

Business Informatics

From practice to theory, and back; again and again

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Agenda

Business Informatics

Practice and Theory

ArchiMate

GEA

Reflections



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Business Informatics; Computing in context

Sustainability

Organisation

Services

Strategy

Products

Computing

People

Compliance

Processes

Efficiency

Security

...

Information



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A need to study, analyse, explain, define, design, ...



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What are our mission critical applications?

What applications do/shall we have?

How do/will applications support our processes?

Are we GDPR compliant?

How can we improve our performance?

What are our resources at risk?

What is the meaning of all that data?



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...

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Business Informatics; Computing in context

Sustainability Organisation

Services Strategy

Products Computing People

Compliance Efficiency Security

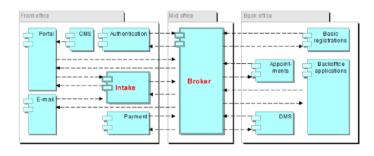
Processes

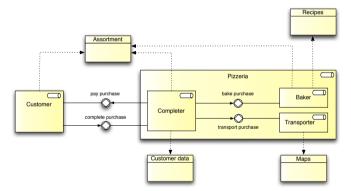
Information

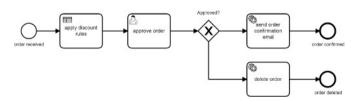
A need to study, analyse, explain, define, design, ...

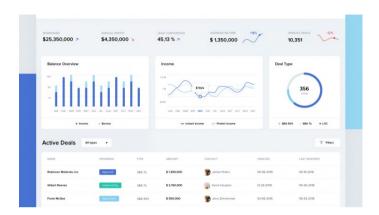
A need for models!



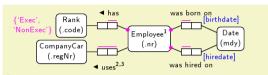












- ¹ For each Employee, birthdate < hiredate.
- ² Each Employee who has Rank 'NonExec' uses at most one CompanyCar.
- ³ Each Employee who has Rank 'Exec' uses some CompanyCar.

B. Develop Product Concept Used on the product was devenered and selections multiple product concepts are developed that can potentially satisfy those requirements. Destinations grad order creatibility feathershows are used to generate a range of concept alternatives. These concepts are enviroped with respect to the product requirements as well as the seating between gradients, company operations, operations, or security of the concepts are expressed and the seat operations of the concepts are expressed and the seat operation of the seat operation of the seat of the s

E.2.2.2.3 Rule Set -- Charging / Billing / Payment Rules

It is permitted that a <u>rental</u> is open <u>only</u> if an <u>estimated rental charge</u> is provisionally charged to a <u>credit card</u> of the <u>renter</u> that is responsible for the <u>rental</u>.

Guidance Type: <u>operative business rule</u>

Description: While a renter has possession of a car, there is a provisional charge to EU-Rent against his

credit card. This will be replaced by an actual charge at the end of the rental

Enforcement Level: Stric

Supporting fact types: rental has rental charge

estimated rental charge is provisionally charged to credit card

renter has credit card rental has driver



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A need to study, analyse, explain, define, design, ...

A need for models!

Languages, semantics, capabilities, ...



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Practice-oriented

Practice-free -inspired -oriented -driven -committed

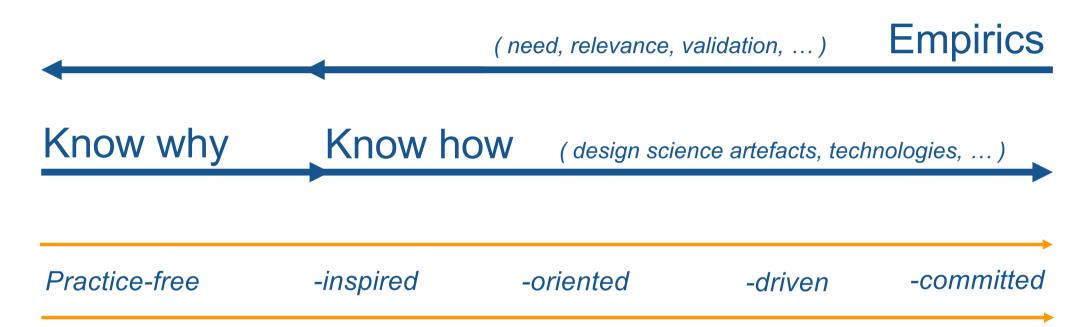
Practice-free -inspired -oriented -driven -committed

Empirics

Practice-free -inspired -oriented -driven -committed

Sciences of why





Sciences of how-to



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ArchiMate in a nutshell

Graphical modelling language for EA

Result of a multi-party 4M€ research project

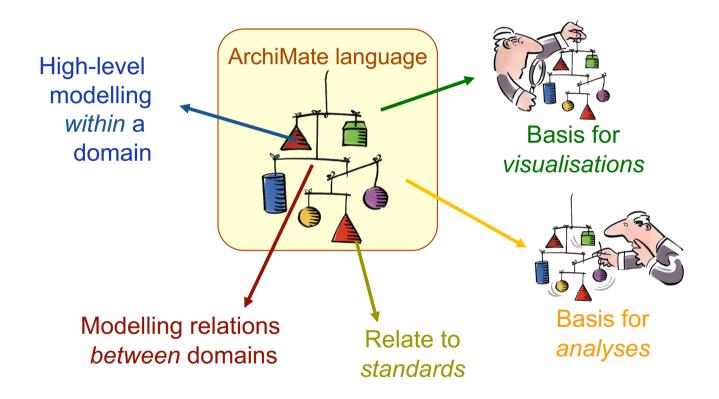
Now a standard of The Open Group next to TOGAF

In use with many end-user organizations

Supported by different tools vendors and consultancy firms

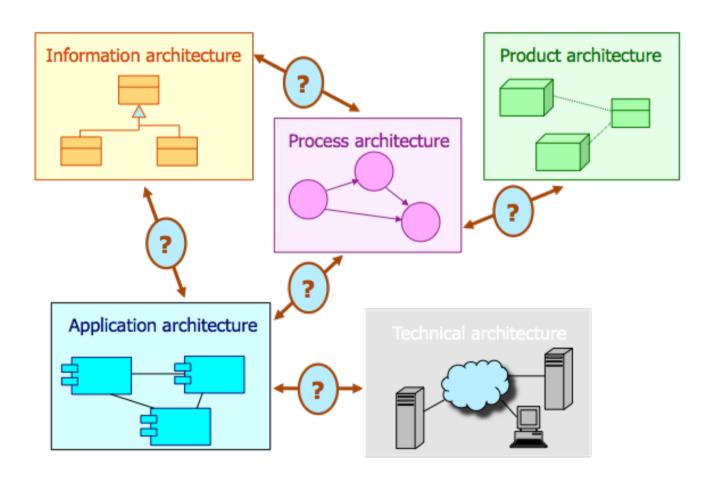


ArchiMate in a nutshell

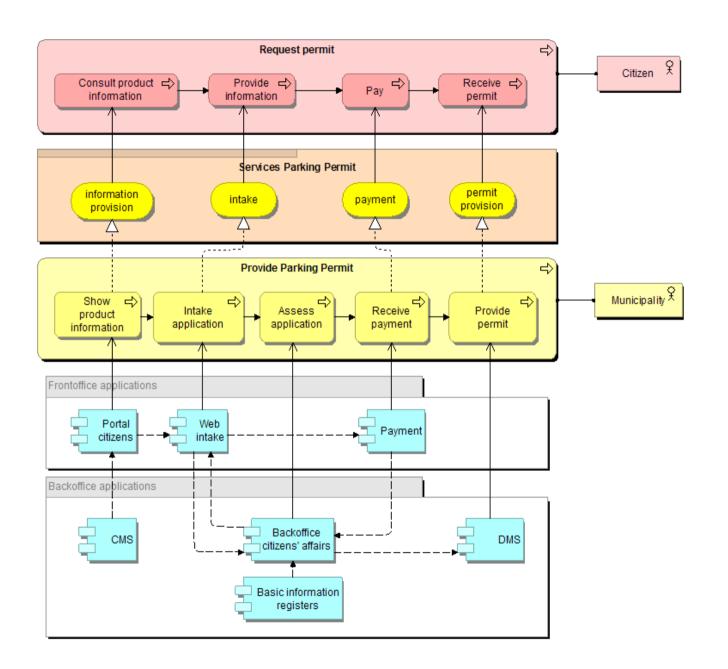




Capturing coherence

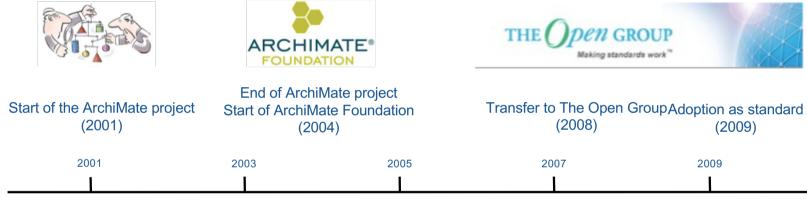




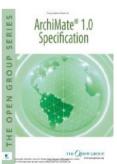




ArchiMate's timeline







Life as a standard

From information processing factories to real factories

TOGAF-wide support

Evolution driven by real-world needs; also helped by science

Hampered by backward compatibility ...

Commercial interests?

ArchiMate in hindsight

Solved a practical need

Not fully satisfactory from a scientific perspective

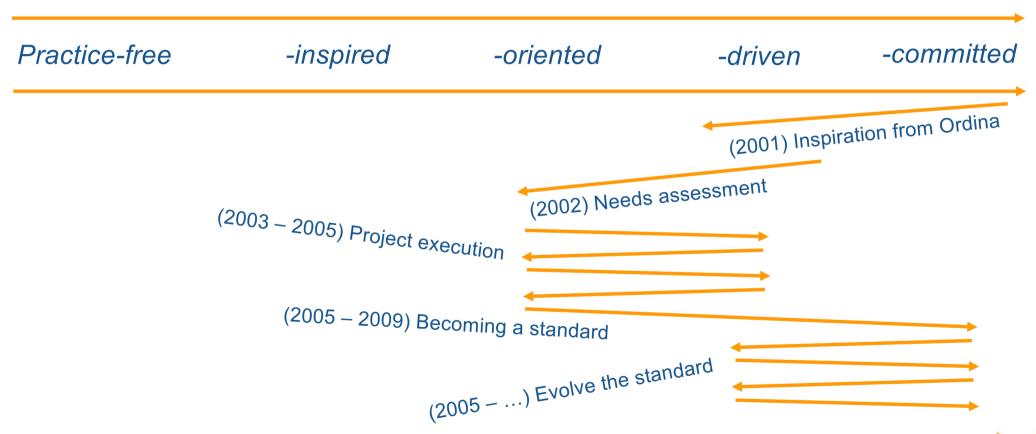
Nice for our *h*-indexes though

Tension between:

- Standardization
- Integration of new concerns & aspects
- Simplicity of language
- Domain specificity



ArchiMate



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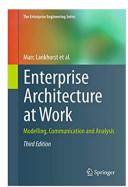














2004 – Enterprise architecture; more to be aligned than:

- Business/IT
- (VP-to-)Business-(to-IS-)to-IT stack

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2005 – Enterprise coherence governance!



the extent to which all relevant aspects of an enterprise are interconnected



2005 – Enterprise coherence governance!

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2006 – General Enterprise Architecting (GEA) programme

ABN-AMRO Bank; ANWB; Achmea; Belastingdienst — Centrum voor ICT; ICTU; ING; Kappa Holding; Ministerie van Binnenlandse Zaken en Koninkrijksrelaties; Ministerie van Defensie; Ministerie van Justitie — Dienst Justitiële Inrichtingen; Ministerie van Landbouw, Natuur en Voedselkwaliteit — Dienst Regelingen; Nederlandse Spoorwegen; PGGM; Politie Nederland; Prorail; Provincie Flevoland; Rabobank; Rijkswaterstaat; UWV; Wehkamp



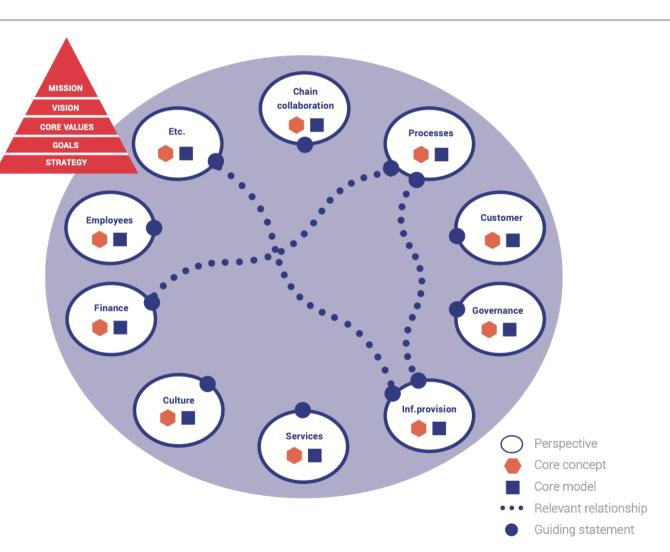
Main elements

Enterprise issue

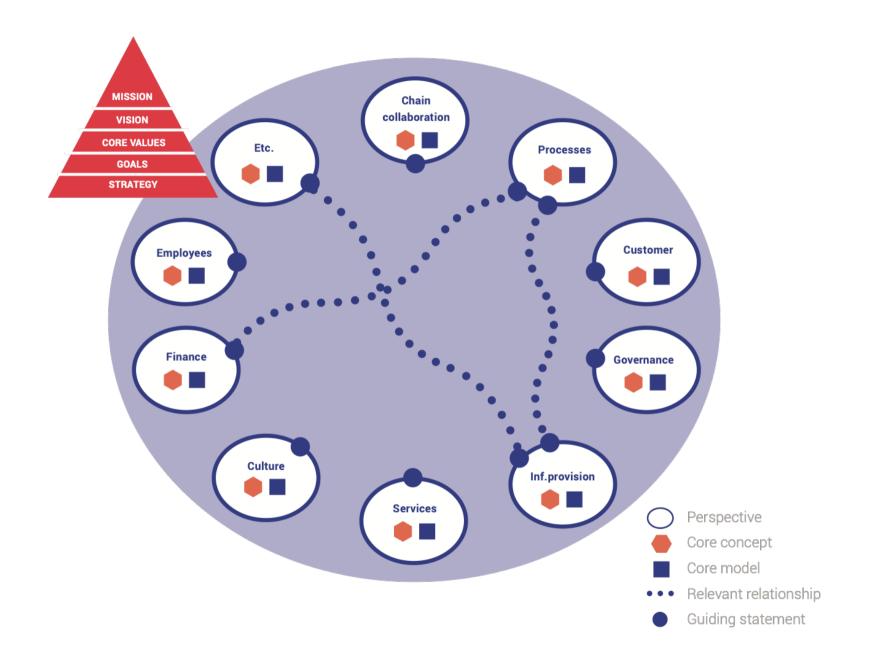
Roadmap

Level of purpose

Level of design

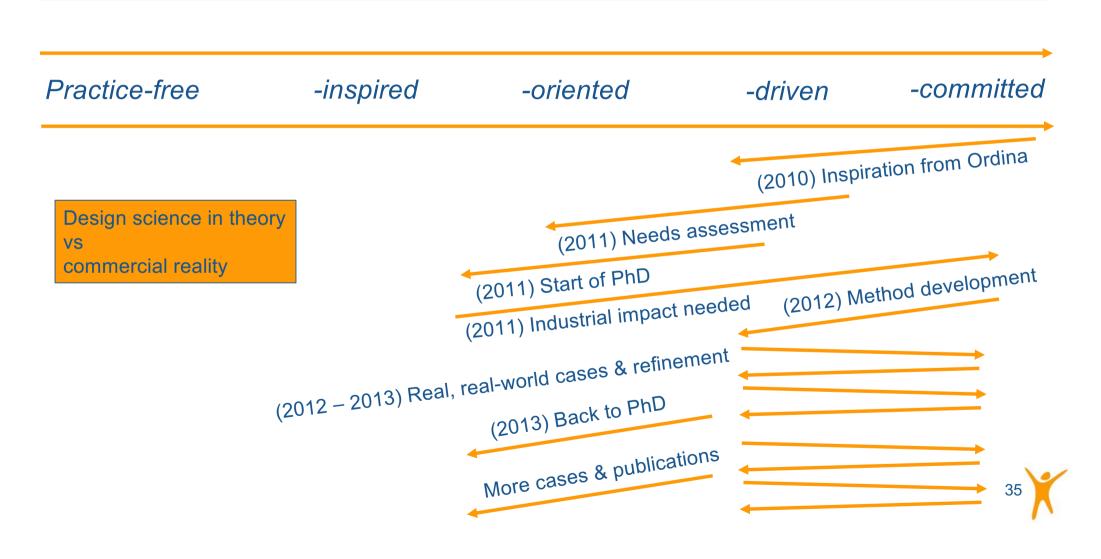








GEA programme



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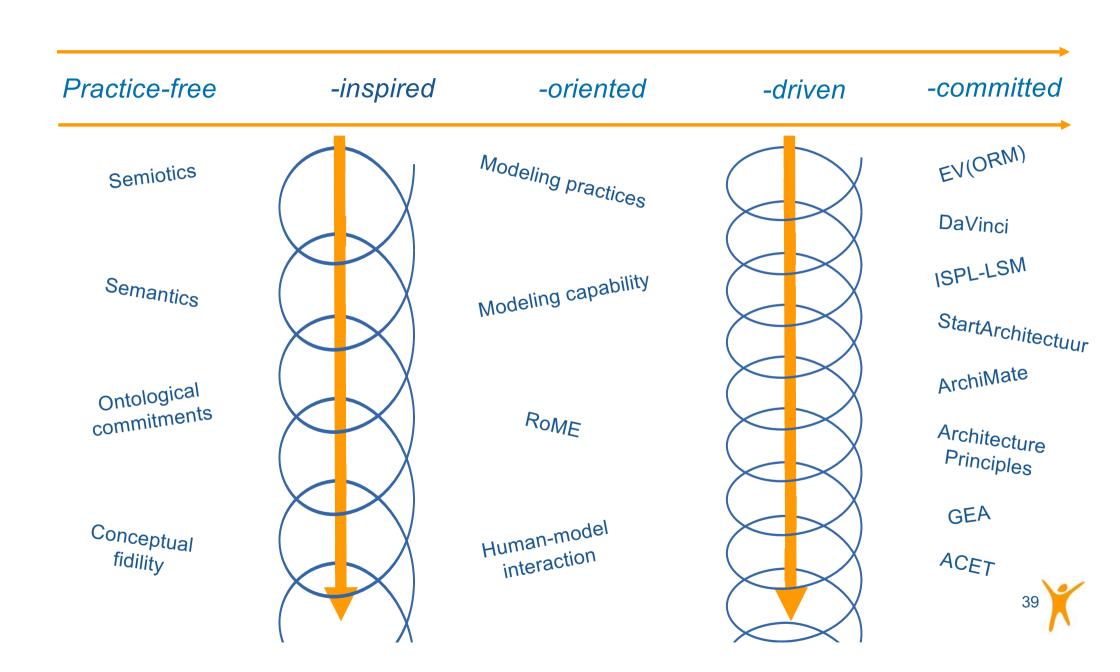
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Practice-free -inspired -oriented -driven -committed

Practice and Theory; Two helixes!

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