• Introducing...
  - Mark Paauwe
  - Dragon1 open EA Method
  - Demo: Dragon1 as EA Tool
• 13 Architecture Visualization Principles

Request your Architecture Visualization cheat-sheet here: info@dragon1.com
Download this presentation on http://www.dragon1.com
Introducing Mark Paauwe

Mark Paauwe, 44
Married, daughter of 8, living in the Netherlands
Studies of Information Science and Business Administration

Thought leader Visual Enterprise Architecture
Chief Technical Officer of The Dragon1 Software Company
Founder of Dragon1, the open EA Method in 2002
Creator of the Dragon1 Collaboration Platform (http://www.dragon1.com)

PhD/Research in 2 areas: Architecture Visualization and Architecture Principles (Prof H.A. Proper / Tudor Institute / Radboud University)

Since 2001 small business owner. Former enterprise architect at consultancy firms.
Introducing Dragon1: a new open EA method

Dragon1 is an open EA method for enabling business change and controlled successful enterprise transformation with Visual Enterprise Architecture in the boardroom.

Dragon1 has a formal and very visual EA Modeling Language (150+ symbols and growing). Dragon1 as open EA method has a Wiki, Books, Supporting Materials and Training + Certification available.

There are user groups online at www.dragon1.com (EA tool User Community) and on LinkedIn and there are monthly Dragon1 knowledge evenings in various countries.

For more information visit: www.dragon1.com
dragon1.com is an Enterprise Collaboration Platform for designing concepts, innovations and business models

dragon1.com is a suite of web applications

• Resource Center
• Architecture Repository
• Visual Designer
• Models Atlas
• Catalogs
• Enterprise Search
• Analytics & Dashboard
• Data Visualization
• Project Management
• ePortfolio & public business profiles

For more information visit: www.dragon1.com

Screenshot of Dragon1 in the Browser viewing an A0-sized processes-poster

Dragon1 works in:
• Internet Explorer
• Google Chrome
• Firefox
• Safari (iPad)

Dragon1 works on:
• Smartphone
• Tablet PC
• Laptop
• desktop
Profiling the CIO – Some aspects

• Open To know of trends
• Have an overview of the companies IT
• Understand the strategic business issues
• Have notion of impact of solutions
• Hate technical models & difficult diagrams
• Being thorough
• To Guide
• Willing to take drastic decisions in seconds...
• Wants to be surrounded by people helping in these situations
For starters: What is Visual Enterprise Architecture according to Dragon1?

• Open innovative and effective way of dealing with EA
• Bridging the gap between strategy and business change
• Bringing the added value of EA into the boardroom
• Delivering total concept design & decision supporting visualizations (management report views)

• New theoretic paradigm for Visual Enterprise Architecture
  – Architecture = a special total concept of a structure, a coherent set of concepts
  – Structure = a system with a constructive, operative and decorative dimension
  – Concept = an approach, way of working, idea, abstraction of an implementation
  – Principle = the enforced or managed way an entity works producing results
  – Architect = creative designer of total concepts & supervisor of realization of structures.
  – Visualize your Total Concept Designs = use sketches, drawings, (not diagrams ➔ because that is engineering!) and photographic images to visualize the concepts understandable.
  – Management Report Views = make every architecture visualization something to decide upon
  – +500 other defined terms

• Read it again!
  This has a lot of impact on mainstream EA
Relationship between structure, architecture, concepts, elements and principles in Dragon1 in a picture

1. **The architecture**
   (a coherent set of concepts of a structure → a total concept of a structure)

2. **The concept**
   (an approach, idea, abstraction of implementation)

3. **The elements**
   (logical functional entities) within the concept
   *(all is relative – elements themselves can also be viewed conceptual)*

4. **The concept-principle**
   (the way the concept works producing results)
A typical enterprise, as a structure has internal structures like this.
A typical enterprise comes nowhere near this... It is not structured like this...
Innovation, evolution and projects cause this:
A suboptimal structuring (de-standardized) of the enterprise

But in total degeneration: sub optimization, complexity increase!
The architecture of the enterprise could be this (total concepts of specific business, information & technical concepts)
So what would be enterprise wide generic/pure theoretical concepts in the structures?

These would be the enterprise architectural concepts
Architecture Principles are ...

- the principles (way of working + results) of concepts
- that are valid structure-wide

- Example of a common business architecture principle
  - By always treating clients rights, giving them what they deserve and pay for, they will come back and buy more

- Example of a common information architecture principle
  - By always and only storing data once in the production environment, enforced by continuous monitoring & management, it is ensured that inconsistent versions of that data are prevented to ever exist so with that quality of data and thus de services depending on them is increased

- Example of a common technical architecture principle
  - By only using proven equipment that is compliant to open standards we will prevent having integration problems at a later stage thus keeping IT for the business scalable at wish.
Give Context to the visualization & use concepts

• Do NOT tell how wonderful architecture is. They know!

• But show:
  
  • **What** is wrong

  • **Why** it is wrong
    (because of current goals & requirements)

  • **How** to make it right
    (not in detail, but with the principle / pattern of the concept – how well is the concept implemented?)

• In order to get a decision from the CIO based on your visualization
What are example / common high-level concepts?

Governance concepts:
- Compliance
- Corporate Governance
- Market Orientation

Business concepts:
- Cross Selling & Up selling
- Process Orientation
- Tailored Business Services Factory
- Open Innovation

Information Concepts:
- 360 client view
- E-procurement
- Loosely coupling
- Fuzzy search
- Service Orientation

Technology Concepts:
- Server Based Computing
- Desktop Virtualization
- Mobile Computing
- Open Standards

Security concepts:
- IM
- Single Sign On
- DMZ

Architecture is all about total concept design!
And now give them context and explode the view of the principle of 1 concepts to make it easy for the CIO to decide for them!

THE TO-BE OF WHATEVER ARCHITECTURE

Business Ambitions
- Be known as the best there is!
- ...

Strategic Business Starting Points
- ...
- Clients want continuity
- ...

Business Goals
- Always deliver (>80%)
- Never be out of stock
- ...

Business Requirements
- Integrated in our processes
- 24 x 7
- Safe & secure

IT-Ambitions
- ABC
- ABC
- ABC

Strategic IT-Starting Points
- ABC
- ABC
- ABC

IT Goals
- ABC
- ABC
- ABC

IT Requirements
- ABC
- ABC
- ABC
Dragon1 - Visual Enterprise Architecture Process

(Part of the) Dragon1 Architecture Process

Phase: Portfolio | Design Assignment | Requirements | Architecture Design | Architecture Realization
---|---|---|---|---
Role: Owner/client (CxO’s)
Activity: Inspire Owner Client to provide assignment
Role: Stakeholders (Business Owners)
Activity: Provide Architecture Design Assignment
Role: Consultants & Specialists
Activity: Propose & Approve Requirements
Role: Project Management & Workers & Quality Controllers
Activity: Propose & Approve Design decisions
Activity: Propose & Approve Exceptions

Product: portfolio
Activity: Program of requirements
Activity: Architecture Design & Specs
Activity: Realization Report
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Architecting = Deciding upon which high level business concepts & IT concepts to propose and approve for realizing strategic starting points, business objectives & goals
Why focus on visualization principles?

These 13 Architecture Visualization Principles are denied almost every day by any architect.

But when respected they add so much value to enterprise architecture.
13 Architecture Visualization Principles

By

1. ADDRESSING COMPLEXITY...
2. REPORTING STATUS...
3. GIVING CONTEXT...
4. POSITIONING THE PROCESS ...
5. ORDERING STAKEHOLDERS...
6. INTEGRATING VISIONS...
7. COMBINING CONFLICTING REQS
8. SCOPING SOLUTIONS...
9. USING LINESTYLES...
10. USING DYNAMICS IN SITUATIONS
11. SHOWING THE TOTALCONCEPT
12. SHOWING THE REAL PRINCIPLES
13. PUBLISHING IN A DESIGN BOOK

You will...

Visualize the high-level concepts principles (way of working + results), in order to facilitate or ease decision making!

*Complexity, Redundancy, Integration, etc....*
1. A Communication Drama is unfolding!

You won’t get any decisions taking with this picture!

You need to show the:

WHAT

WHY

And

HOW
1. A Communication Drama: This is why we need a CCC!

Put the focus on the pattern of the complexity-concept
Architecture is a total concept of a structure. A structure is a system with a constructive, operative and decorative dimension. An Architecture Framework shows types of architectures and the (larger) concepts.
2. AS-IS Enterprise Architecture Framework 20XX
Organization XYZ

Virtualization (50%)

Wireless Networking (100%)

Server Based Computing (95%)

DMZ

Clear Desk Policy

Identity Management

Security Architecture

Process Oriented Approach (40%)

Business Architecture

Services Delivery & Management?

Case Management (20%)

Compliance (95%)

Quality Management (95%)

Business Development Management?

Governance Architecture

360 Client View (95%)

EAI (85%)

Service Orientation (loosely coupling)

Information Architecture

Secure web business applications?

Wireless Networking (100%)

Server Based Computing (95%)

Virtualization (50%)

Technical Architecture

Management Report view – At last: Some Decisions are taken!
3. Relating strategic starting points and concepts for the CIO to decide! – this is what you put on an architecture poster!

Every concept needs to be related to starting points, business goals or requirements for justification

Stakeholders
1. 
2. 
3. 

Identity, Culture, Mission, Vision on Themes

Strategic Starting Points
1. 
2. 
3. 

Business Goals
1. 
2. 
3. 

An Architect (the creative designer of total concepts) may only propose a concept to be used in an architecture to the owner-client, if best practices or Proof of concepts are known and if costs and time of application of the concept are known.

This is an Architecture ➔ A total concept
4. Where is architecture?
What impact does it have / may it have?

The gray areas...
5. Who comes first with requirements?
6. A common strategy-view or not of the Board!

Brick & Mortar

Outsourcing IT

Only Online

Merger of Business

?
7. Open and Secure Website
8. When, Why and How to create this EA Blueprint?
9. When, Why and How to create this Architecture Framework View?
10. When, Why and How to create this Artist Impression?
11. Show the Total Concept (the architecture) of the structure

- STP
- Multi-channel
- Inter-mediaires
- Target Groups
- 360 Client View
- Transparent Pricing
- Insurance Factory
12. When, Why and How to create this Principle Drawing?
12. Three ways to visualize High Level Business Concepts and IT Concepts

A. Pretty Meaningless

B. Nice but... what is the impact?

C. Understandable & Decidable

- Visualize principles: the way things work + results -

1. A customer selects the goods themselves
   - No service-staff is needed
   - restricting opening hours

2. A customer purchases the goods themselves
   - No sales-staff is needed
   - restricting transaction volume

3. A customer is stimulated to act in the right way
   - Automated monitoring and enforcement is needed.
   - We still are human!

4. Result: The company sells more using less resources!
12. Three ways to visualize High Level Business Concepts and IT Concepts

A. Pretty Meaningless

B. Nice but... hard to understand, and what is the impact?

C. Understandable & Decidable
- Visualize principles: the way things work + results -

1. A person or systems request storage capacity from storage pool manager

2. The storage request handler looks for capacity

3. The requestor gets the available capacity in a logical database

4. Result: The company uses resources more optimally preventing buying new.
When, Why and How to create this Strategic Roadmap?

- Show Capabilities
- Show Time
- Show Money
A list of 13 important Architecture Visualization Principles to get more out of Enterprise Architecture

1. **ADDRESSING COMPLEXITY WILL...:** Often architecture visualizations do not address complexity, what is wrong, etc.... They don’t visualize something to decide upon. Make visualizations worth making, knowing and looking at. The current so called correct situation is hardly of any meaning.


3. **GIVING CONTEXT BRINGS...:** Give context to your visualizations to make deciding by the board much more easier. Related strategic information to design parts. Add also other contextual information using an Architecture View Layout.

4. **PROCESS MODELLING & POSITIONING EXPLAINS...:** Visualize the design & realization process using a storyboard placing architecture in between strategy, port mgt and policy + frameworks. Choose standards and methods and stick to them.

5. **ORDERING STAKEHOLDERS IN RINGS MAKES...:** Visualize the uncertainty about stakeholders order/power using a...?

6. **INTEGRATION OF VISIONS RESULTS IN...:** Visualize the visions stakeholders have of the integral solution using a...?

7. **COMBINING CONFLICTS REQUIREMENTS WILL...:** Visualize the conflicting requirement stakeholder have using a...?
A list of 13 important Architecture Visualization Principles to get more out of Enterprise Architecture

8. **COMBINING CONFLICTS REQUIREMENTS WILL...:** Visualize the conflicting requirement stakeholder have using a...?

9. **SCOPING SOLUTIONS VISUALLY MAKES...:** Visualize the scope-creep of the integral solution using a...?

10. **USING LINE STYLES WILL...:** Visualize past, present and future with different line styles.

11. **VISUALIZING DYNAMICS BRINGS...:** Visualize dynamics and situation more than static structures: use photo’s of situations. Do not draw a bike as a architect. It takes all the fun out of it.

12. **VISUALIZING THE TOTAL CONCEPT WILL...:** Visualize architecture as total concept using a....?

13. **VISUALIZING REAL PRINCIPLES TO...:** Visualize the way concepts work with principle drawings. Have the board take decisions using these visualizations.

14. **PUBLISHING ARCHITECTURE IN A DESIGN BOOK WILL...:** Convince the board for your architecture vision using a Glossy A3-sized Design Book.

*NO Worries, these principles are all explained in the textbook and wiki!*
Architecture is the total concept for design & realization of a structure

The Case

An insurance company wants to unfold an digital intermediary strategy.

The Architects come up with detailed IT-architecture documents, making no sense to the board, so they start managing the program by exception.

The Principle

Architecture as strict conceptual design makes architecture less fuzzy

Always sketch the architecture of a system as the conceptual design and realization of a system. This architecture vision drawing makes the board decide issues upon it. It relates concepts to strategic starting points.

Example Architecture Vision / Design Sketch of the Total concept
Enterprise Architecture is a Design Science

The Case
A hospital wants to implement eHealth as an integral solution in the organization.

But gets stuck in politics, power, changing requirements, complexity and process & IT integration issues.

The Principle
Applying Enterprise Architecture as Design Science makes sure it adds value to enterprise transformation.

Step 1 in Design is to always get an architecture design assignment first of the owner-client and do a visual stakeholder analysis.

Step 2 in Design is to always create as architect a Program of Requirements, by inspiring stakeholders for requirements using pictures.

Get a Design Assignment

Create a Program of Requirements

Step 1

Step 2
Why do principle-visualizations work so well for decision taking?

Formal Meta Model

Formal Model

Role Dependent View

Informal Visualization (of the concept-principle or solution-principle related to aims, objectives & goals + impact shown)

These are comprehensible & understandable & decidable within seconds

These take years of study....
A new open EA Framework for Visual Enterprise Architecture
A list of principles another way around to get more out of Enterprise Architecture

1. Enterprise Architecture as Design Science adds value to enterprise transformation - View enterprise architecture as a design science & realization for enterprise transformation, so ... Be sure to have architect capable of designing and helping the realization.

2. ARCHITECTURE AS STRICT CONCEPTUAL DESIGN makes architecture less fuzzy - View the architecture of a system as the conceptual design and realization of a system.

3. Dear CIO, your architect is waiting for a design assignment (even if he doesn’t know it).

4. Use visualizations to get the stakeholder requirements of integral business IT solutions right.

5. ARCHITECTURE VISUALIZATION AS MANAGEMENT REPORT VIEWS – Creating visualizations as management reports makes them much more usable as decision supporting systems.

6. VISUAL ENTERPRISE ARCHITECTURE AS VISUAL RISK MANAGEMENT – Use Enterprise Architecture for Visual Risk Management in strategic programs or enterprise transformation. CFO’s and auditors will love it and USE it!

7. Use Black Spots Views to report what is not in control - Always report/visualize what you and people know & don’t know.
A list of principles another way around to get more out of Enterprise Architecture

8. Improve continuity with a justified Business-IT Dependency impact view.

9. Manage programs with an Architecture Framework - Make a distinction between architecture framework and architecture vision, so....?

10. Always ask an architect for a principle drawing before deciding - Before choosing a concept, always create a principle drawing, so....?

11. Save time and money in every project with a enterprise+solution blueprint

12. Unlock adaptivity with an Enterprise Architecture Baseline. Where is yours?

13. Don’t be afraid to use Informal visualizations such Artist Impressions at your CxO-meetings. Where were you last time?

NO Worries, these principles are all explained in the textbook and wiki!
• Thank you for attending this presentation

• Maybe I have inspired you to respect the presented principles and start visualizing your own principles

• The new open EA Method for Visual Enterprise Architecture helps solving EA-issues in less time, people, budget and at a higher quality than most other methods do.

• Want to know more about Visual Enterprise Architecture?

Start your journey in Architecture Visualization at

http://www.dragon1.com

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Some Companies I have visited for data on principles or I have information on about their principles

Rabobank
Tatasteel
Kadaster
Gemeente Maastricht
Gemeente Utrecht
Essent
OHRA
TenneT
Fortis ASR
DSM
Gemeente Roerdalen
Ziekenhuis Gelderse Vallei
UMCG
RWS
Ministerie van ELI
ABN AMRO
ING
ICTU
Philips
Siemens

UK Defense
UWV
EC
NATO
Toyota
UK Government
KLM
Bank Santander
Provincie Gelderland
Gemeente Noordwijk
-S heerenllo
C1000 / Schuitema
NS
Gemeente Amsterdam
Ahold
BAM
Woonnet Rijnmond
Woning Corporaties
Vidomes
OHIO State (US)

Hogeschool Avans
Hogeschool Windesheim
Hogeschool Wageningen
Universteit van Wageningen
VR Rijnijsselland
Etc...

(in total I have data on principles of over 250 companies!)
About the added value of Dragon1 for Enterprise Architecture

It is always of added value to visually communicate impact, results and risks of changes and decisions to CxOs because you can use Dragon1.