

EA Visualization Tool Survey

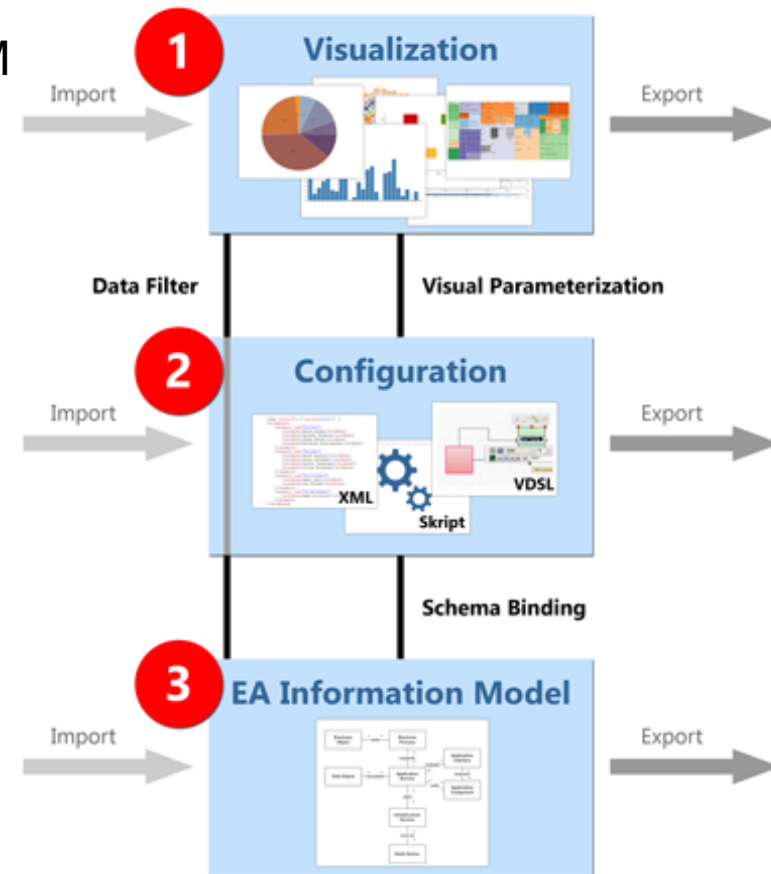
29.06.2016, Prof. Dr. Florian Matthes

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Fakultät für Informatik
Technische Universität München

www.matthes.in.tum.de

1. EA Visualization Tool Survey

- **Kontinuierliche Kommunikation** zwischen Stakeholdern wichtigster Erfolgsfaktor im EAM
- **Visualisierungen** sind in der Praxis *das Kommunikationsmittel der Wahl*
- **Wie wird das Thema Visualisierung in aktuellen EAM Tools abgebildet?**
 - Toolunterstützung
 - Visualisierungstypen in der Praxis
 - Anwenderbedarf



Verwandte Arbeiten

- sebis EAM Tool Survey 2008
- Gartner Magic Quadrant 2012, 2013
- Forrester Research 2013

EA Visualization Tool Survey 2014

1. Fokus auf Visualisierung
2. Große Anbieter-/Toolauswahl
3. Breite Anwenderumfrage

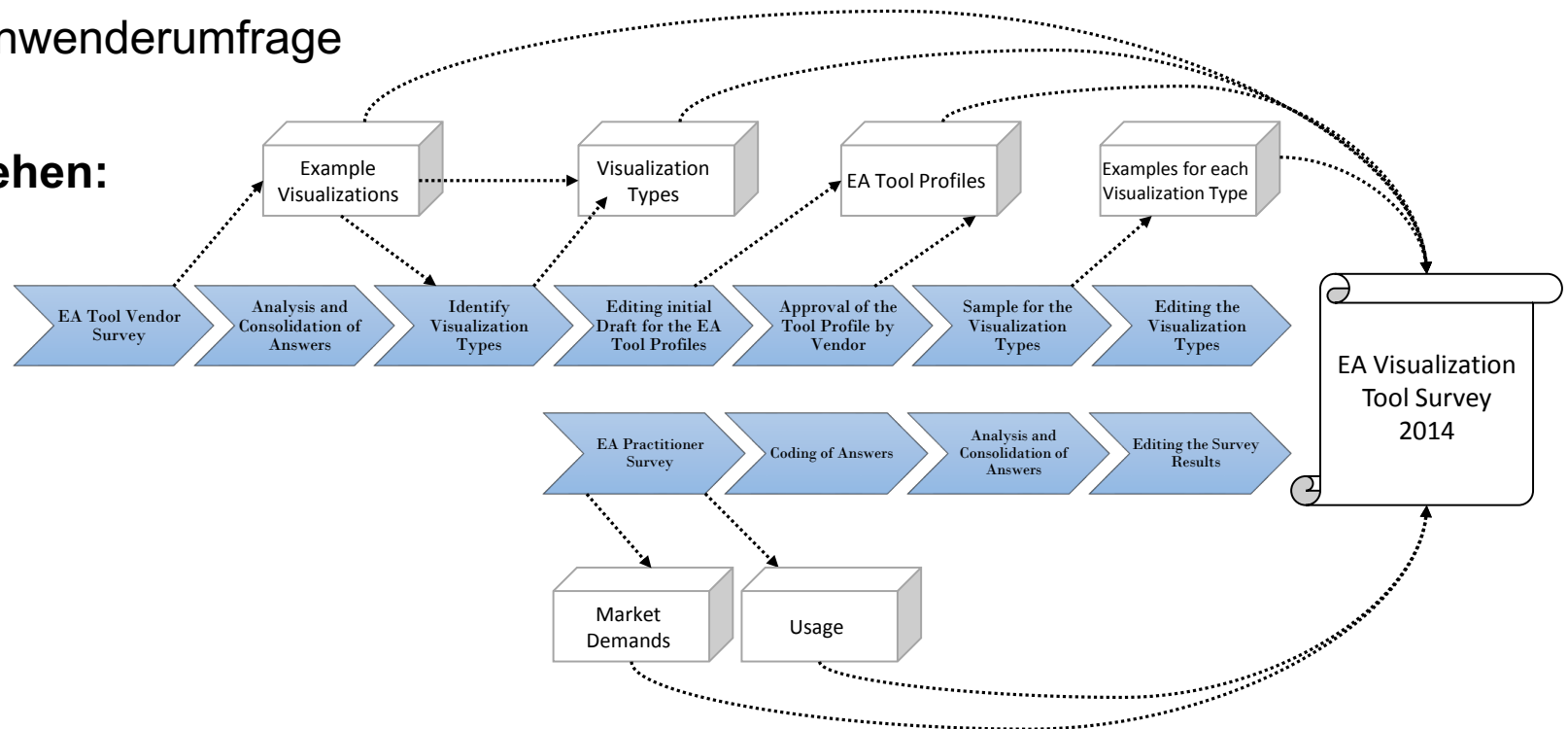
Vendor	EAMTS08 [MBL + 08]	Gartner 2012 [Gal2]	Gartner 2013 [Gal3]	Forrester 2013 [Fo13]	EAVTSA14
ABACUS by Avolution	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
adaptive EAM by adaptive Inc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ADOit by BOC AG	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
ARIS by Software AG	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
BiZZdesign EA Tool Suite by BiZZdesign	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Corporate Modeler Suite by Casewise	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Essential Project by EAS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Embarcadero EA/Studio from Embarcadero Technologies Inc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enterprise Architect by SparxSystems Ltd	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Envision VIP by Future Tech Systems	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iteraplan by iteratec	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Layer8 by Layer8-Solutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
leanIX by LeanIX GmbH	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
MEGA by MEGA International	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
OpenText by OpenText Corp.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
planningIT by Software AG	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PowerDesigner by Sybase/SAP AG	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
process4biz by process4biz	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
QPR EnterpriseArchitect by QPR Software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
QualiWare Enterprise Architecture by QualiWare	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rational System Architect by IBM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
SAMU Repository by Atoll Technologies Ltd	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Troux by Troux Technologies	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Txture by QELaB Business Services GmbH	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- Projektlaufzeit: **Juli 2013 – Februar 2014**
- Team: **2 wissenschaftliche Mitarbeiter, 1 Masterstudent**

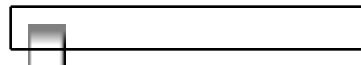
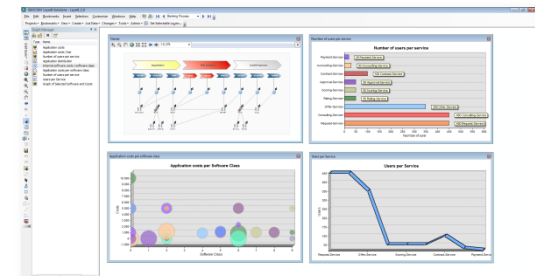
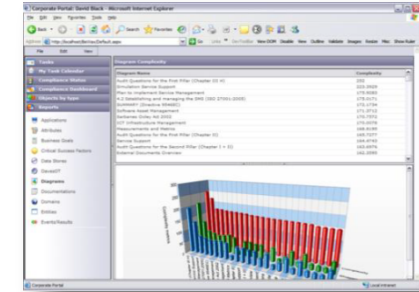
- **Zweiteiliges/-phasiges Studiendesign**

1. Herstellerumfrage
2. Anwenderumfrage

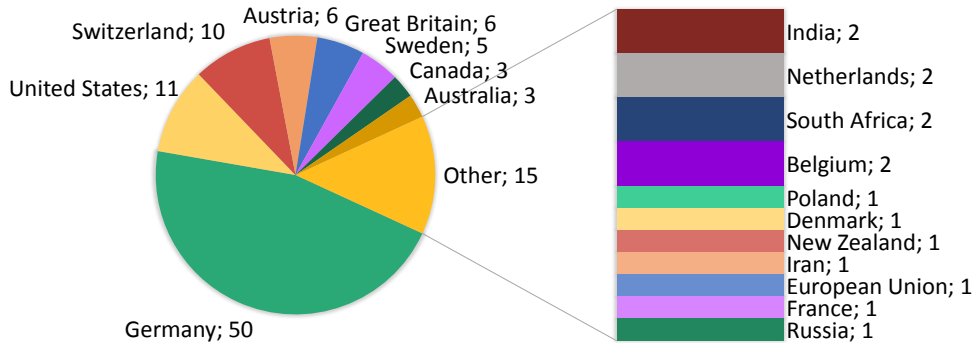
- **Vorgehen:**



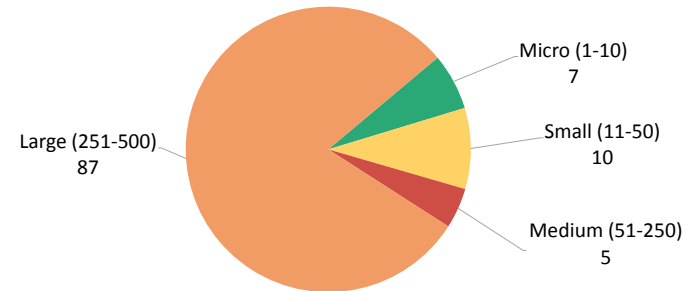
- 18 Hersteller
- 19 Tools
- 109 Praktiker
- 26 Visualisierungstypen



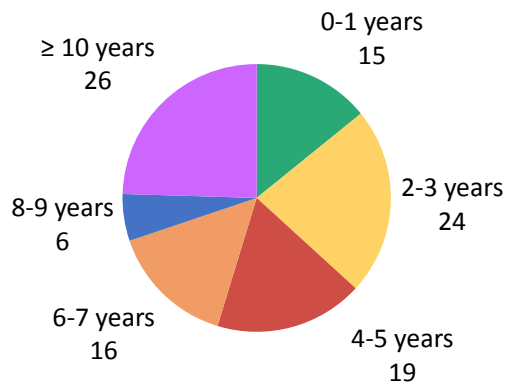
Unternehmenssitz



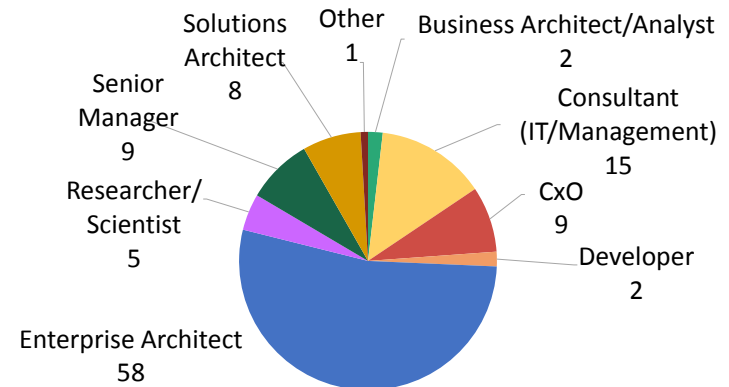
Unternehmensgröße

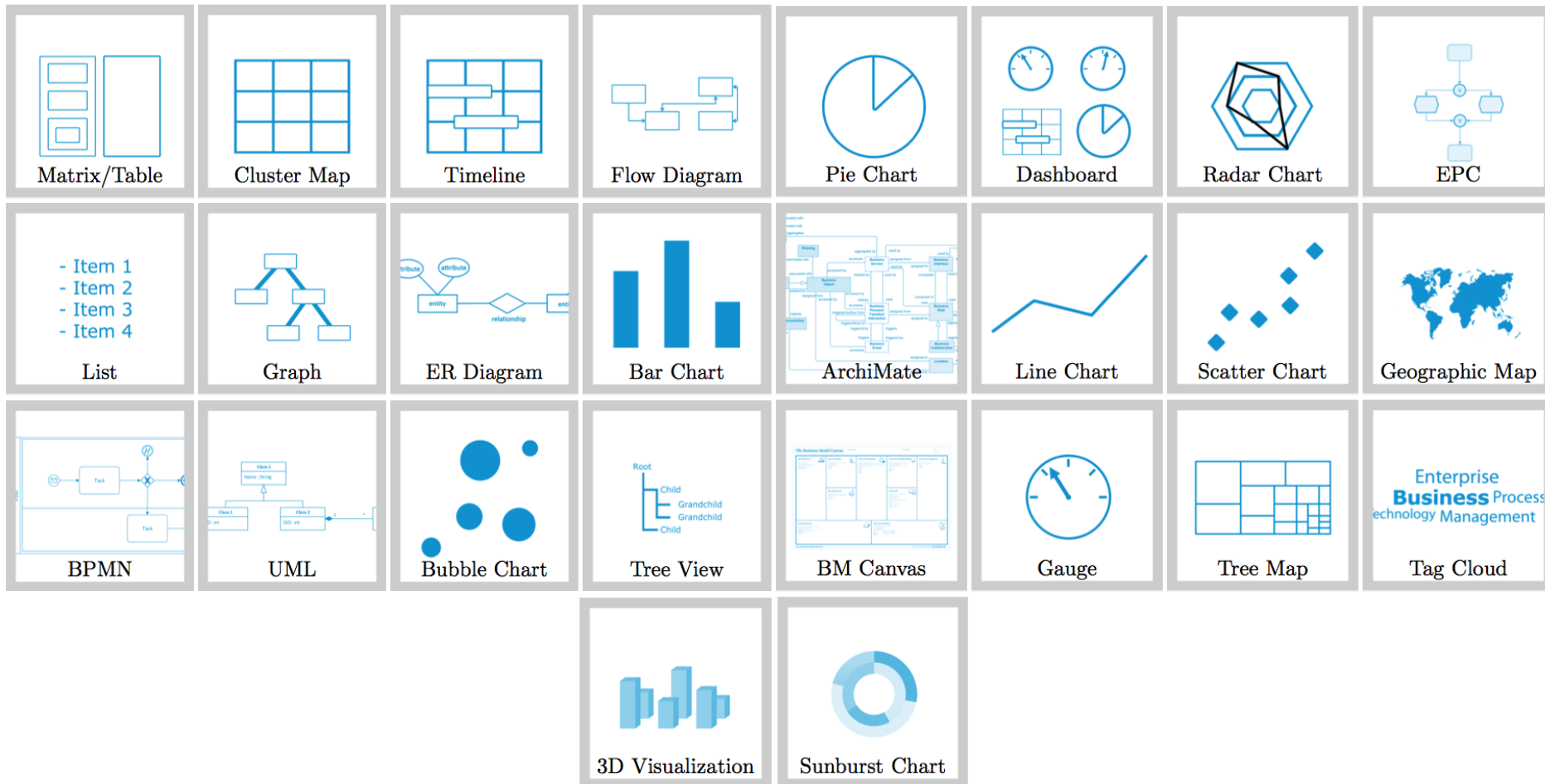


EAM Erfahrung



Rolle

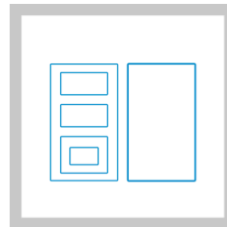




Steckbrief

5.2. Cluster Map

Cluster maps are widespread in Enterprise Architecture. They are often used to visualize hierarchical relationships between entities. For instance, a mapping from applications to business domains or processes can be visualized in a cluster map: outer rectangles represent business domains, inner rectangles represent applications. Then, each rectangle corresponding to a business domain contains all rectangles which correspond to an application that supports the respective business domain.



Usage

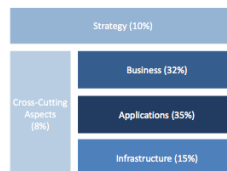
According to our survey, 82 out of 109 practitioners use some kind of cluster map. They provided 220 examples to illustrate how they use this visualization type. Practitioners report that cluster maps are mainly used at the application and business layer.

Strategy	10%
Business	32%
Applications	32%
Infrastructure	15%
Cross-Cutting Aspects	8%
n = 220	

Stakeholders

Business Analyst	8%
CxO (e.g. CEO, CFO, CIO)	18%
Enterprise Architect	20%
Junior/Senior Manager (Business)	13%
Junior/Senior Manager (IT)	15%
Solution Architect	16%
Other	11%
n = 213	

Usage Domain



Examples



Screenshots von jedem Tool

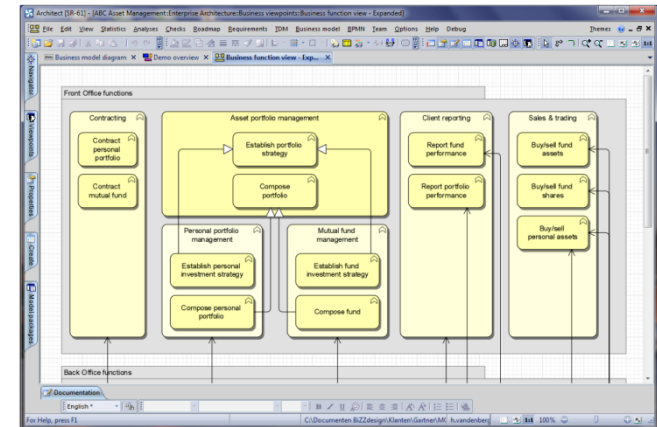


Figure 9.3.: Cluster Map of the BiZZdesign Architect

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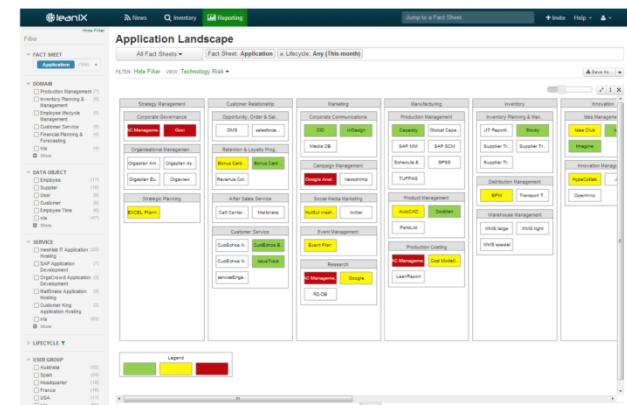
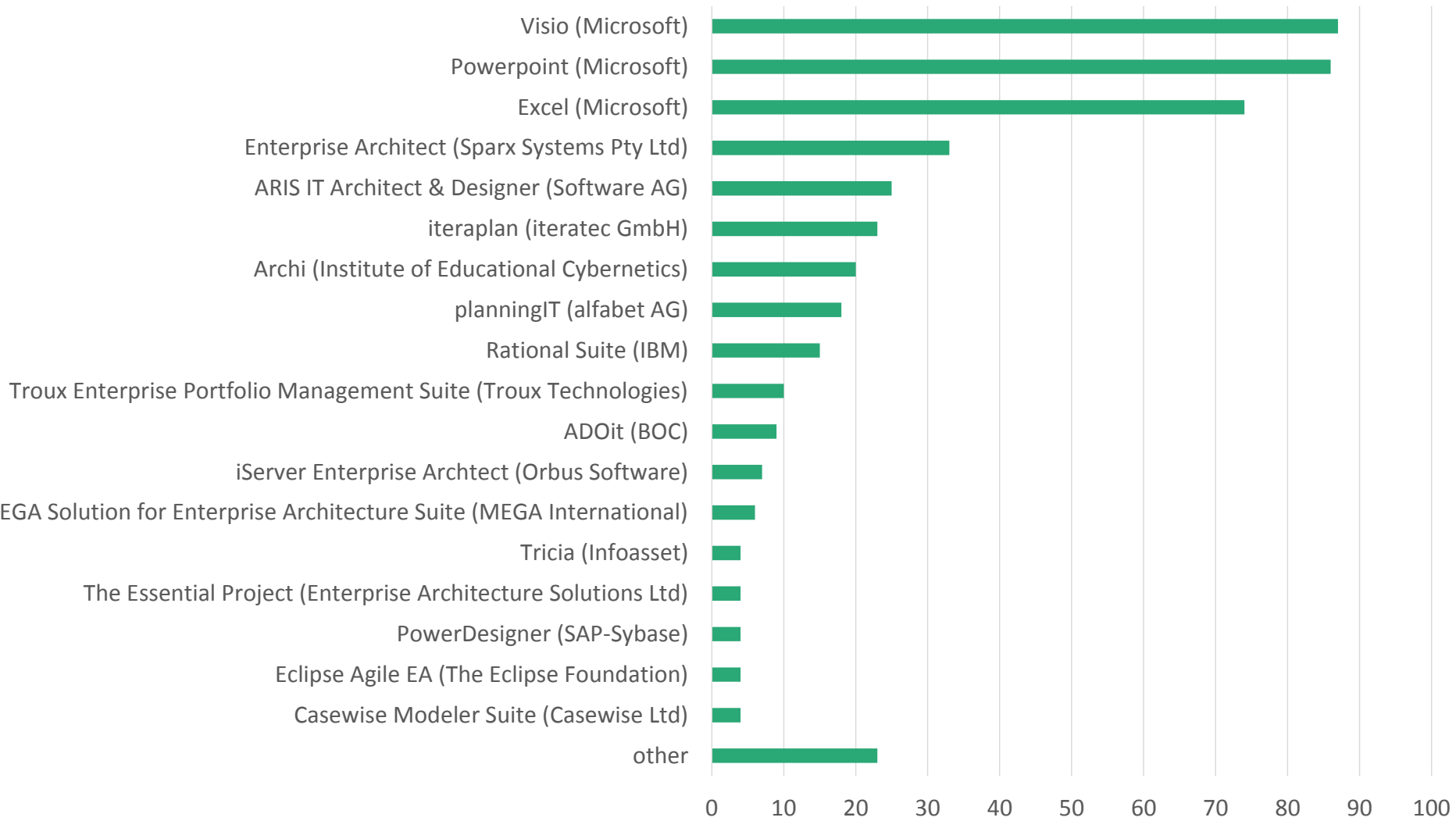
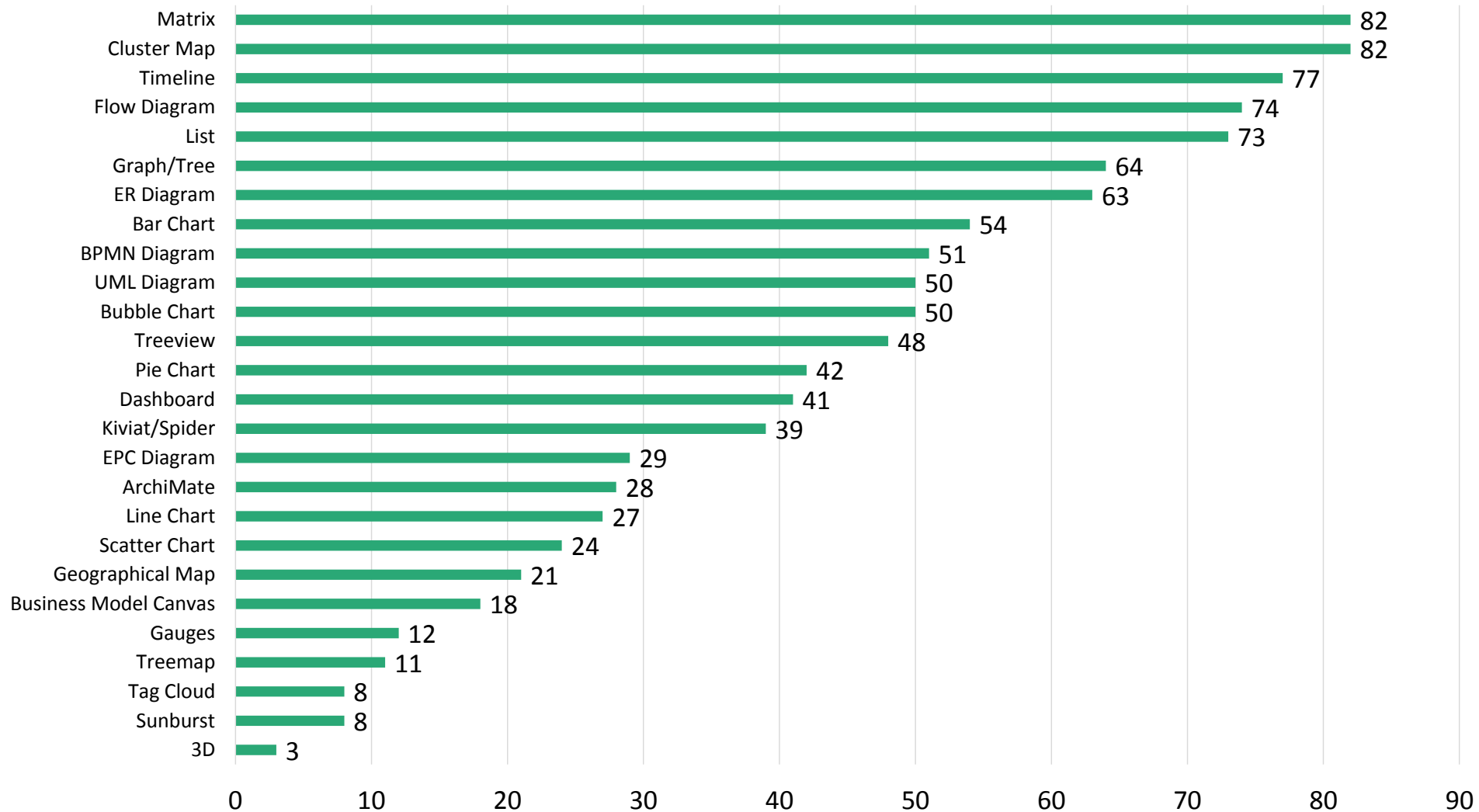


Figure 15.2.: Cluster Map of the leanIX



Nutzung von Visualisierungstypen (N=109)



Visualization Type	ABACUS (p. 74)	ADDOit (p. 96)	ALFABET (p. 116)	BiZZdesign Architect (p. 136)	Corporate Modeler Suite (p. 156)	Enterprise Architect (p. 170)	Envision VIP (p. 184)	iteraplan (p. 208)	Layer8 (p. 224)	leanIX (p. 240)	MEGA (p. 254)	PowerDesigner (p. 274)	process4.biz (p. 77)	QPR EnterpriseArchitect (p. 300)	Rational System Architect (p. 318)	SAMU Repository (p. 330)	Tricia (p. 346)	Texture (p. 360)
Matrix (p. 45)	p. 81	p. 103	p. 123 ^a	p. 143	p. 163	p. 177	p. 191	p. 215	p. 231		p. 261	p. 281		p. 307	p. 326		p. 353	
Cluster Map (p. 46)	p. 81	p. 103	p. 123 ^a	p. 143	p. 163	p. 177	p. 191	p. 215		p. 247		p. 281		p. 307	p. 326		p. 353	
Timeline (p. 47)	p. 82	p. 104	p. 124 ^a	p. 144	p. 164	p. 178	p. 192	p. 216		p. 247	p. 261	p. 282	p. 297	p. 308 ^c			p. 354	
Flow Diagram (p. 48)	p. 82	p. 104	p. 124 ^a	p. 144		p. 178	p. 192	p. 216	p. 231	p. 248	p. 262			p. 308		p. 337		
List (p. 49)	p. 83	p. 105	p. 125 ^a	p. 145		p. 179	p. 193	p. 217	p. 232	p. 248	p. 262			p. 309		p. 337	p. 354	p. 367
Graph (p. 50)	p. 83	p. 105	p. 125 ^a	p. 145	p. 164	p. 179	p. 194	p. 217	p. 232		p. 263	p. 282	p. 297	p. 309	p. 327		p. 355	p. 367
ER Diagram (p. 51)	p. 84		p. 126 ^a	p. 146	p. 165	p. 180	p. 194		p. 233		p. 263	p. 283		p. 310		p. 338		
Bar Chart (p. 52)	p. 84	p. 106	p. 126 ^a	p. 146			p. 195	p. 218	p. 233	p. 249	p. 264	p. 283		p. 310 ^c		p. 338	p. 355	
BPMN Diagram (p. 53)	p. 85	p. 106	p. 127 ^b	p. 147		p. 180	p. 195			p. 249	p. 264		p. 298	p. 311	p. 327	p. 339		
UML Diagram (p. 54)	p. 85	p. 107	p. 127 ^b	p. 147	p. 165	p. 181	p. 196				p. 265	p. 284		p. 311			p. 356	
Bubble Chart (p. 55)	p. 86	p. 107	p. 128 ^a	p. 148			p. 197	p. 218	p. 234	p. 250	p. 265					p. 339	p. 356	
Treeview (p. 56)	p. 86	p. 108	p. 128 ^a	p. 148		p. 181	p. 198	p. 219	p. 234	p. 250	p. 266			p. 312		p. 340		
Pie Chart (p. 57)	p. 87	p. 108	p. 129 ^a	p. 149			p. 198	p. 219	p. 235	p. 251	p. 266			p. 312 ^c		p. 340		
Dashboard (p. 58)	p. 87	p. 109	p. 129 ^a	p. 149	p. 166		p. 199	p. 220	p. 235		p. 267	p. 284		p. 313 ^c		p. 341		
Radar Diagram (p. 59)	p. 88	p. 109	p. 130 ^a	p. 150			p. 199		p. 236		p. 267	p. 285		p. 313 ^c		p. 341	p. 357	
EPC Diagram (p. 60)	p. 88	p. 110	p. 130 ^b	p. 150	p. 166	p. 182	p. 200				p. 268		p. 298	p. 314				
ArchiMate Diagram (p. 61)	p. 89	p. 110	p. 131 ^b	p. 151	p. 167		p. 201				p. 268			p. 314		p. 342		
Line Chart (p. 62)	p. 89		p. 131 ^a	p. 151			p. 201	p. 220 ^d	p. 236	p. 251	p. 269			p. 315 ^c				
Scatter Chart (p. 63)	p. 90	p. 111	p. 132 ^a	p. 152			p. 202	p. 221	p. 237		p. 269			p. 315 ^c		p. 342		
Geographic Map (p. 64)	p. 90		p. 132 ^a	p. 152			p. 202		p. 237	p. 252	p. 270					p. 343		
Business Model Canvas (p. 65)	p. 91	p. 111	p. 133 ^b	p. 153			p. 203				p. 270	p. 285						
Gauges (p. 66)	p. 91	p. 112	p. 133 ^a				p. 203		p. 238		p. 271			p. 316 ^c				
Treemap (p. 67)	p. 92	p. 112	p. 134 ^a	p. 153			p. 204				p. 271	p. 286						p. 368
Tag Cloud (p. 68)				p. 154			p. 204					p. 286						
Sunburst (p. 70)	p. 92	p. 113					p. 205					p. 287						
3D Visualization (p. 69)	p. 93				p. 167		p. 205											

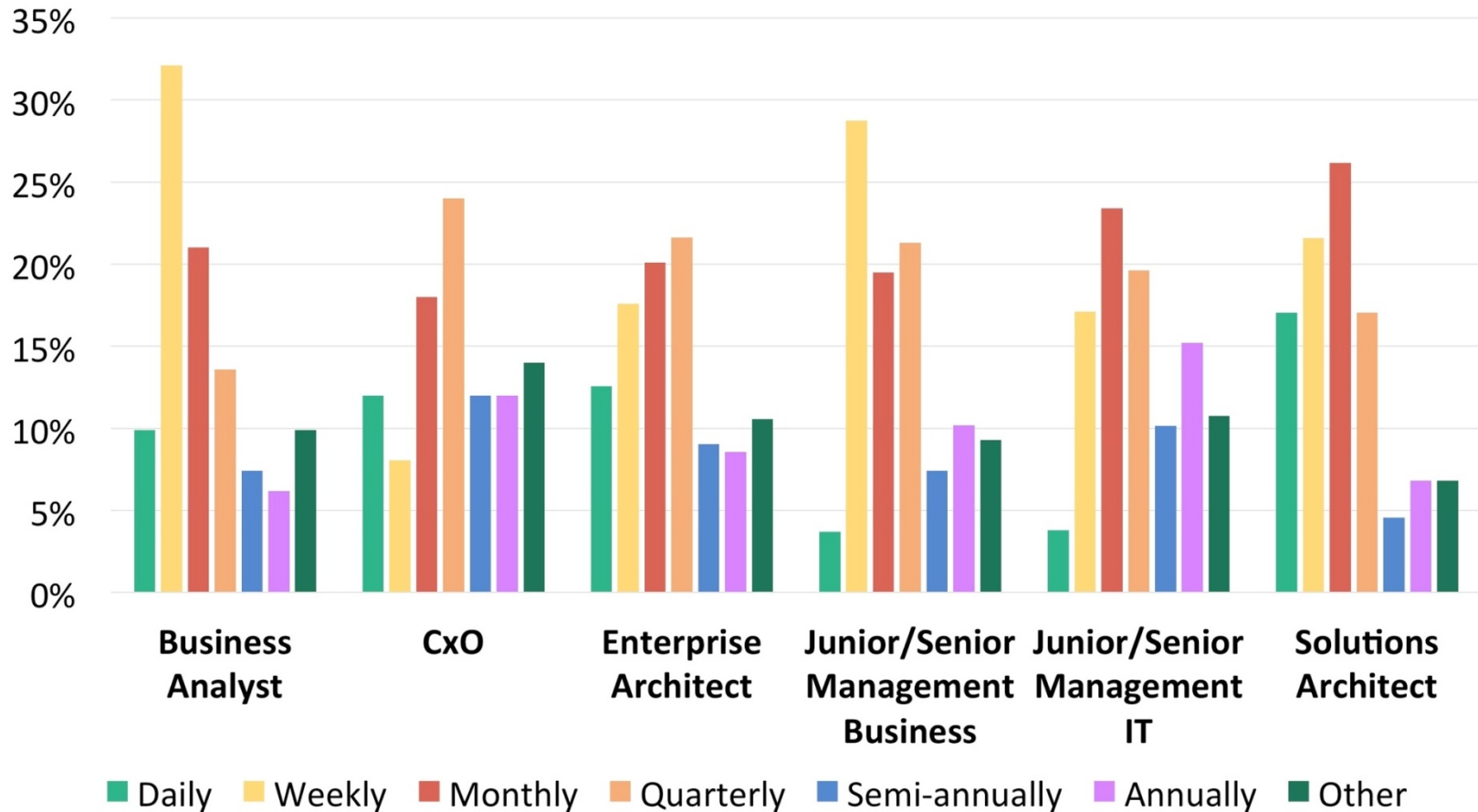
^a According to Software AG, this visualization type is supported best with planningIT.

^b According to Software AG, this visualization type is supported best with ARIS.

^c This visualization type is only provided by the QPR metrics add-on.

^d This visualization type is only provided by the ITM Analytics add-on of iteraplan.

Änderungsrate aufgeschlüsselt nach Nutzergruppen



- ✓ **461 Seiten**, englisch
- ✓ **300 Screenshots und Diagramme**
- ✓ **266 Tabellen**
- ✓ **18 Hersteller- und Toolprofile**
- ✓ **26 Visualisierungstypen**
- ✓ **zahlreiche Statistiken** zur Verwendung von Visualisierungen
- ✓ PDF oder gedruckt

Version: 1.0

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Sascha Roth, Marin Zec, Florian Matthes

Enterprise Architecture Visualization Tool Survey 2014



Thank you for your attention. Questions?



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Prof.Dr.rer.nat.



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