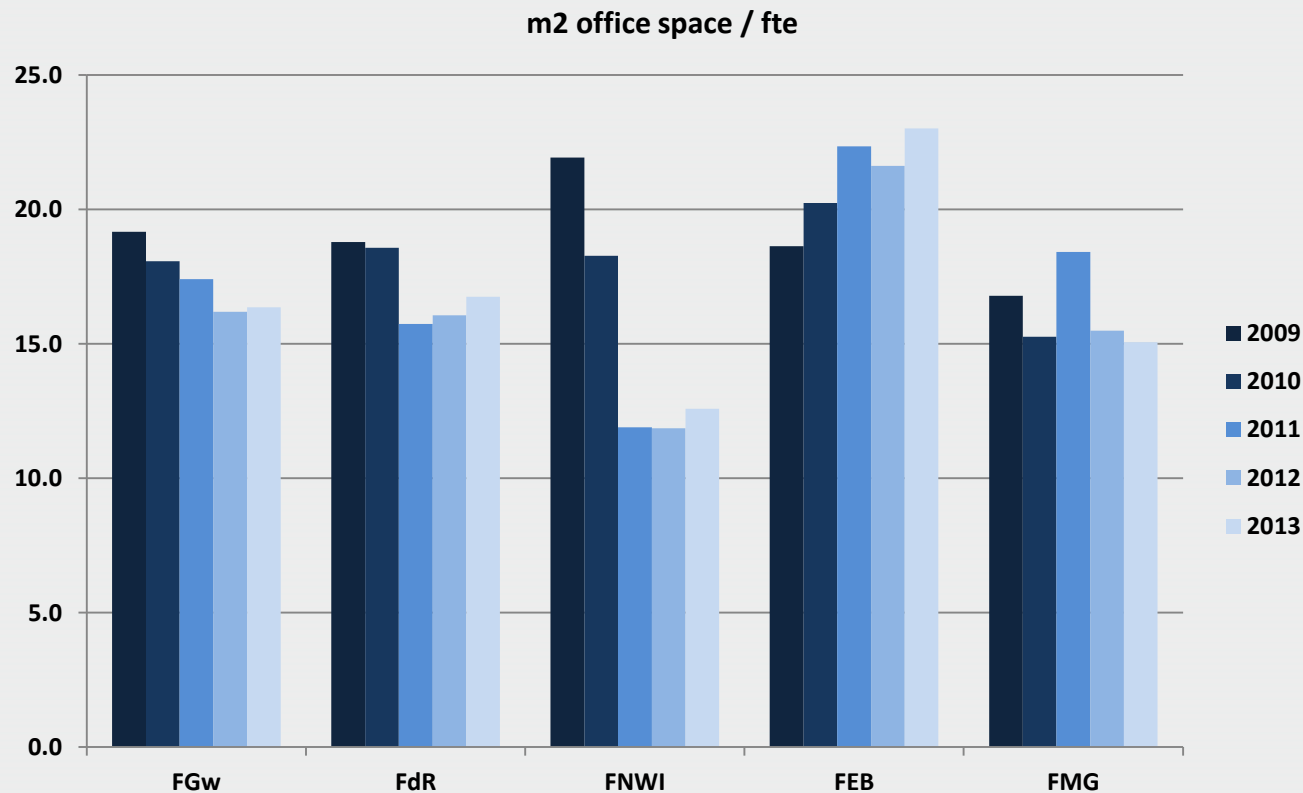
Contact



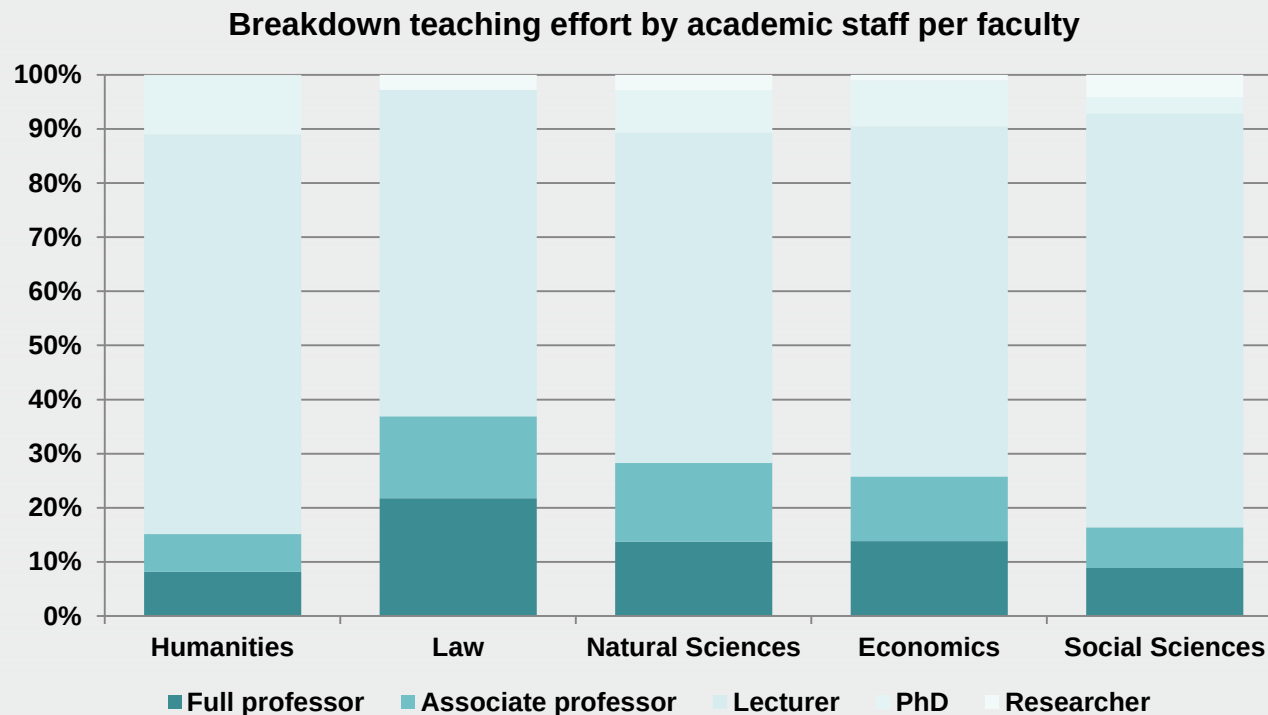
Examples cross-domain ratio's (1)



Examples cross-domain ratio's (2)

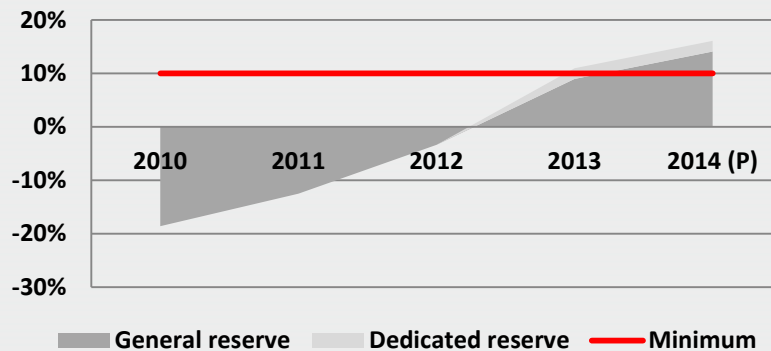


Examples cross-domain ratio's (3)

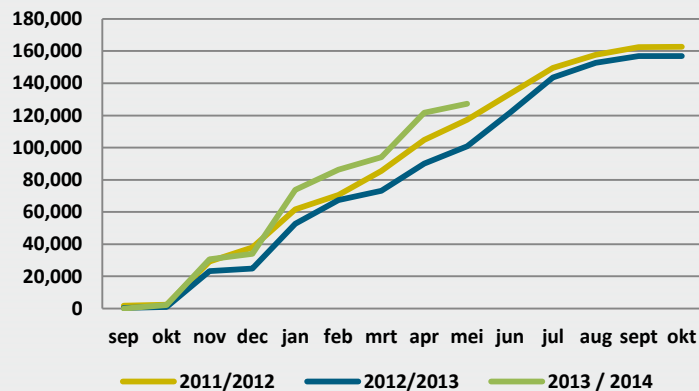


Example Faculty X

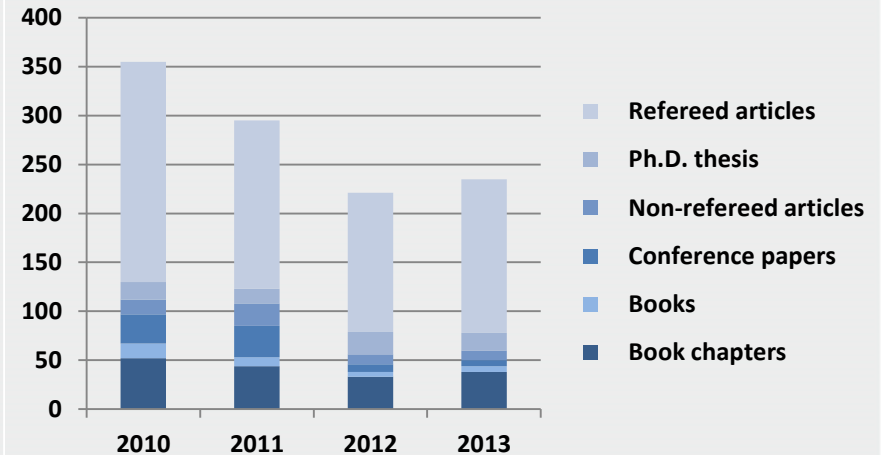
Resilience (Reserves / Total income)



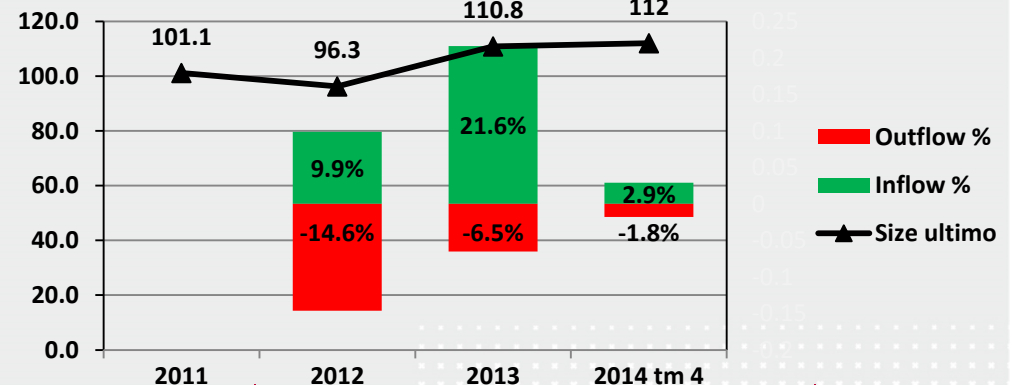
ECTS by students



Academic publications (Standard Evaluation Protocol)

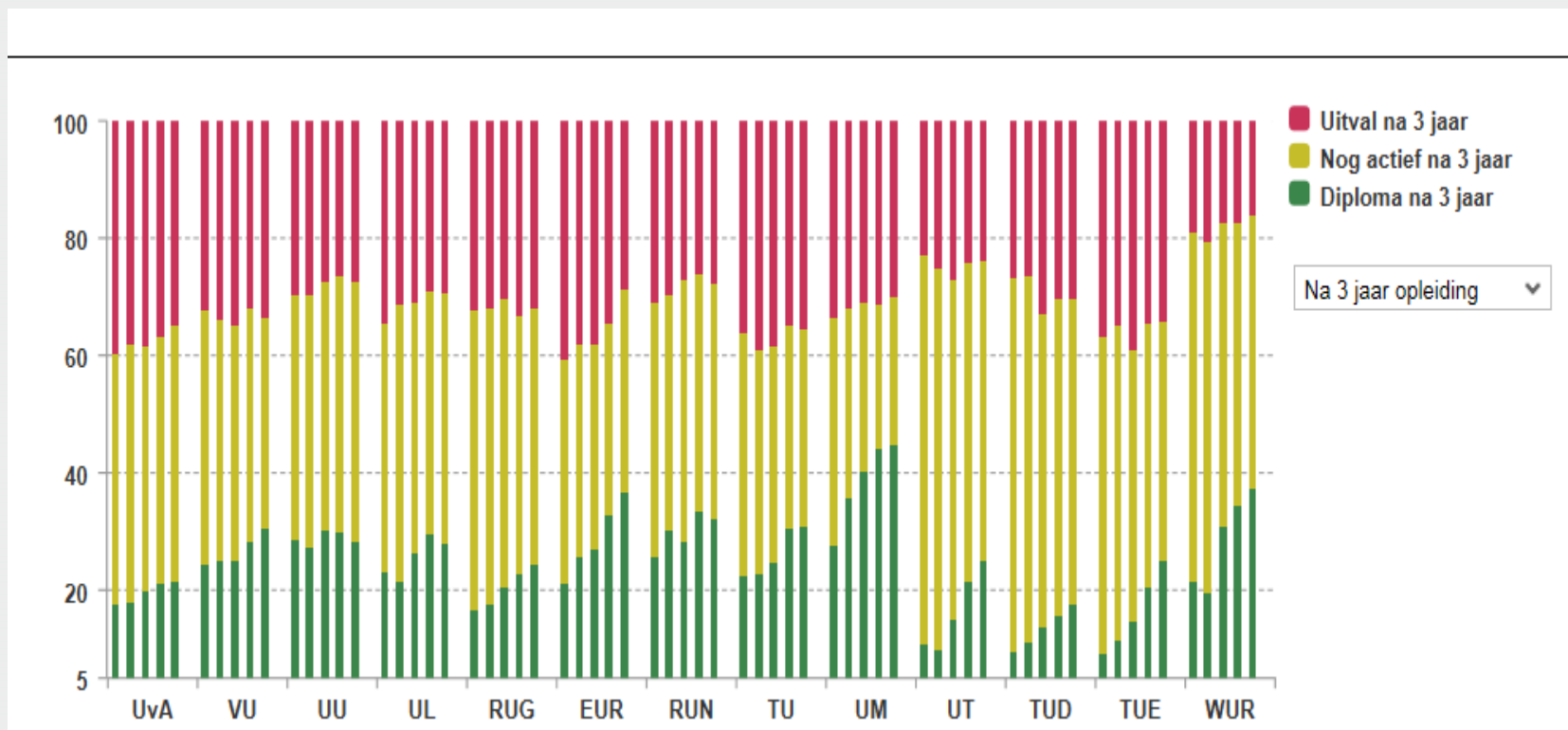


Academic staff, inflow & outflow



Example cross-nation ratio

Drop-out / still active / graduated Bachelor students within 3 years (2007/2008 – 2011-2012)



Summary

- Take a picture of a diamond in mind
- Hide the constituents deeply in the systems
- Let time and the elements come
- Detect and dig the raw diamonds
- Grind and polish them
- Wear / use them on appropriate occasions



UvA*data*

Managementinformatie Online

Making data talk