



The Dragon1 Software Company

Strategic Decision Making
by the CIO using Dragon1
Enterprise Architecture Visualizations

13 Architecture Visualization Principles

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For more examples visit: www.dragon1.com

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 - Demo: Dragon1 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 web based Dragon1 EA Tool (<http://cloud.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.



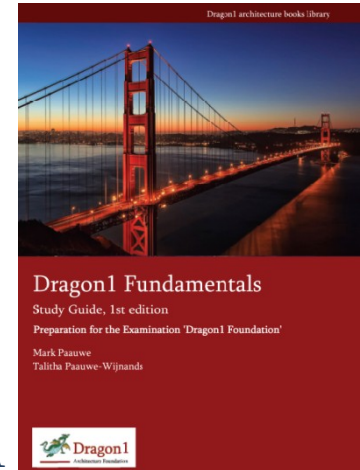
Introducing Dragon1: a new true open EA method

Dragon1 is a true 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 Fundamentals Textbook



Dragon1 Foundation Training



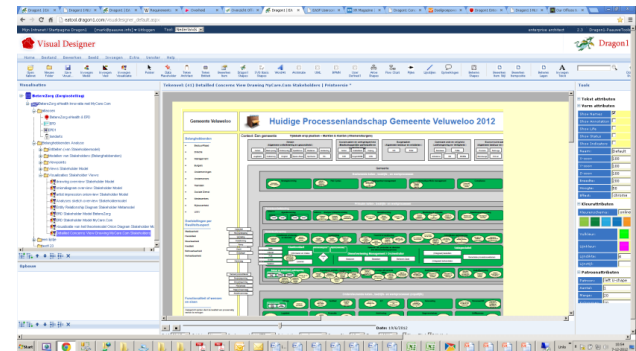
Introducing **dragon1.com** *the innovative BPM / EA Tool supporting Dragon1*



Dragon1.com is an Enterprise Collaboration Platform for BPM / EA Modeling, ArchiMate, BPMN and TOGAF

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
- e-Portfolio & public business profiles



*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

For more information visit: www.dragon1.com and <http://store.dragon1.com>



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



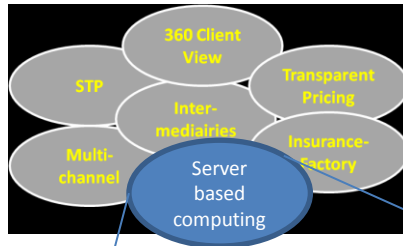
For starters: What is Visual Enterprise Architecture according to Dragon1?



- 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

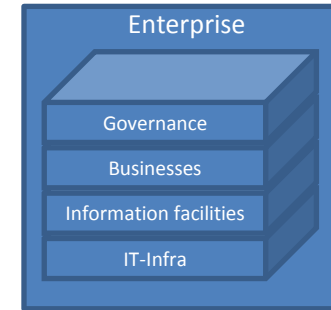


Relationship between structure, architecture, concepts, elements and principles in Dragon1 in a picture



1. The architecture

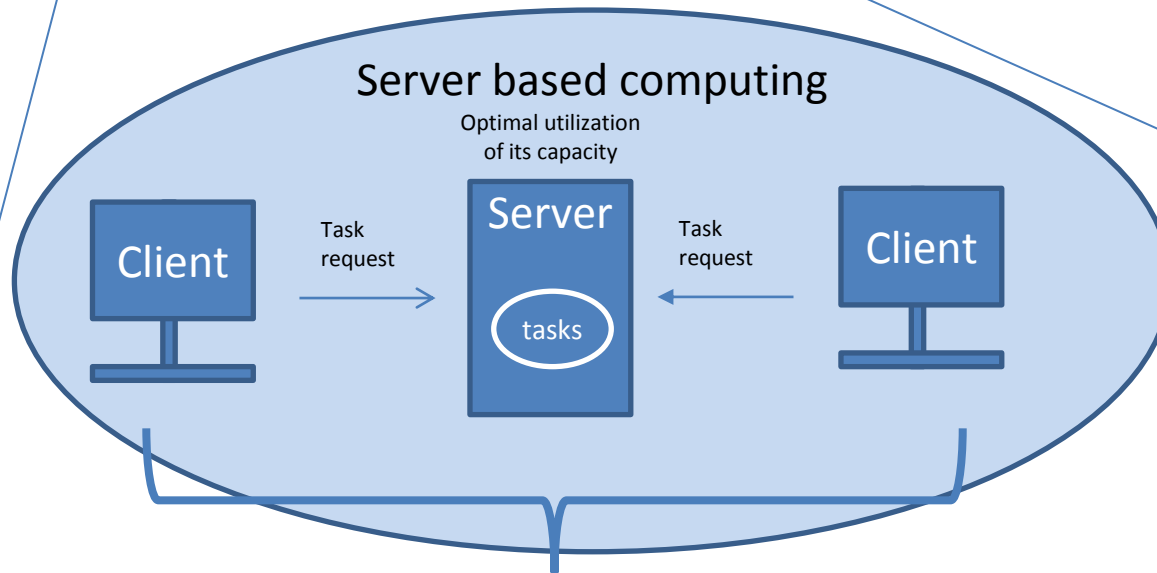
(a coherent set of concepts of a structure → a total concept of a structure)



4 common enterprise structures

2. The concept

(an approach, idea, abstraction of implementation)



3. The elements

(logical functional entities) within the concept

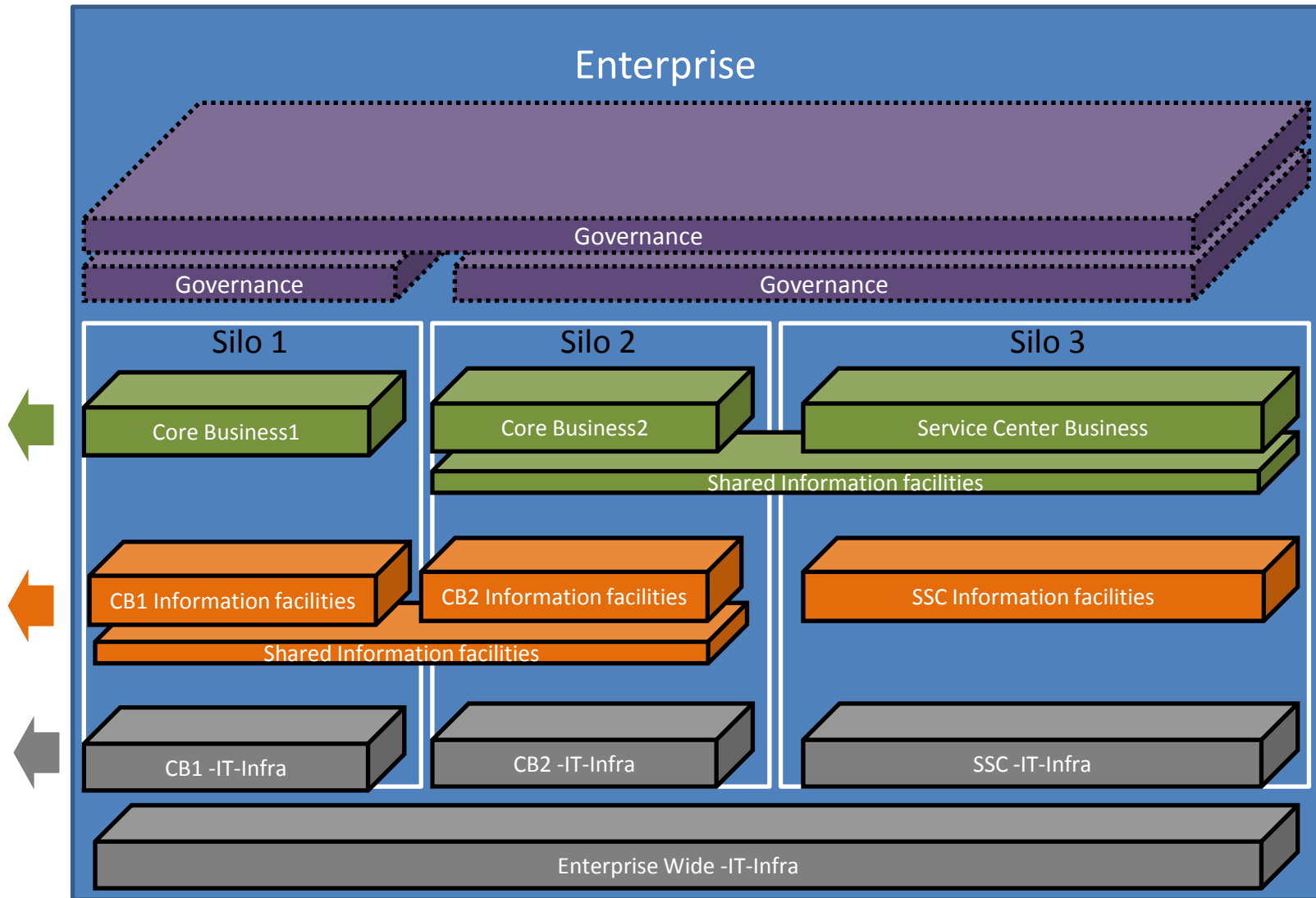
(all is relative – elements themselves can also be viewed conceptual)

4. The concept-principle

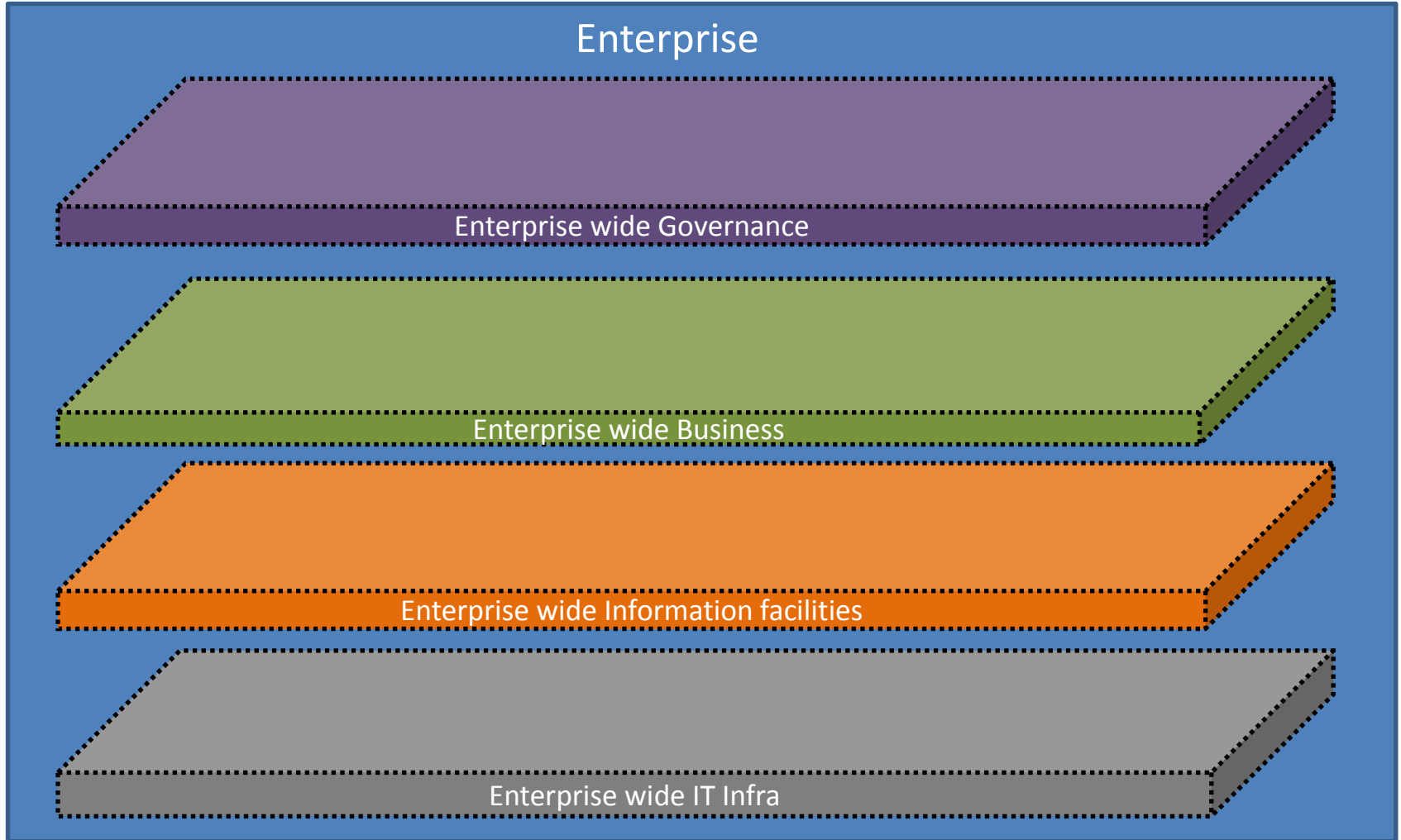
(the way the concept works producing results)



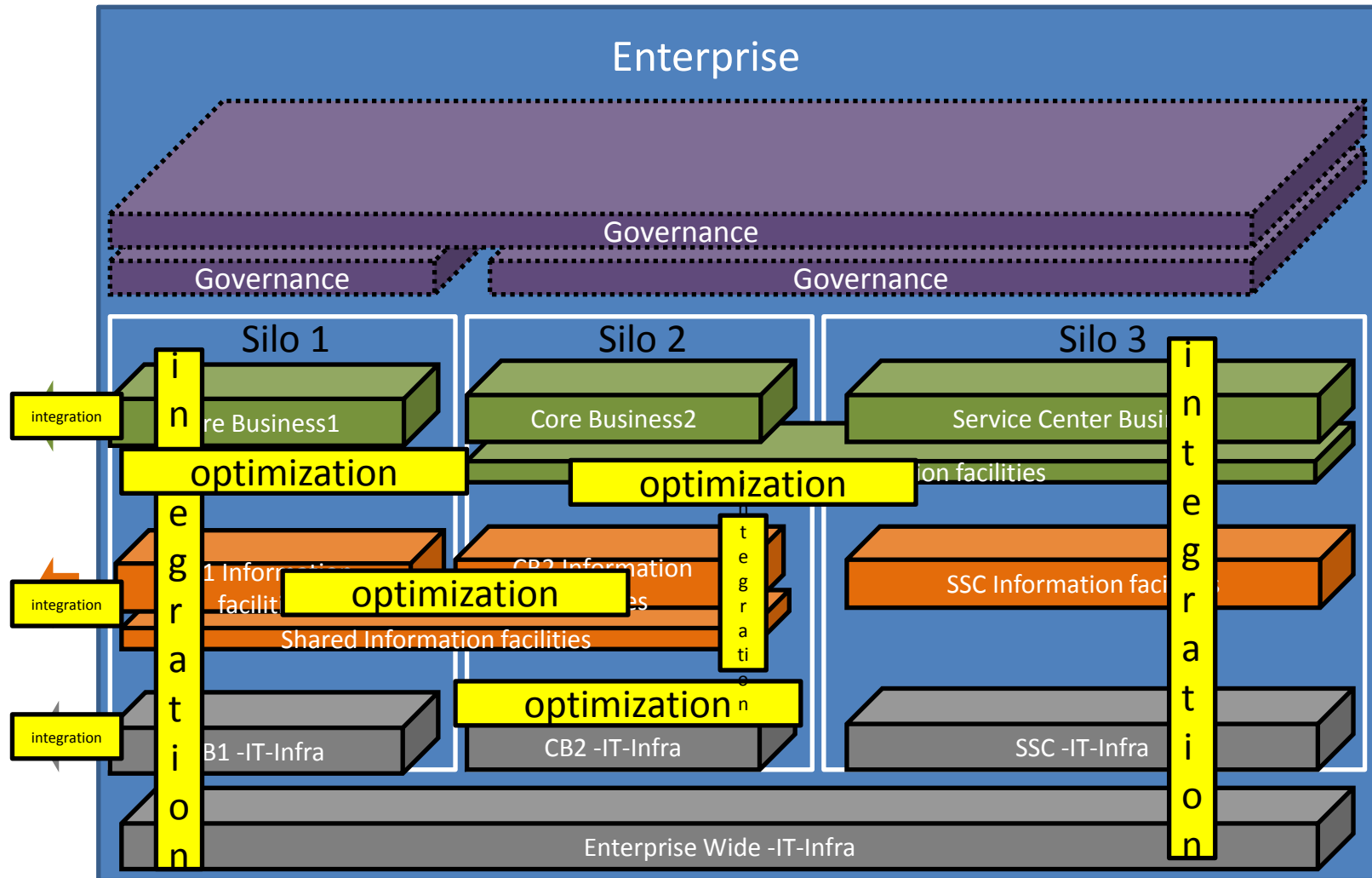
A typical enterprise, as a structure has internal structures like this



A typical enterprise comes nowhere near this...
It is not structured like this...



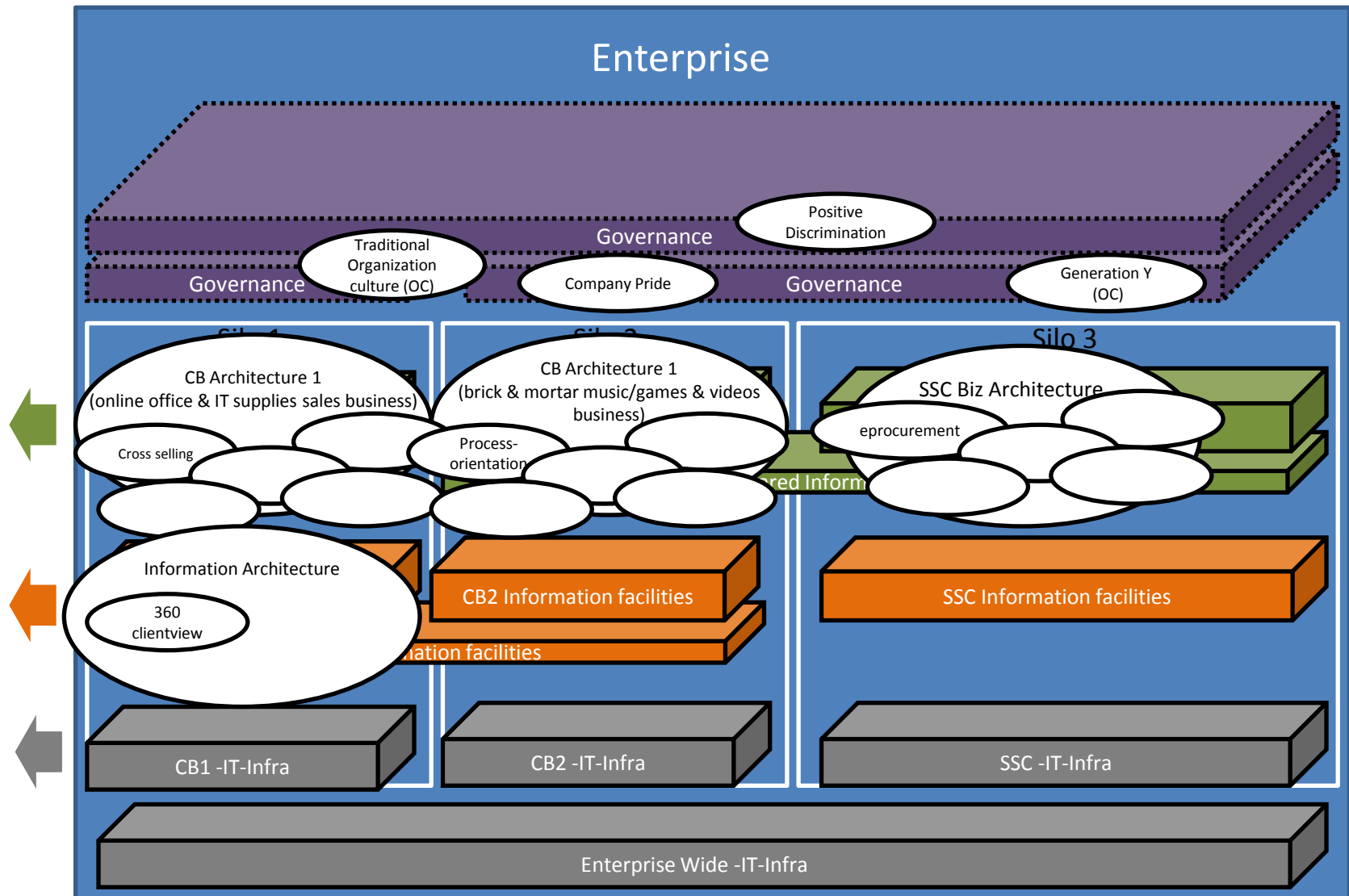
Innovation, evolution and projects cause this:
A suboptimal structuring (destandardized) of the enterprise



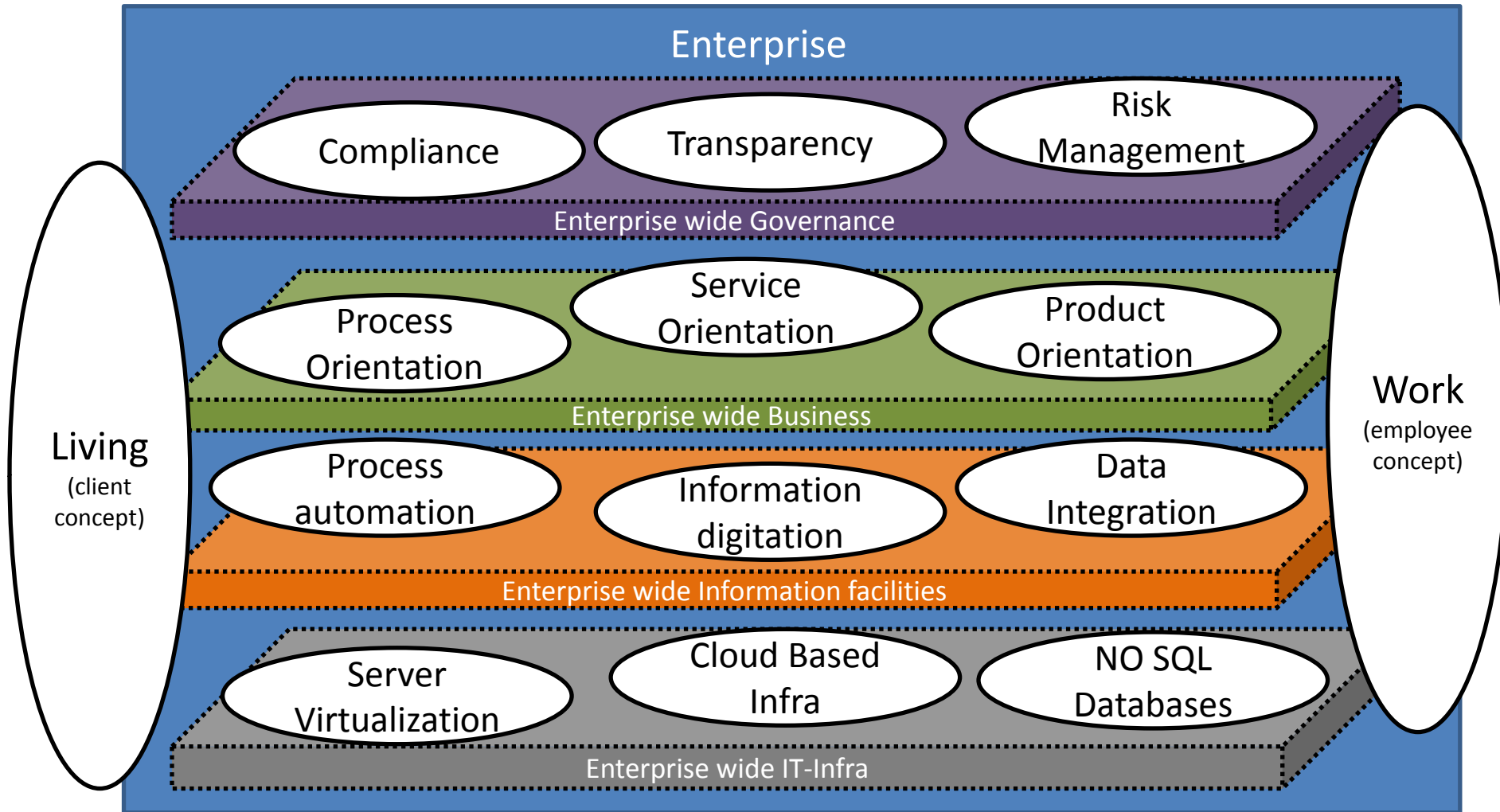
But in total degeneration: suboptimization, complexity increase!



The architecture of the enterprise could be this
(total concepts of specific/unique 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...



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.



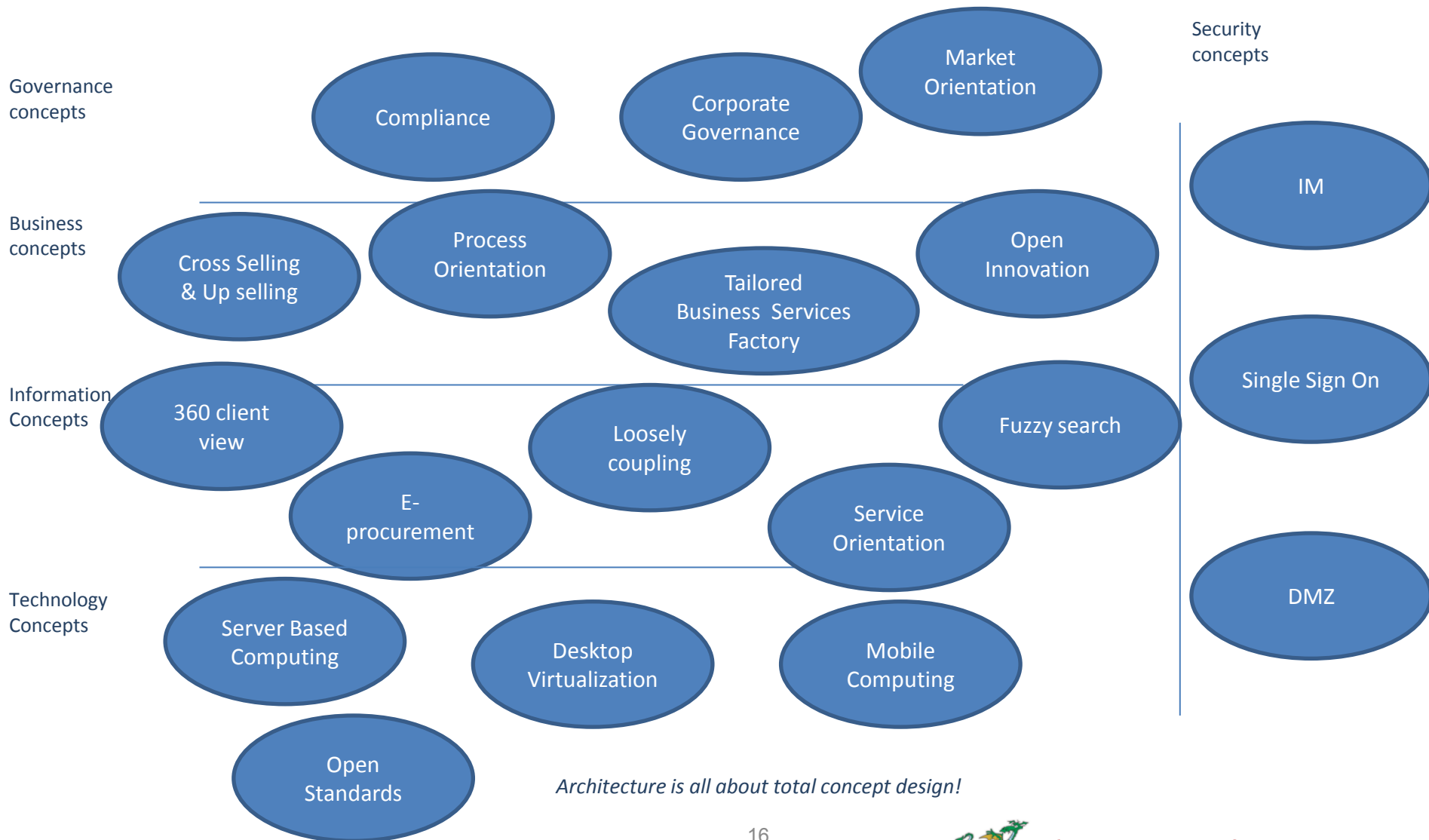
Give Context to the visualization & use concepts



- 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?



And now give them context and put them on an A0 sized poster, 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

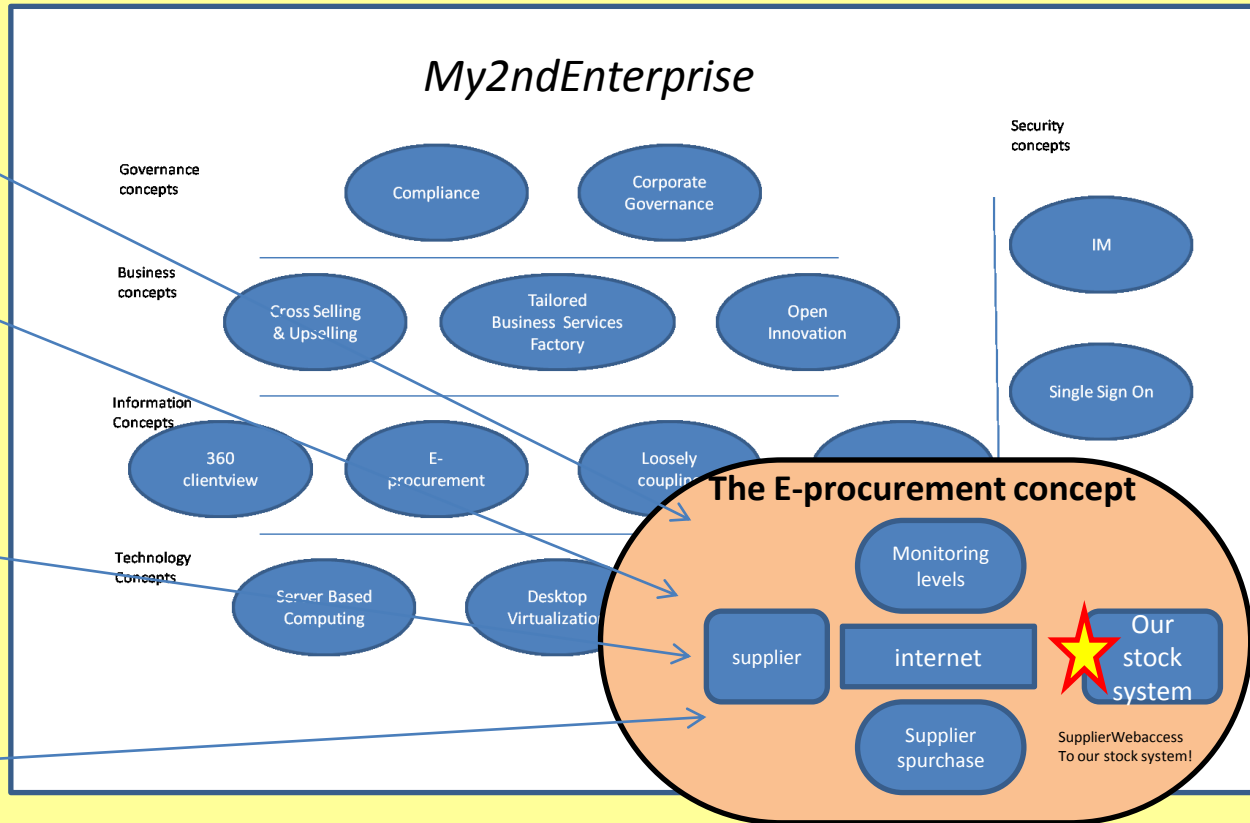
- ..
- Clients want continuity
- ..

Business Goals

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

Business Requirements

- Integrated in ou processes
- 24 x 7
- Safe & secure



IT-Ambitions

- ABC
- ABC
- ABC

Strategic IT-Starting Points

- ABC
- ABC
- ABC

IT Goals

- ABC
- ABC
- ABC

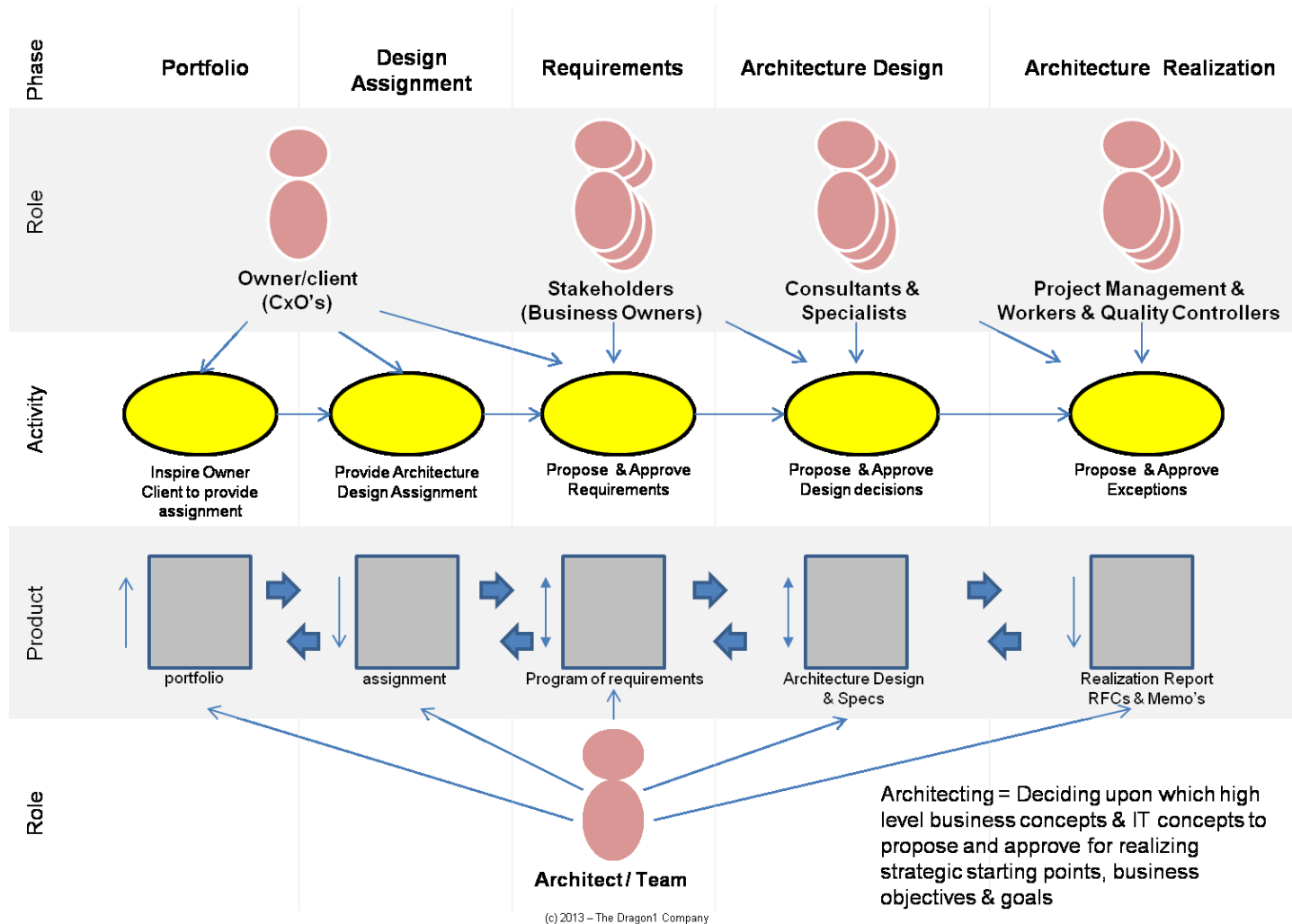
IT Requirements

- ABC
- ABC
- ABC



Dragon1 - Visual Enterprise Architecture Process

(Part of the) Dragon1 Architecture Process



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 LIFESTYLES...
10. USING DYNAMICS IN SITUATIONS
11. SHOWING THE TOTALCONCEPT
12. SHOWING THE REAL PRINCIPLES
13. PUBLISHING IN A DESIGN BOOK

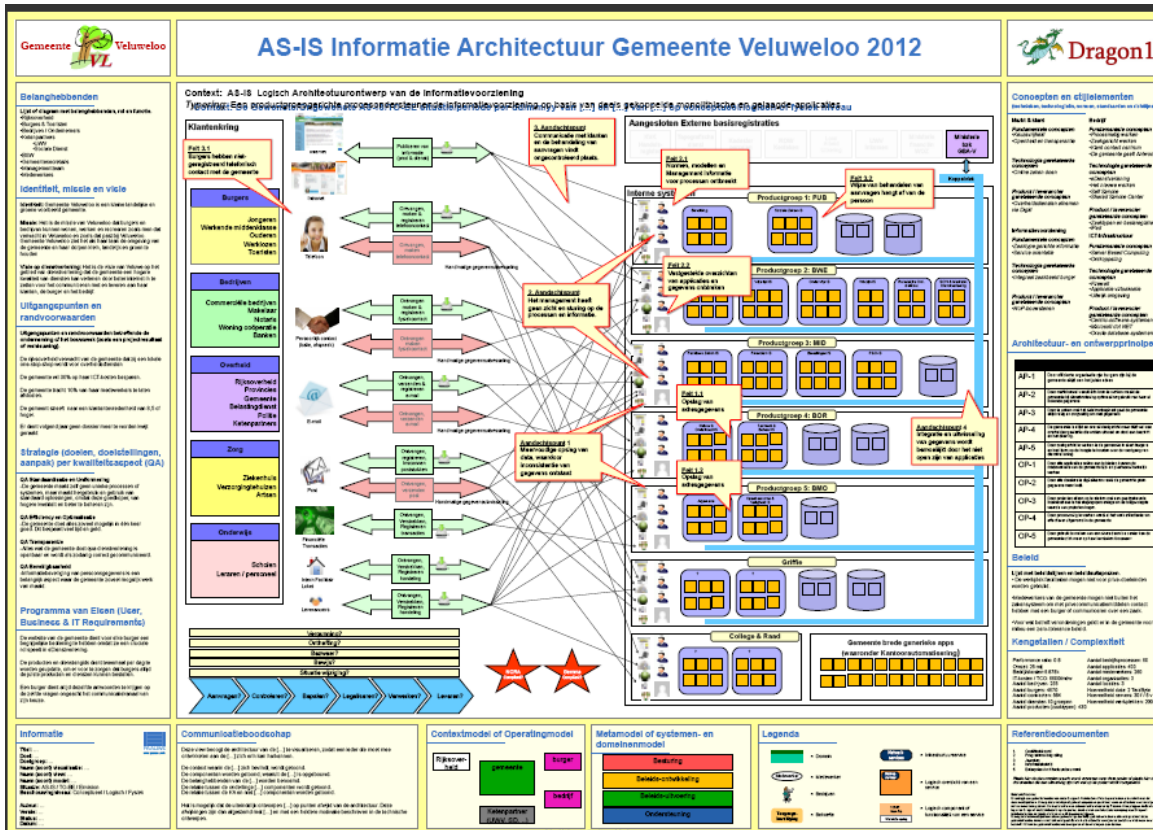
You will...

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

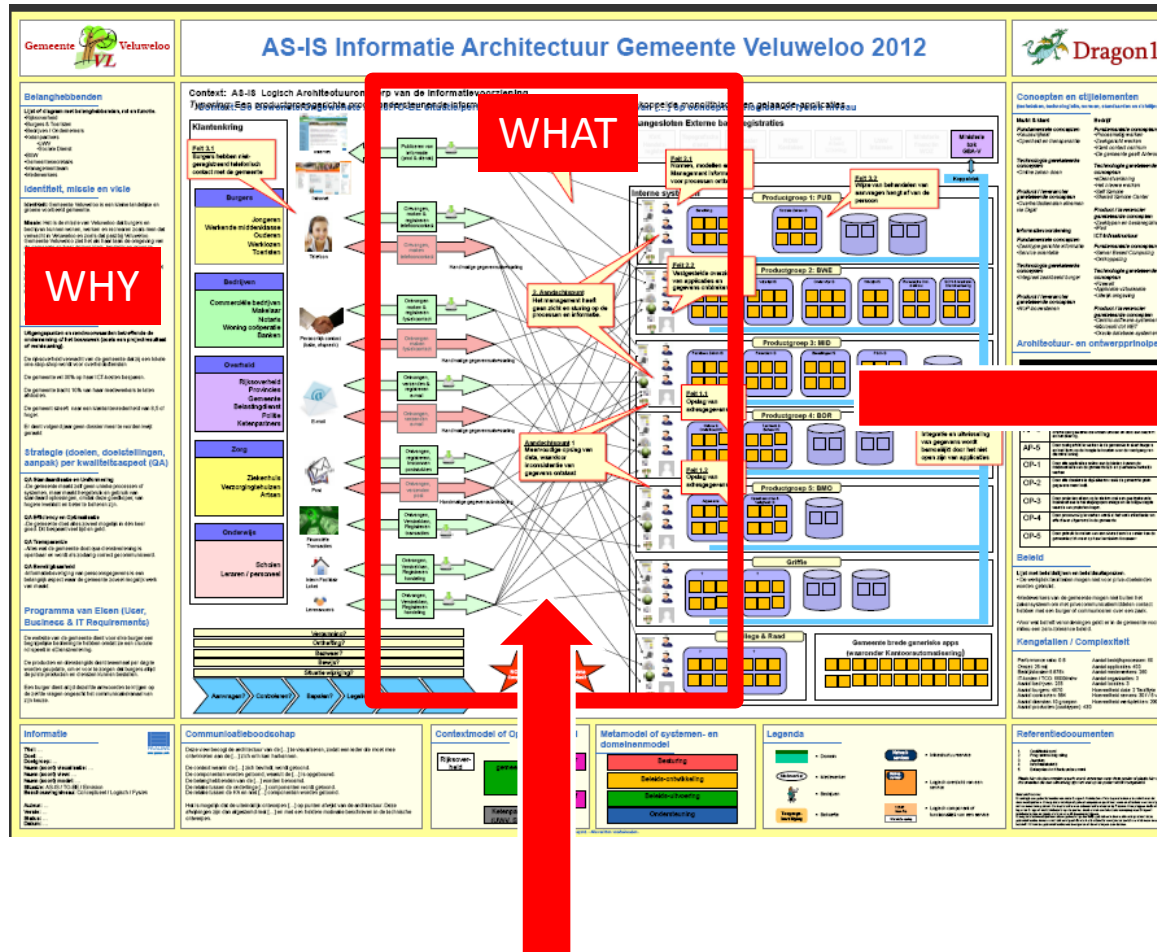
WHY

And

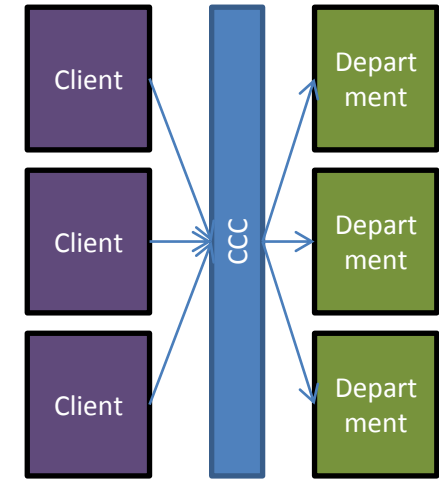
HOW



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



HOW



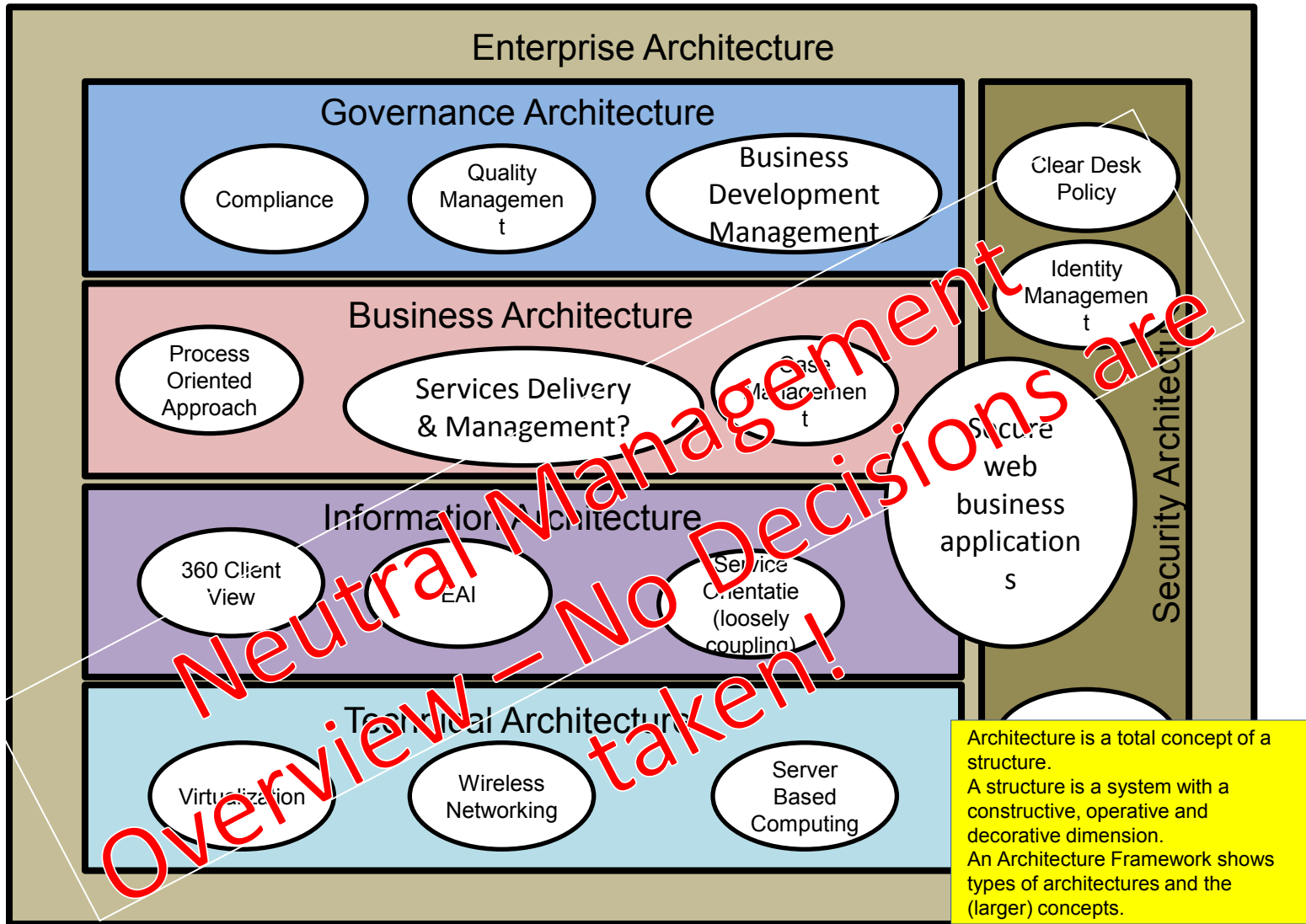
(the principle/pattern of the CCC-solution concept)

Put the focus on the pattern of the complexity-concept



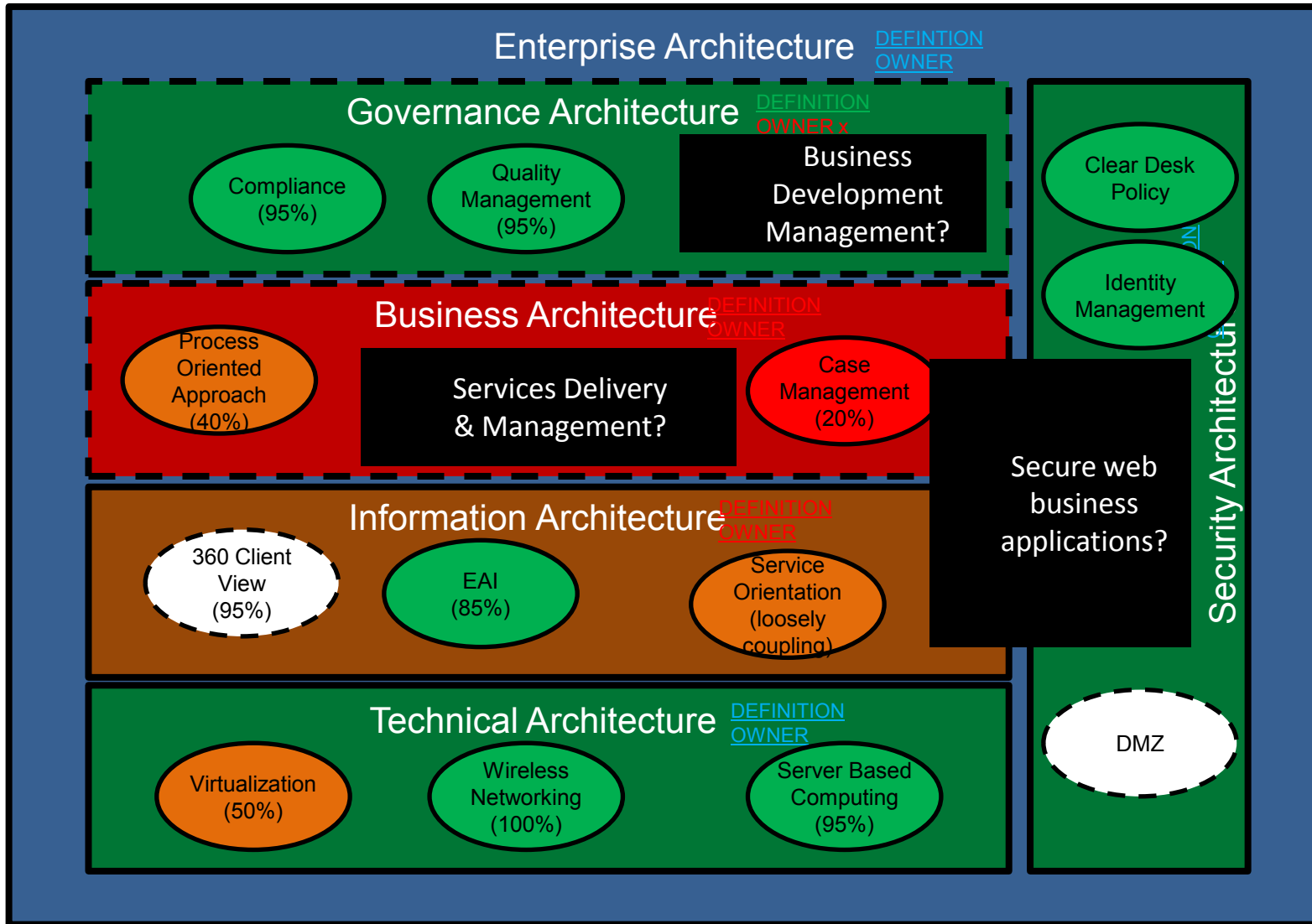
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2. AS-IS Enterprise Architecture Framework 2013 Organization XYZ



2. AS-IS Enterprise Architecture Framework 2013 Organization XYZ

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

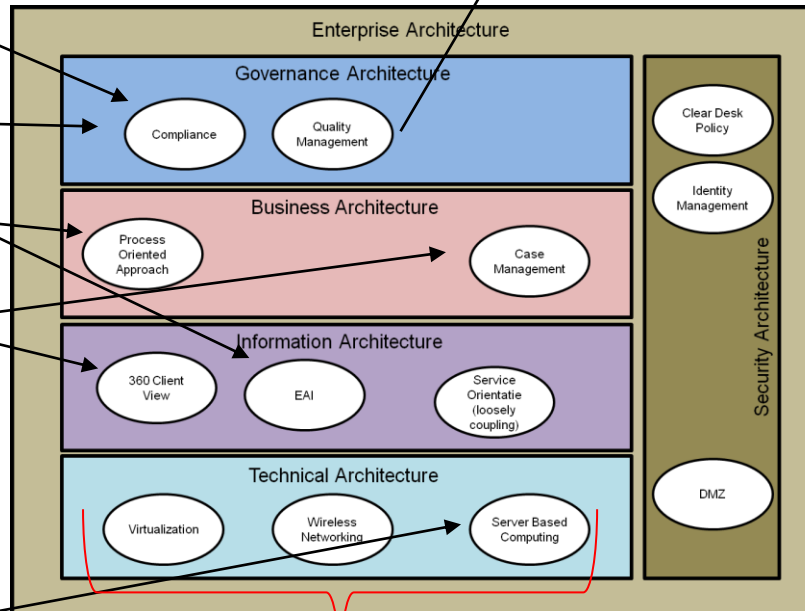
Strategic Starting Points

- 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.

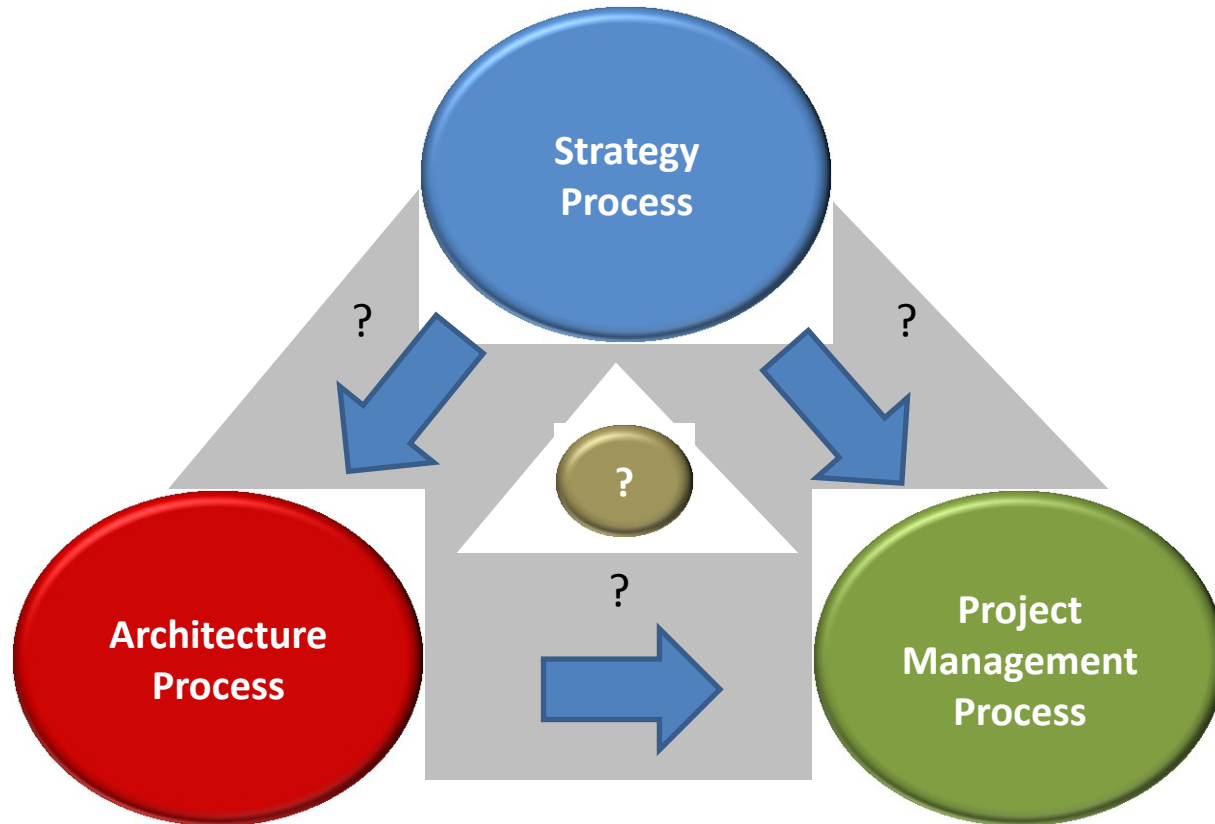


This is an Architecture → A total concept



4. Where is architecture?

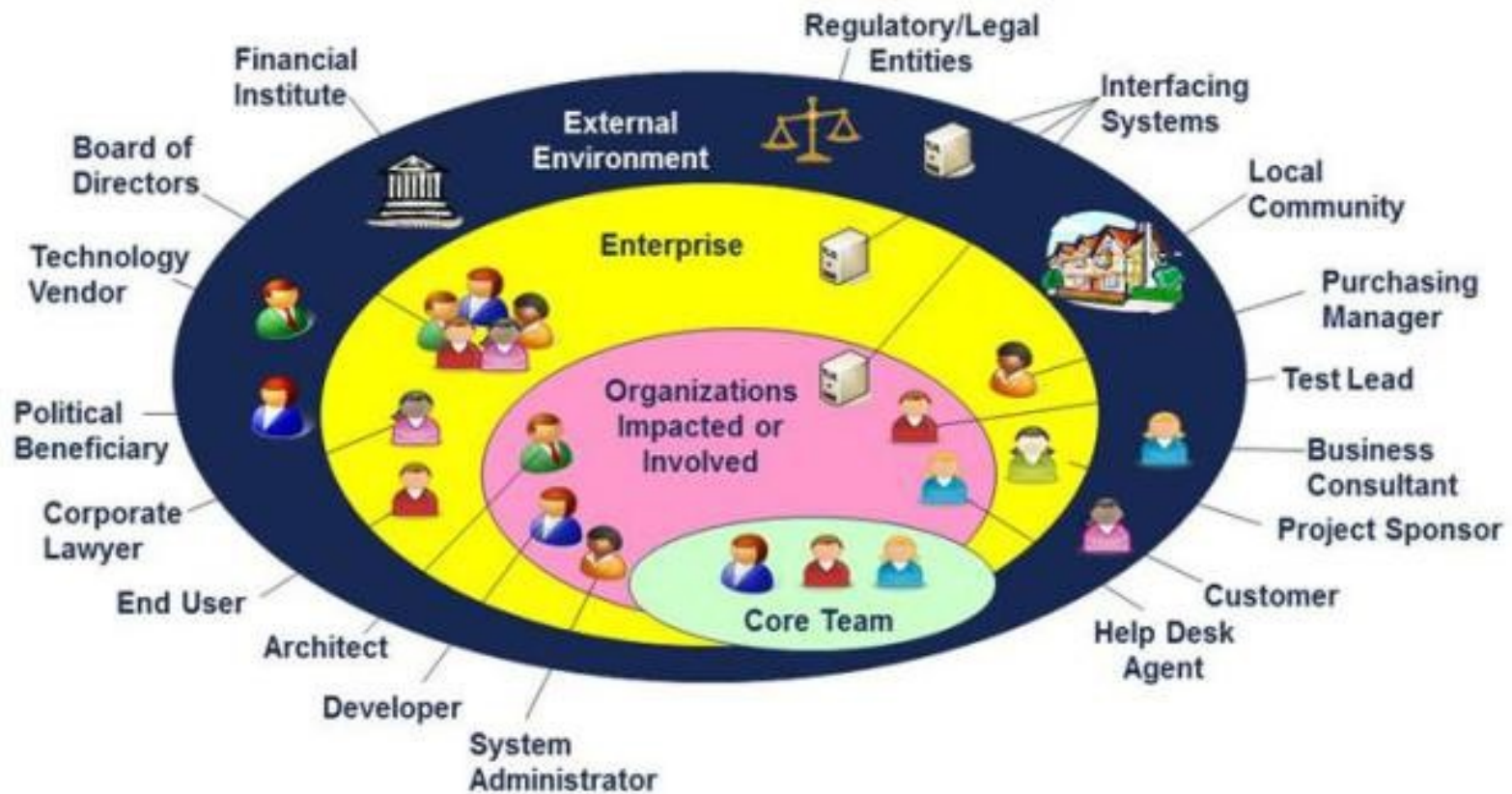
What impact does it have / may it have?



The gray areas...



5. Who comes first with requirements?



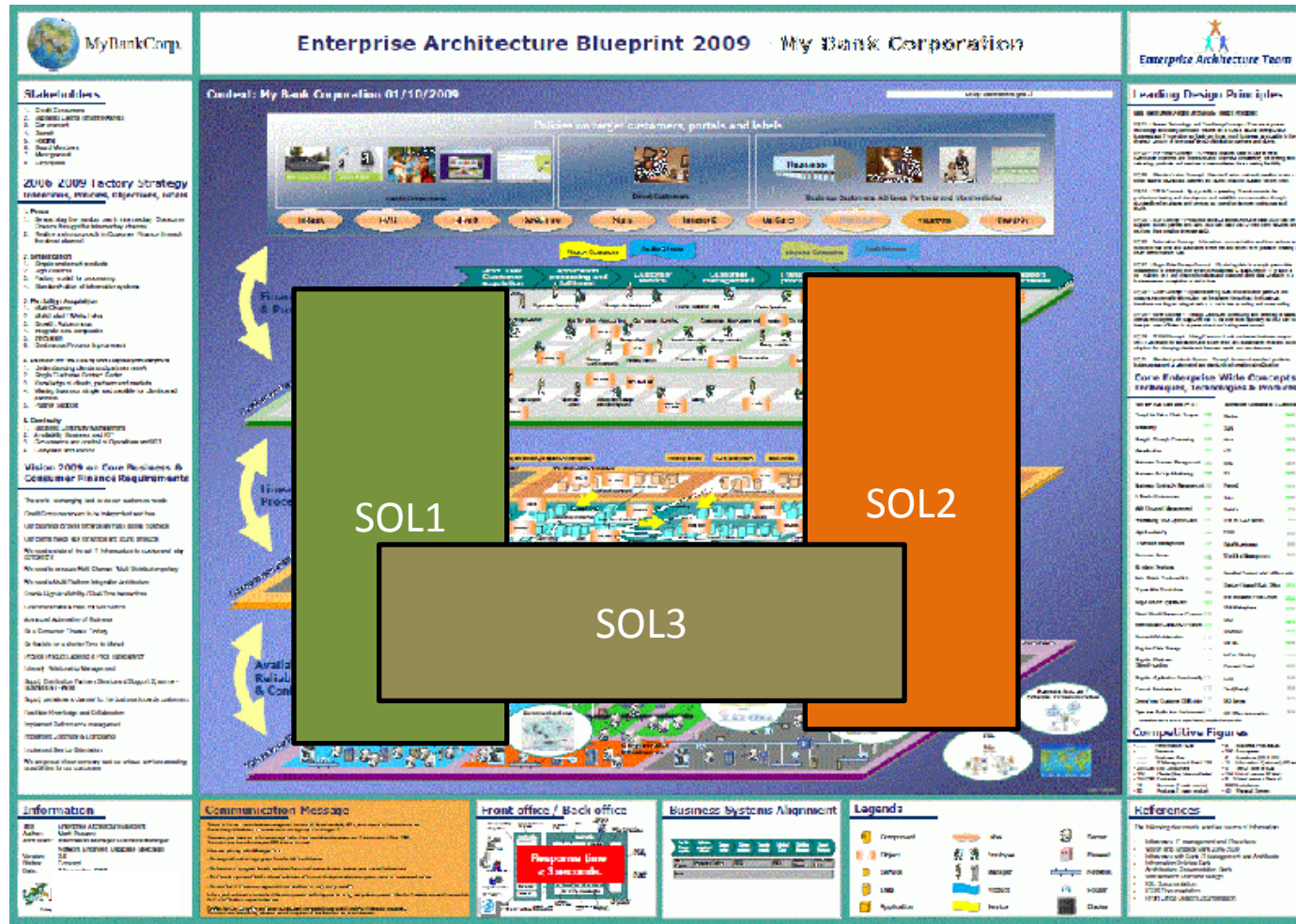
6. A common strategy-view or not of the Board!



7. Open and Secure Website

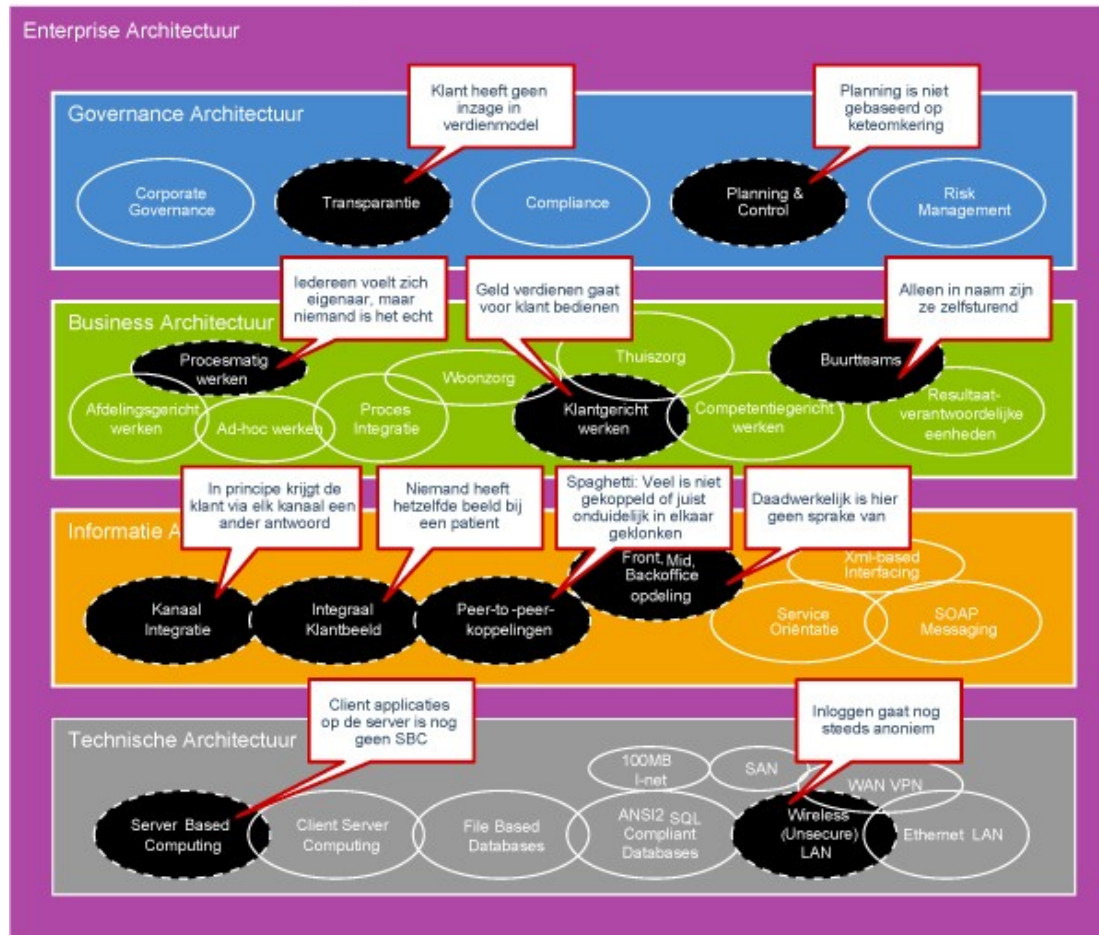


8. When, Why and How to create this EA Blueprint?

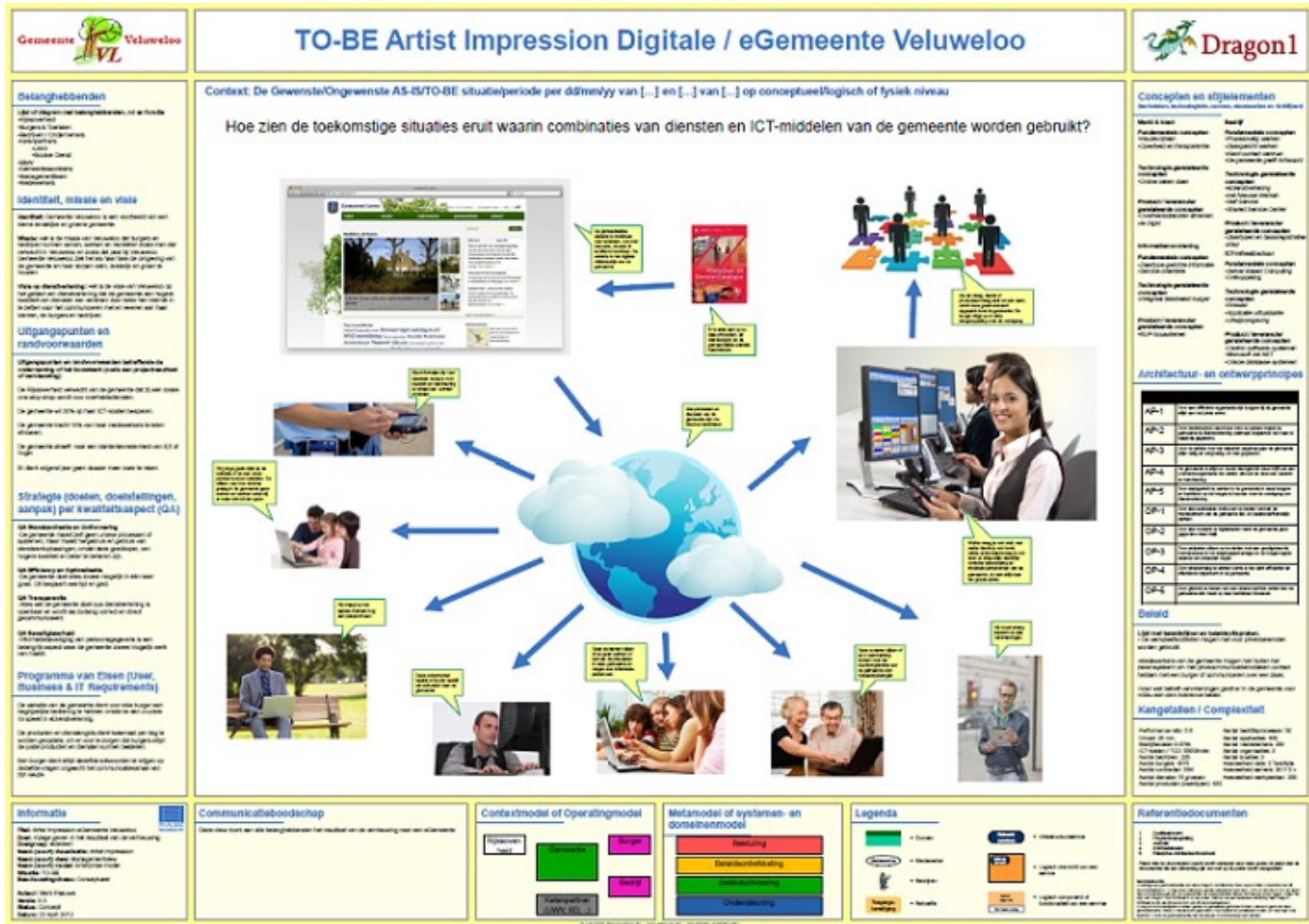


9. When, Why and How to create this Architecture Framework View?

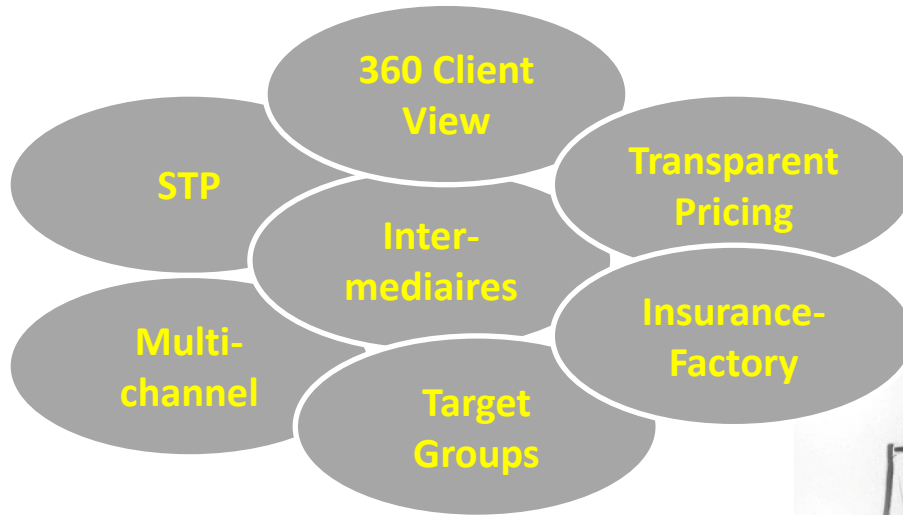
Enterprise Architectuur Raamwerk



10. When, Why and How to create this Artist Impression?



11. Show the Total Concept (the architecture) of the structure



12. When, Why and How to create this Principle Drawing?

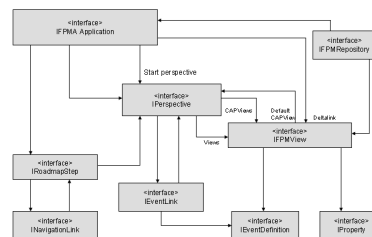
[illegible]

12. Three ways to visualize High Level Business Concepts and IT Concepts

A. Pretty Meaningless

Self Service
Sales

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!

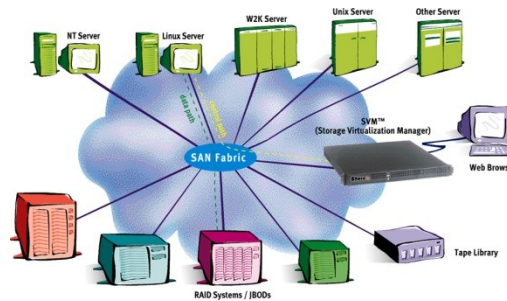


12. Three ways to visualize High Level Business Concepts and IT Concepts

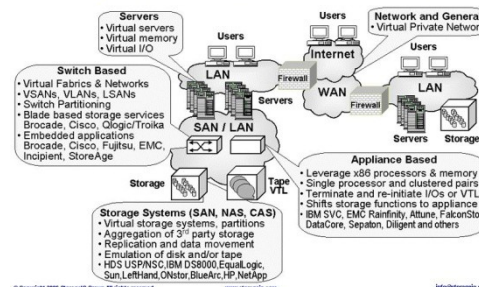
A. Pretty Meaningless

Storage
Virtualization

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



Many faces of virtualization – Various Locations



C. Understandable & Decidable

- Visualize principles: the way things work + results -

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

A Requestor

(man or
system)



A Storage pool
manager

(software
driver)

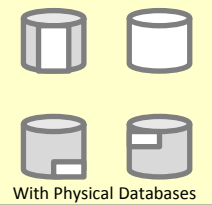
2. The storage request handler looks for capacity

A Storage pool
manager

(software
driver)



A Logical Storage Pool



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

A Requestor

(man or
system)



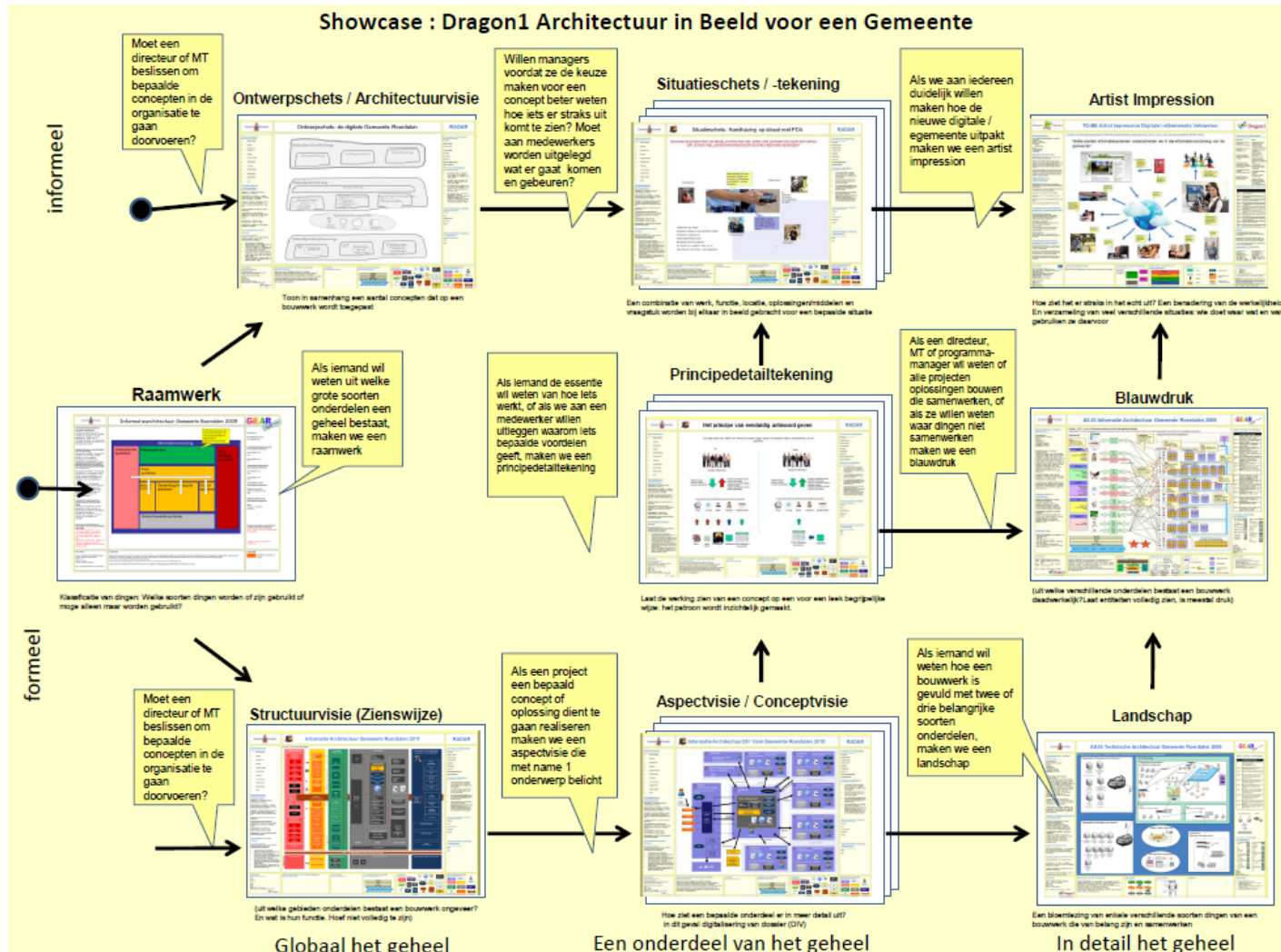
A Storage pool
manager

(software
driver)

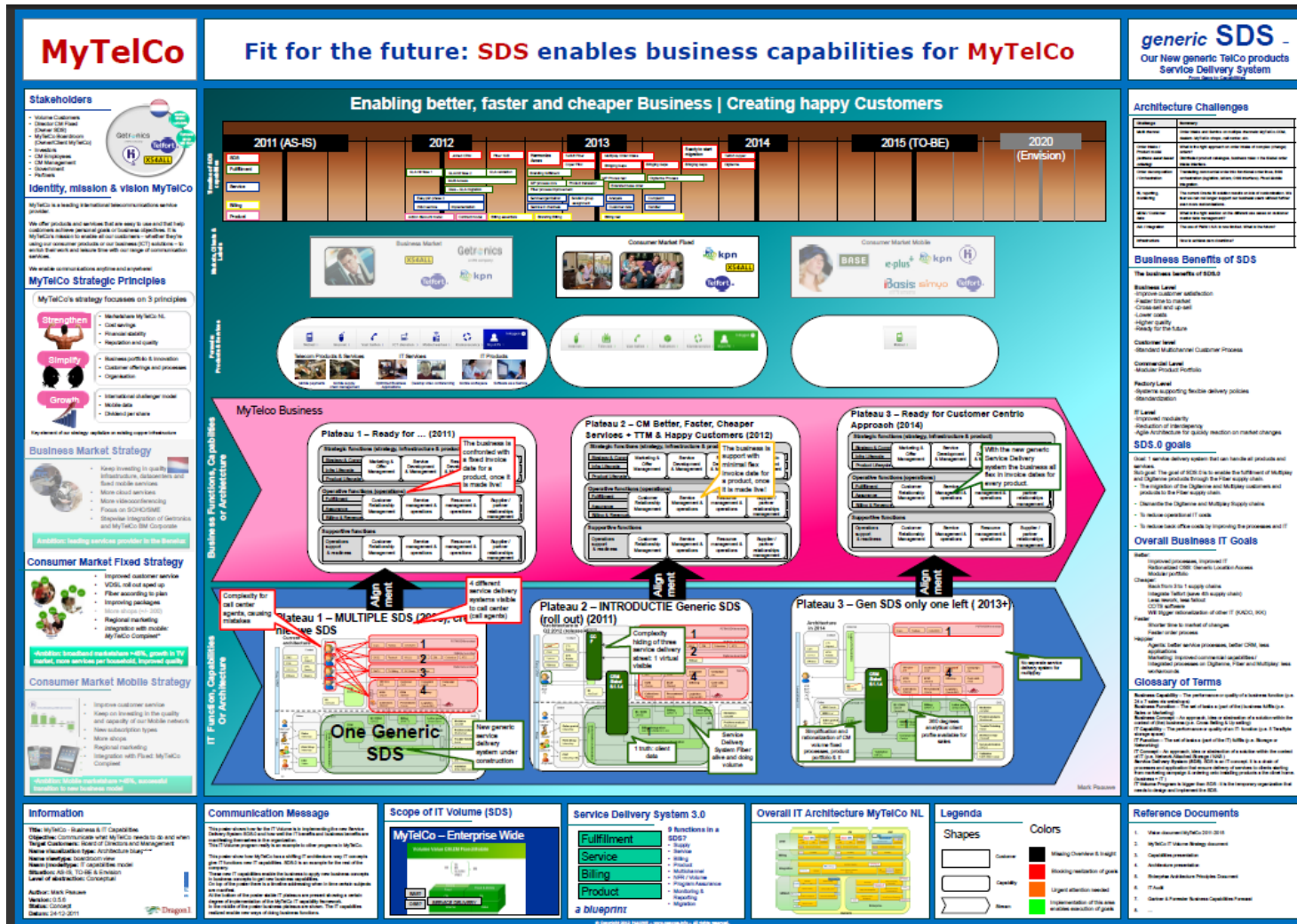
4. Result: The company uses resources more optimally preventing buying new.



When, Why and How to create this Visualizations Consistency Overview?



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.
2. **REPORTING STATUS MAKES...:** Report status and progress and issues and solutions using management report view: architecture posters with progress and status information. Visualize status of situation using signal colors.
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

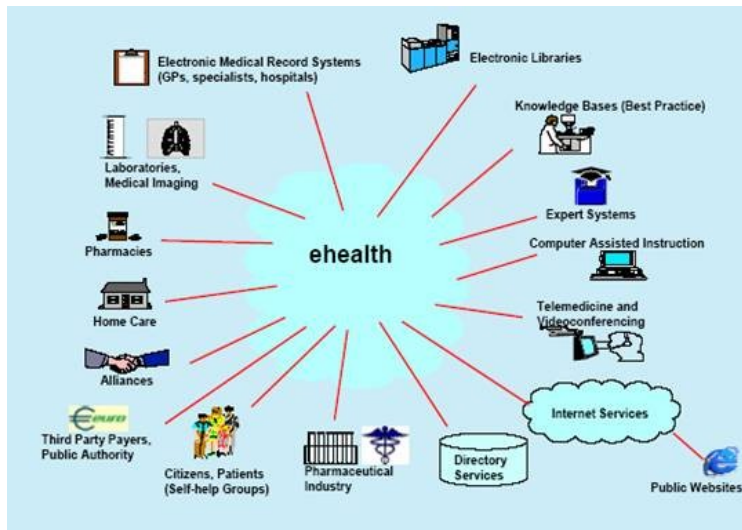


Enterprise Architecture is a Design Science

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.

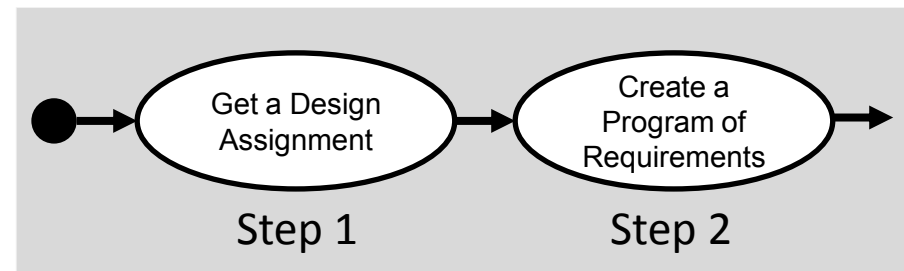


The Principle

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.

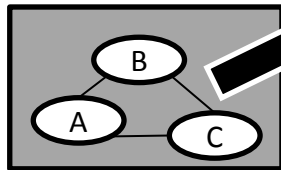
Step 2 in Design is to always create as architect a Program of Requirements, by inspiring stakeholders for requirements using pictures.



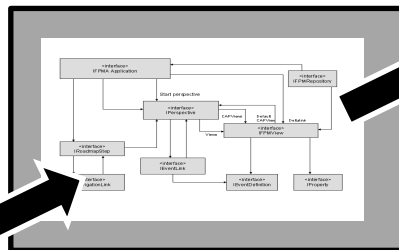
Why do principle-visualizations work so well for decision taking?

These are comprehensible & understandable & decidable within seconds

These take years of study....



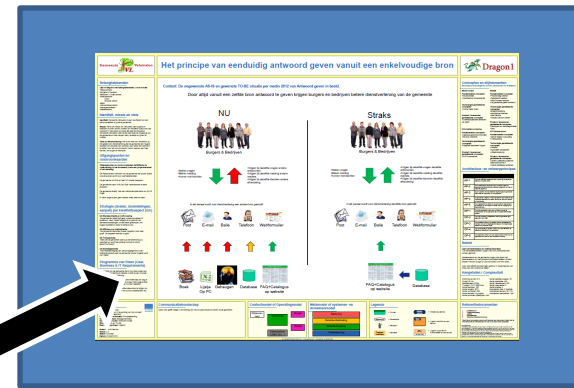
Formal Meta Model



Formal Model



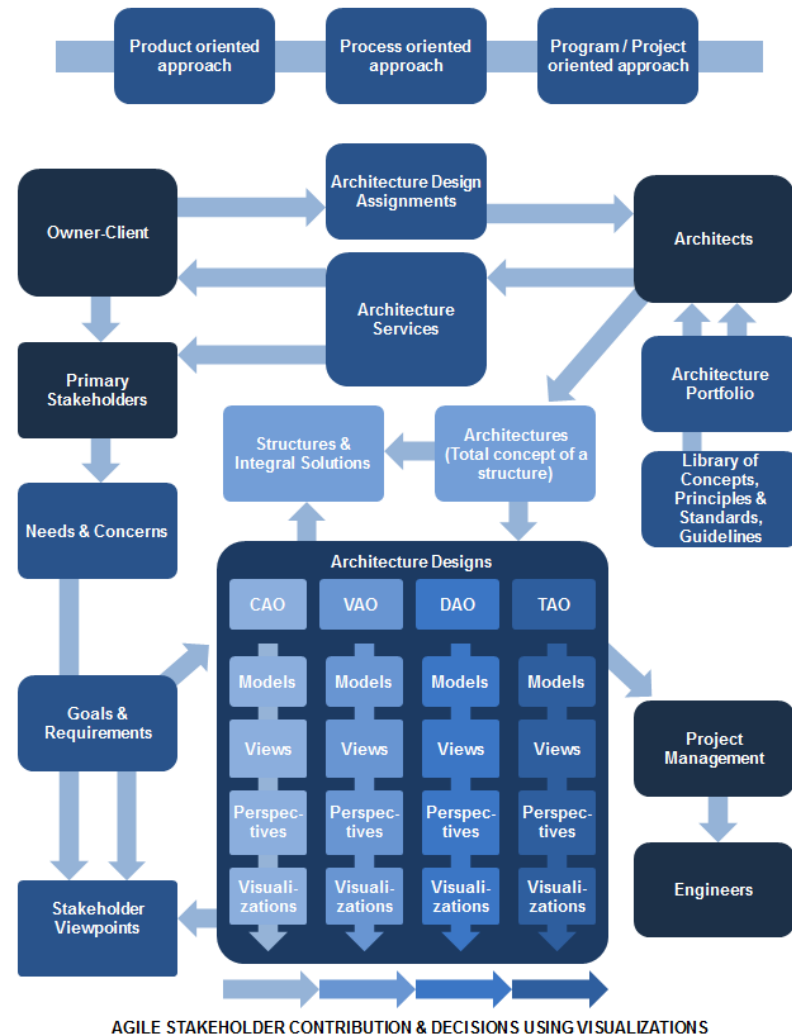
Role Dependent View



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



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!



The End



- Thank you for attending this presentation
- Maybe I have inspired you to respect the presented principles and start visualizing your own principles
- The new true 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>

mark.paauwe@dragon1.com



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
Toyoto
UK Government
KLM
Bank Santander
Provincie Gelderland
Gemeente Noordwijk
-S heerenloo
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 using Dragon1

