



Integrating Volere with Togaf for Requirements Management

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Who we are



Our Mission

- Arismore is an innovative company which helps large companies and government to transform and secure their Information Systems
- Arismore set new criteria based on
 - ✓ HR empowerment
 - ✓ Collaborative intelligence
 - ✓ Balanced actions at enterprise level (consultancy) & on local projects (doer)

Our Offer

- Consulting
 - ✓ Architecture of information systems
 - ✓ Program management
 - ✓ Simplification of technical infrastructure
- Achievement of security solutions of information system
 - ✓ Identity and Access Management
 - ✓ Management of service quality and performance
- Training and certification to practice
 - ✓ Enterprise Architecture and TOGAF®
9
 - ✓ Service Management and ITIL
 - ✓ Identity and Access Management

Arismore represents The Open Group in France through the Architecture Forum France.

Our clients



Revenue : 16 M€ in 2011 - 150 employees - fast growing company



**Telecom
Médias**



**Industry
Utilities**



**Bank
Insurance**



**Retail
Services**



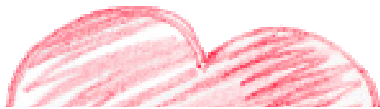
Agenda



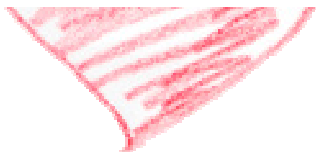
- Our vision
- Volere, a reference
- Requirements Engineering
- Requirements and Cycle
- Requirements and Content
- Requirements and Capability



Togaf[®] is a Requirement Driven approach



ADM = heart of TOGAF[®]
Requirements = heart of ADM



So we need to have a strong, useful and powerful requirement approach.

We think that the Volere approach is a good candidate to complement Togaf[®] on this point.

- Togaf® defines the

What

- ✓ what is recommended to do

- As practioners, we have to

choose the How

- ✓ « how to do the what »

Based on our experience,
we notice that the Volere approach is
a good HOW for requirements.

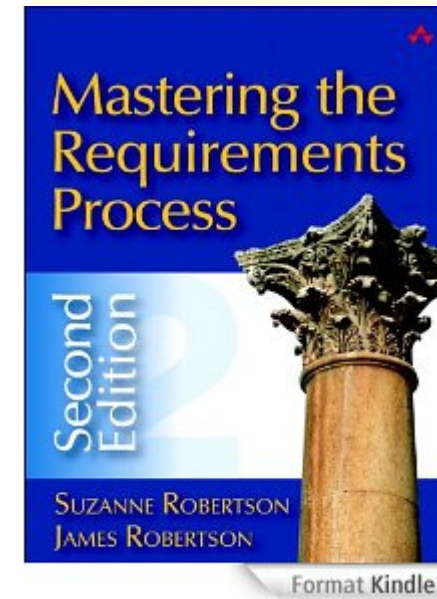
The Volere approach, a reference



- Volere is the umbrella that covers the collection of requirements templates, processes, books, consulting and training
- Since its inception, Volere has been used by thousands of organizations around the world

Please visit
<http://www.volere.co.uk>
for more informations

Volere (Voh-lair-ray)
means « to want »,
« to wish » in Italian



Volere, most known resources



Volere Requirements Specification Template

- Project Drivers
- Project Constraints
- Functional Requirements
- Non-functional Requirements
- Project Issues

Volere Atomic Requirement Shell

Requirement #:	75	Requirement Type:	9	Event/BUC/PUC #:	7, 9
Description:	The product shall record all the roads that have been treated				
Rationale:	To be able to schedule untreated roads and highlight potential danger				
Originator:	Arnold Snow - Chief Engineer				
Fit Criterion:	The recorded treated roads shall agree with the drivers' road treatment logs and shall be up to date within 30 minutes of the completion of the road's treatment				
Customer Satisfaction:	3	Customer Dissatisfaction:	5		
Dependencies:	All requirements using road and scheduling data		Conflicts:	105	
Supporting Materials:	Work context diagram, terms definitions in section 5				
History:	Created February 29, 2010				

Volere
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for more informations

Volere, not new for Togaf®



Referenced Documents

- The Volere web site has a useful list of leading requirements tools: www.volere.co.uk/tools.htm.

Excerpt from TOGAF® 9.1

17.2.3 Resources

The world of requirements engineering is rich with emerging recommendations and processes for requirements management. TOGAF does not mandate or recommend any specific process or tool; it simply states what an effective requirements management process should achieve (i.e., the “requirements for requirements”, if you like).

17.2.3.1 Business Scenarios

One effective technique that is described in TOGAF itself is business scenarios, which are an appropriate and useful technique to discover and document business requirements, and to articulate an Architecture Vision that responds to those requirements. Business scenarios are described in detail in Part III, Chapter 26.

17.2.3.2 Requirements Tools

There is a large, and increasing, number of Commercial Off-The-Shelf (COTS) tools available for the support of requirements management, albeit not necessarily designed for architecture requirements. The Volere web site has a very useful list of leading requirements tools (see www.volere.co.uk/tools.htm).

Excerpt from TOGAF® 9.1

Volere already cited in
Togaf® 8

ADM Architecture Requirements Management

Approach

17.2.2.2 Volere Requirements Specification Template

Architecture requirements is very much a niche area within the overall requirements field. One useful resource is the Volere Requirements Specification Template, available from Volere⁴ (refer to www.volere.co.uk/template.htm). While not designed with architecture requirements in mind, this is a very useful requirements template, which is freely available and may be modified or copied (for internal use, provided the copyright is appropriately acknowledged).

One interesting item in this template is the “waiting room”, which is a hold-all for requirements in waiting. There are often requirements identified which, as a result of the prioritization activity that forms part of the requirements management process (see below), are designated as beyond the planned scope, or the time available, for the current iteration of the architecture. The waiting room is a repository of future requirements. Having the ability to store such requirements helps avoid the perception that they are simply being discarded, while at the same time helping to manage expectations about what will be delivered.

17.2.2.3 Requirements Tools

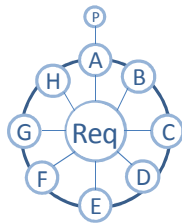
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Excerpt from TOGAF® 9

Our view on TOGAF®



CYCLE



ADM

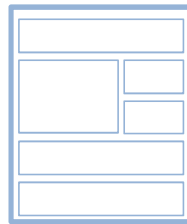


Techniques for the ADM

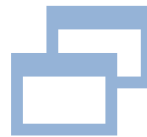


Guidelines for the ADM

CONTENT



Repository



Classifications: Continuum and Reference Models

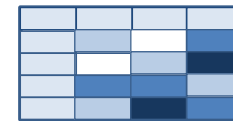


Typical Content: artifacts, viewpoints, deliverables

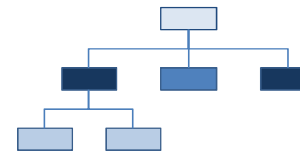
CAPABILITY



Governance



Skills



Organization

Requirements are everywhere in Togaf®



- Cycle

- ✓ In which we discover requirements and search the options to satisfy them and we guide the design and the building of the best/preferred option, based on requirements coverage

- Content

- ✓ In which we stock and trace the requirements, and we provide templates for viewpoints and deliverables to explicit and document the requirements

- Capability

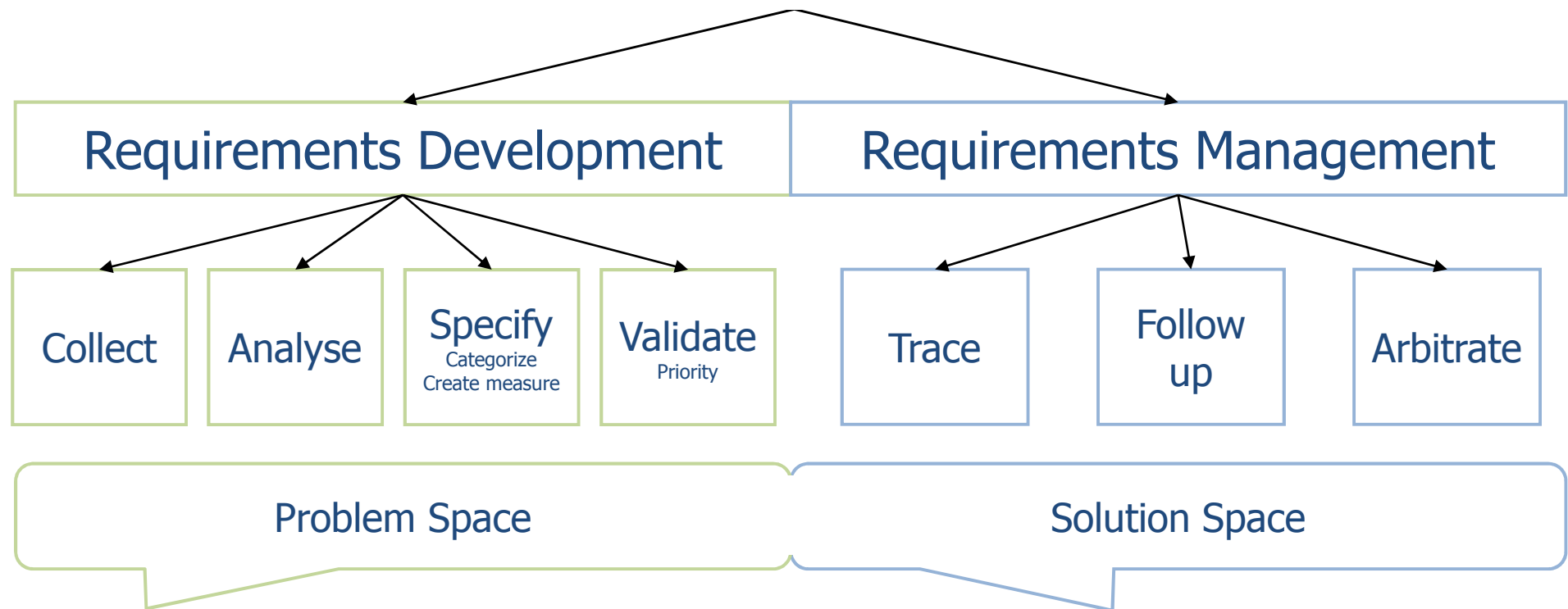
- ✓ In which we define and develop skills to have the right Business Analyst(s) and we organise and govern the right way to develop and manage requirements

Volere is useful for all parts

What we call Requirements Engineering



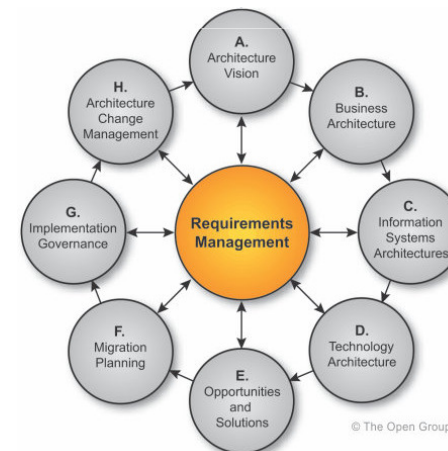
Requirements Engineering



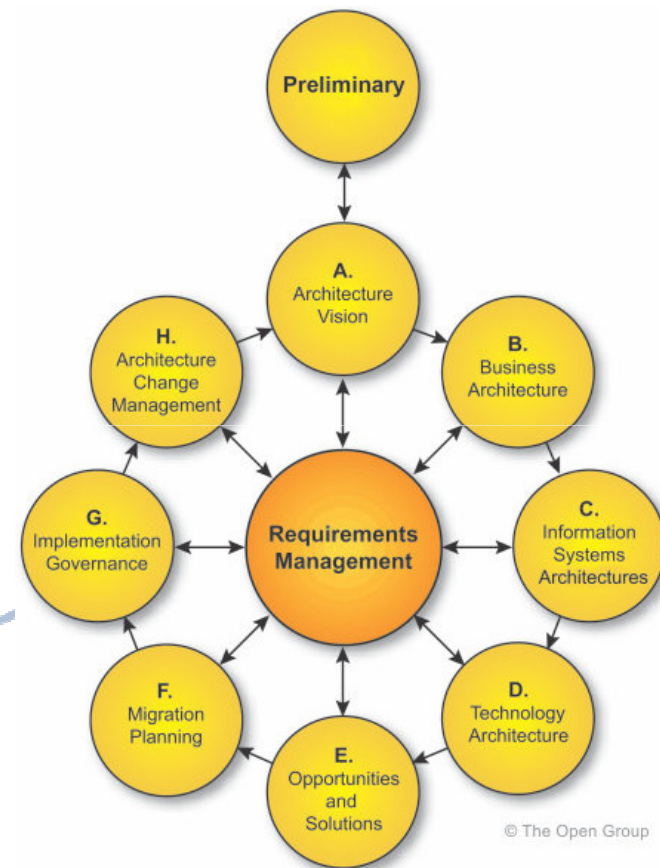
Requirements Engineering

Requirements Development

Requirements Management



Requirements and Cycle

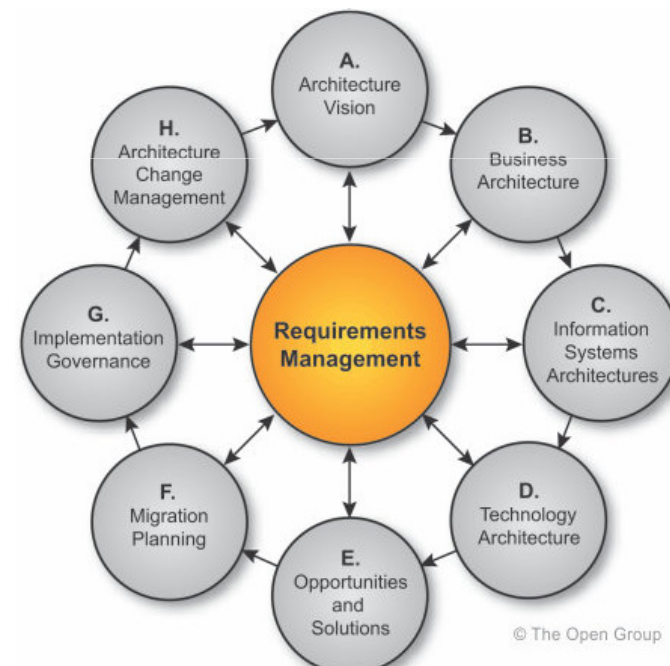
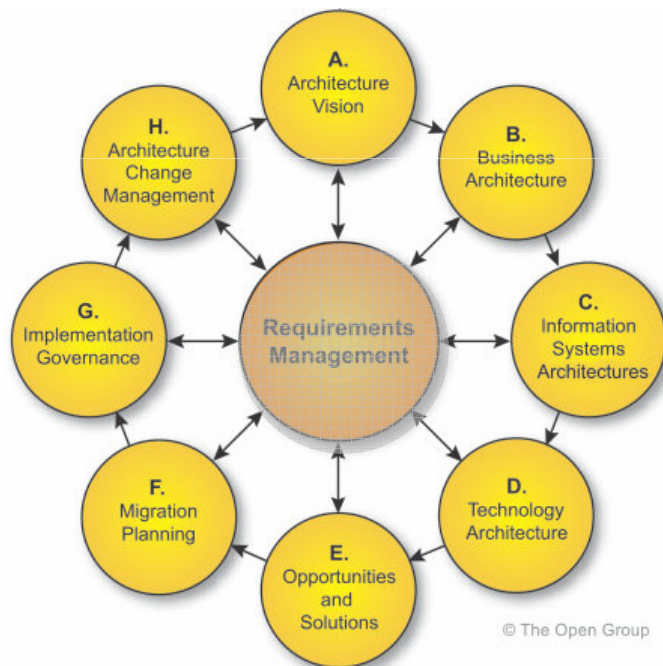


Key points where Volere should help for the cycle



- Scope
- Blastoff

- Fit criteria
- Quality gateway



Phase A: Architecture Vision

The steps in Phase A



- Establish the architecture project
- Identify stakeholders, concerns, and business requirements
- Confirm and elaborate business goals, business drivers, and constraints
- Evaluate business capabilities
- Assess readiness for business transformation
- Define scope
- Confirm and elaborate Architecture Principles, including business principles
- Develop Architecture Vision
- Define the Target Architecture value propositions and KPIs
- Identify the business transformation risks and mitigation activities
- Develop Statement of Architecture Work; secure approval

Potential contributions of Volere

Scope of the project



- Discovering and iterative adjustments of three parts



The Project Blastoff



- Project blastoff should apply to an ADM Cycle
- Project blastoff is the Volere way
 - ✓ To start Stakeholders Management
(Cf. Togaf®, Part 3: Techniques for the ADM)
 - ✓ "Secure approval" (last step of Phase A)
 - ✓ Create a strong basis to develop the requirements

Project Blastoff

« In which we establish a solid foundation for the requirements, and ensure that the members of the project team all start rowing in same direction »

Mastering requirements Process, 2nde Edition

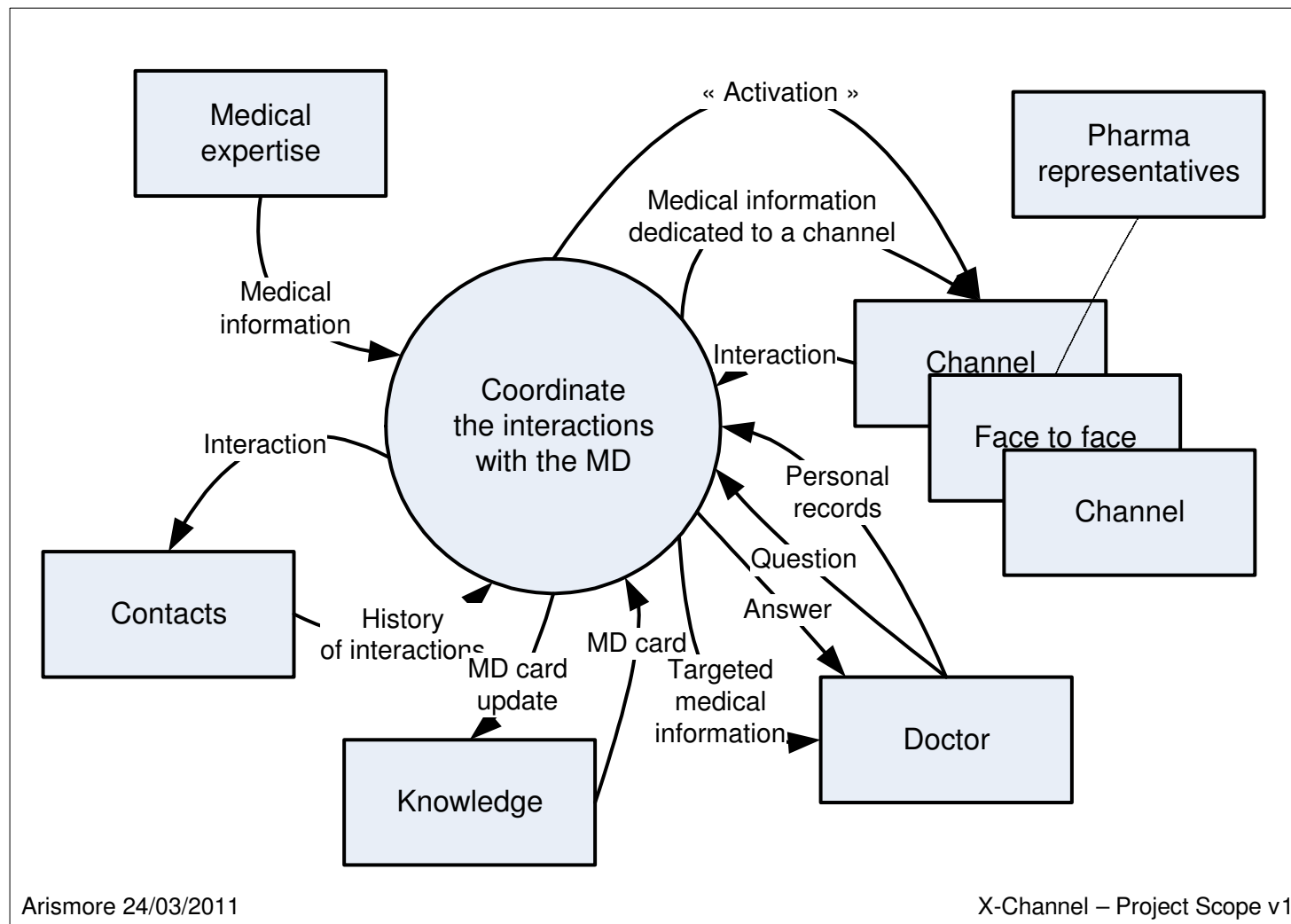
Develop Architecture Vision

Start with a Work Context Diagram

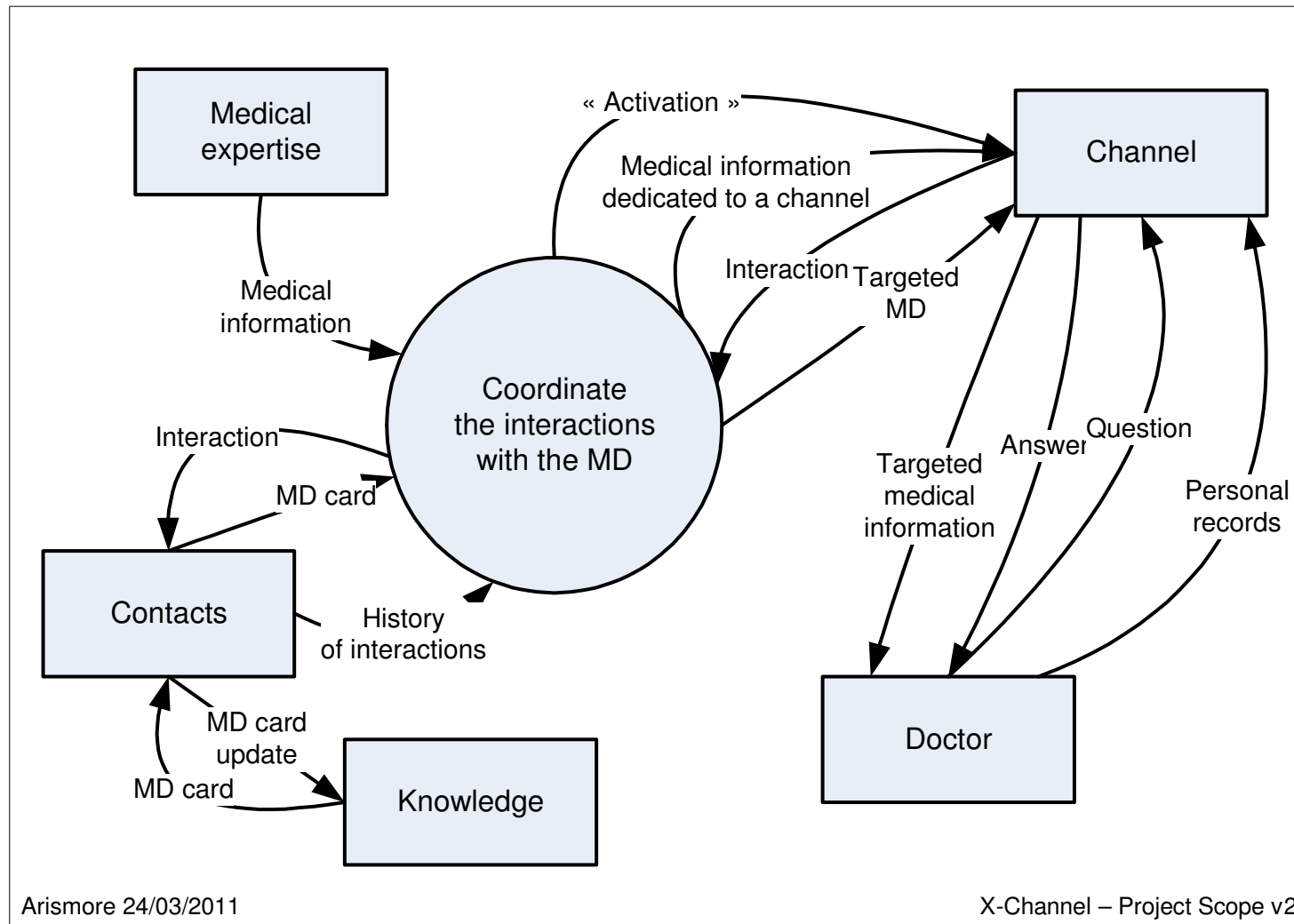


- Volere proposes the creation of a Work Context Diagram
- After real life tries, we discover that a good Work Context session is a good start to envisage the Architecture Vision
- Because the work context diagram :
 - ✓ focuses on the work to change (capability increment)
 - ✓ identifies business events and data flow within the scope and with the scope and adjacents systems
 - ✓ identifies what will be done by the product (i.e. IS and IT within Togaf) and by the users (i.e. Business)

Develop Architecture Vision Example



Develop Architecture Vision Example



Ensure relevant architecture requirements



The objectives of the Requirements Management phase are to:

- **ensure** that the Requirements Management process is sustained and operates for all relevant ADM phases
 - **manage** architecture requirements identified during any execution of the ADM cycle or a phase
 - **ensure** that relevant architecture requirements are available for use by each phase as the phase is executed
- Volere is dedicated to requirements development, but two strong ideas will **ensure** « relevant architecture requirements »
 - ✓ Fit criteria
 - ✓ Quality gateway

Fit criteria



- The fit criteria define an acceptance test for any solution trying to cover the requirement
- The fit criteria should be used for selecting or qualify Architecture Building Blocks and Solution Building Blocks
- The fit criteria should be part of an architecture contract
- The fit criteria would help developers and testers during the realization project

Fit Criteria

« In which we show how measuring a requirement makes it unambiguous, understandable, and, importantly, testable »

Mastering requirements Process, 2nde Edition

Quality Gateway

Don't put garbage into your Requirements Repository



- The Quality Gateway is the activity where each requirement is tested to ensure its suitability and testability
- Volere proposes a « sanity check » of a requirement
- It is meant to be easy, fast and light
- Volere suggests a pair of gatekeepers
 - ✓ Lead business analyst to ensure the suitability of the requirement
 - ✓ A tester to ensure the testability of the requirement

Quality Gateway

« In which we prevent unworthy requirements becoming part of the specification »

Mastering requirements Process, 2nde Edition

Requirement based Governance for the ADM

1) Go ahead or continue



Deciding when go ahead during the ADM should be based on the answer

- ✓ Do this activity help us to discover new requirement(s) ?
 - if yes then continue, else go ahead
- ✓ Do this activity help us to find a new / better solution, i.e. that enhance the coverage of requirements ?
 - if yes then continue, else go ahead

Requirement based Governance for the ADM

2) Prioritise



- Phase E : choose the scenario which have the best requirement coverage
 - ✓ tip : consider costs and time as special kind of requirement
- Priorisation: a simple but powerful approach
 - ✓ Priority = Customer Satisfaction + Customer Unsatisfaction
 - ✓ Basic math i.e. no hidden politics in the formula

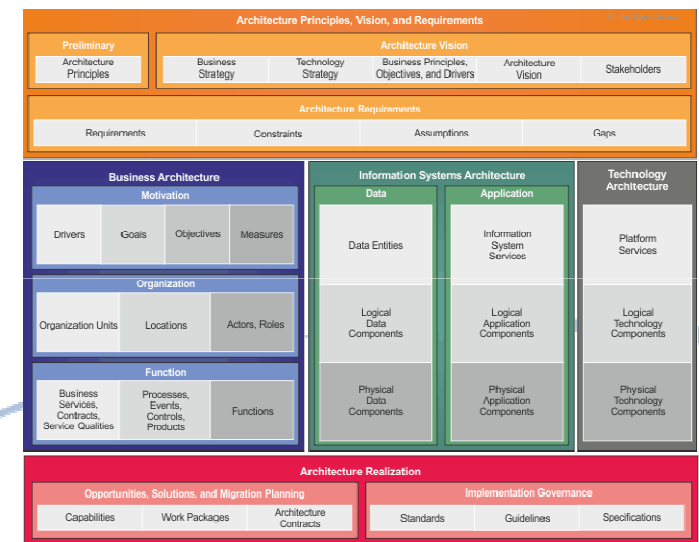
		Customer satisfaction					Customer unsatisfaction
		1	2	3	4	5	
1	2	2	3	4	5	6	
2	3	3	4	5	6	7	
3	4	4	5	6	7	8	
4	5	5	6	7	8	9	
5	6	6	7	8	9	10	

Low priority

Medium priority

High priority

Requirements and Content



Key points where Volere should help for the content



- A taxonomy for Non Functional Requirements
 - ✓ 10. Look and Feel Requirements
 - ✓ 11. Usability and Humanity Requirements
 - ✓ 12. Performance Requirements
 - ✓ 13. Operational and Environmental Requirements
 - ✓ 14. Maintainability and Support Requirements
 - ✓ 15. Security Requirements
 - ✓ 16. Cultural and Political Requirements
 - ✓ 17. Legal Requirements
- A good viewpoint and template for requirements

Snowcard



Viewpoint for atomic requirement

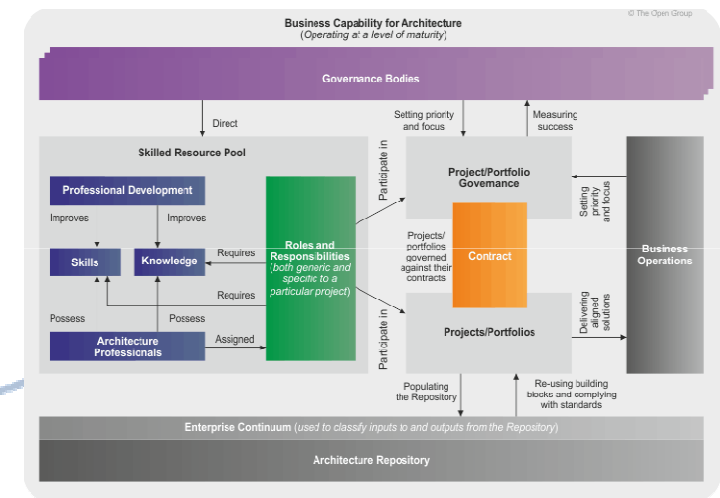


- « Snowcard » is a good template for describing a requirement
- « Snowcard » should be considered as a viewpoint
 - ✓ Stakeholder: any
 - ✓ Concern: Is my requirement well defined, clear, complete, testable, prioritised and validated ?

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Requirements and Capability



Key points where Volere should help for the capability



- Identify and develop skills
 - ✓ The whole Volere process
 - ✓ Trawling techniques
 - You may also complete with Babok® and agile approaches
 - Not only business scenarios!
 - ✓ Soft skills: Dialogue, Negotiation, Teamwork....
 - Soft skills are already listed in the Togaf® Skill Framework

BA is not BA

Business
Analyst
=
Requirements



Business
Architect
=
Business
modelling

You need these two different
and complementary roles in your team