



Polarion Software®

ALM tools: past, present & future

Stefano Rizzo
VP Strategy, Polarion Software
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Where do we come from?

ALM: yesterday

Where do we come from?



ALM: yesterday

Where do we come from?



Application Lifecycle Management (ALM) is a continuous process of managing the life of an application through governance, development and maintenance. **ALM is the marriage** of business management to software engineering made possible by tools that facilitate and **integrate** *requirements management, architecture, coding, testing, tracking, and release management.*

Wikipedia – from Jennifer deJong “Mea culpa, ALM toolmakers say,” SDTimes, April 15, 2008.

The administration and control of an application from inception to its demise. It embraces *requirements management, system design, software development and configuration management* and implies an **integrated** set of tools for developing and **controlling** the project.

PC Magazine Encyclopedia

Abbreviated as ALM, Application Lifecycle Management refers to the capability to **integrate**, coordinate and manage the different **phases** of the software delivery process. From development to deployment, ALM is a set of pre-defined process and tools that include *definition, design, development, testing, deployment and management*. Throughout the ALM process, each of these steps are closely monitored and controlled.

Wobopedia

Where do we sit today?

ALM encompasses the practices, processes and tools that aid in the management of the application development life cycle, specifically the workflow and artifacts associated with producing or maintaining a custom software application.

Key capabilities include *change management*, *workflow and work item* management, and an integration backplane that allows an organization to establish **traceability** and **accountability** across multiple processes, multiple locations, multiple tool types, and multiple tools of each type across the stages of development and delivery.

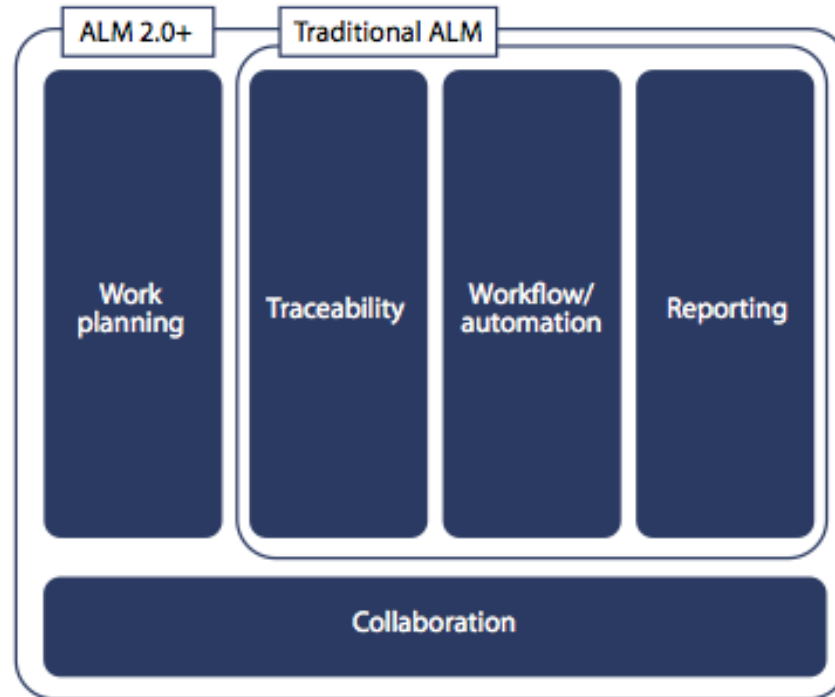
Gartner

Application lifecycle management **coordinates** people, processes, and tools in an iterative cycle of inter-related activities, including *definition, design, development, testing, deployment, and management*.

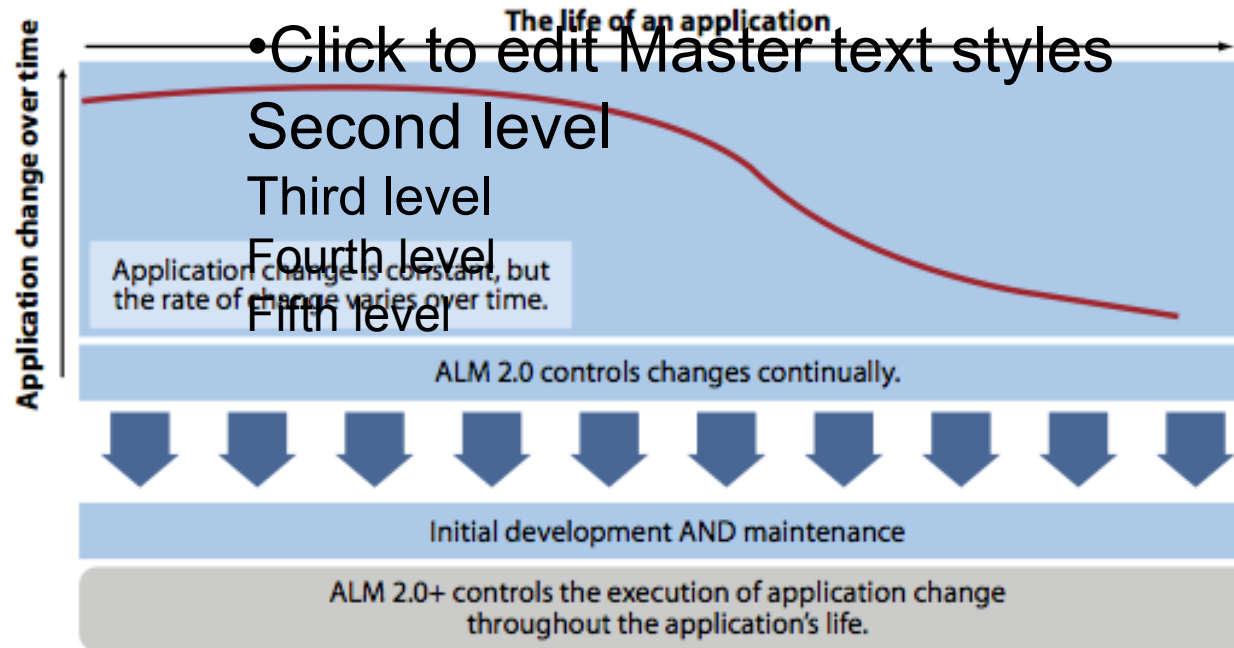
IBM Rational

ALM: today

Actual (future) definitions

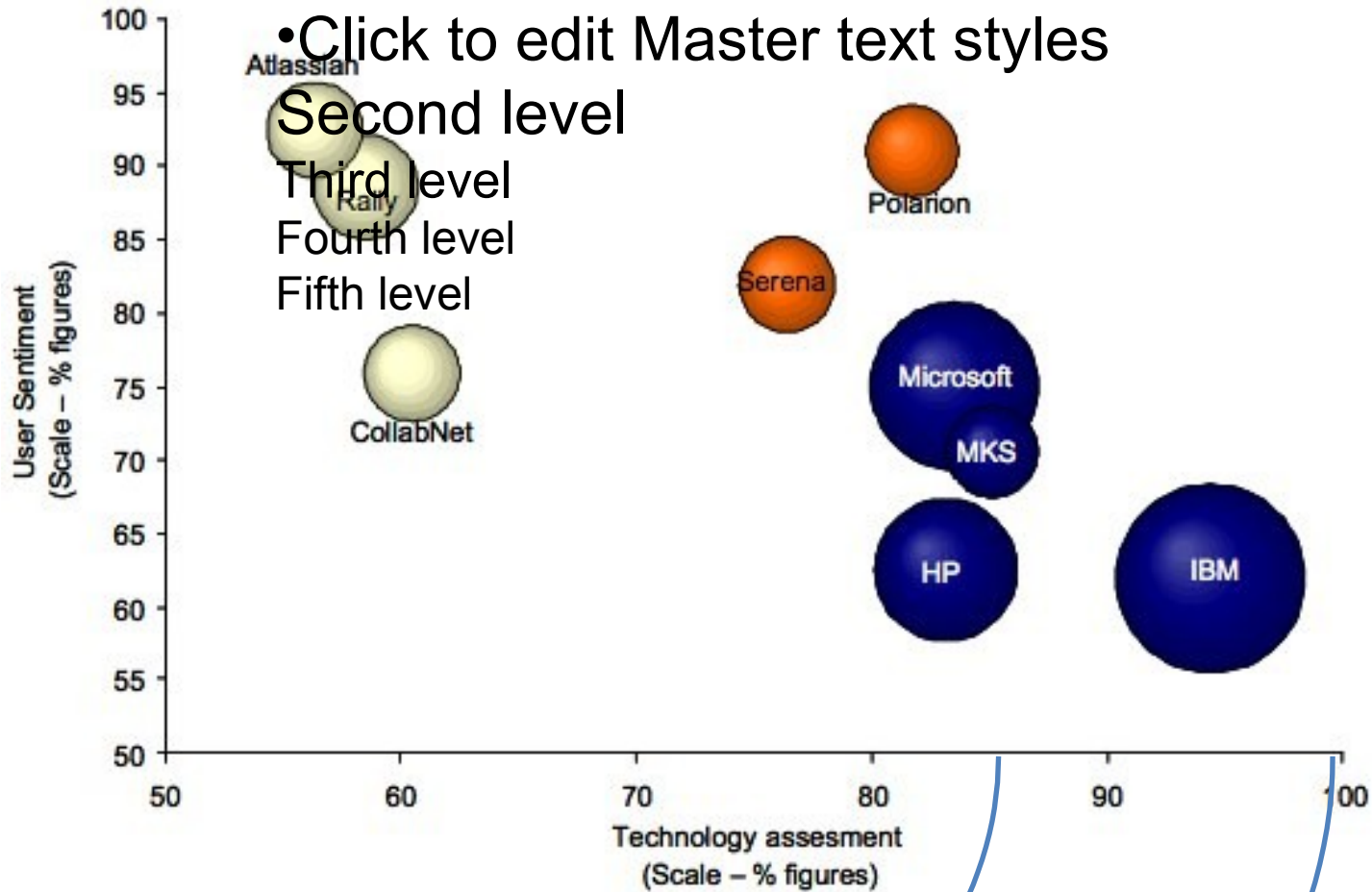


Source: Forrester Research, Inc.



ALM: today

Ovum ALM Decision Matrix



ALM: today

ALM history so far



ALM: today

ALM meets PLM



Where are we going to
tomorrow?

The ALM expedition

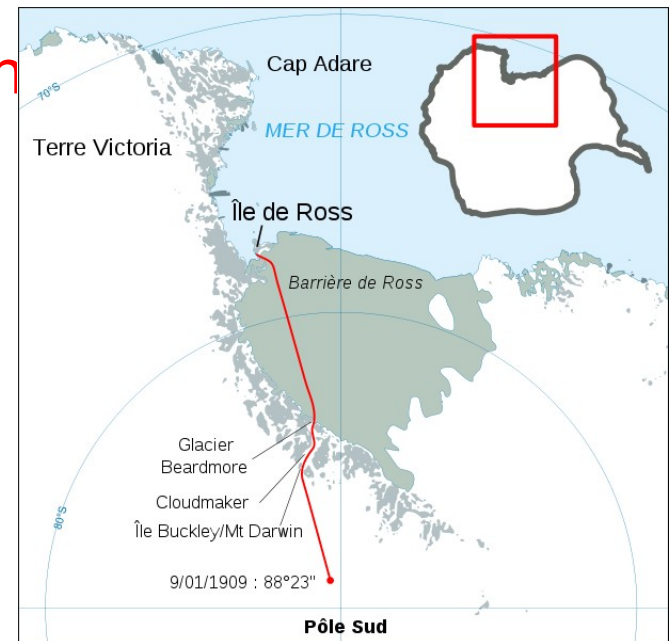
Where are we going to?

- Our landscape (i.e. lifestyle 2011)

Flat and **multi-disciplinary** world

People bored (**buried?**) by technology

I like to change and **in**



The ALM expedition

Multidisciplinary



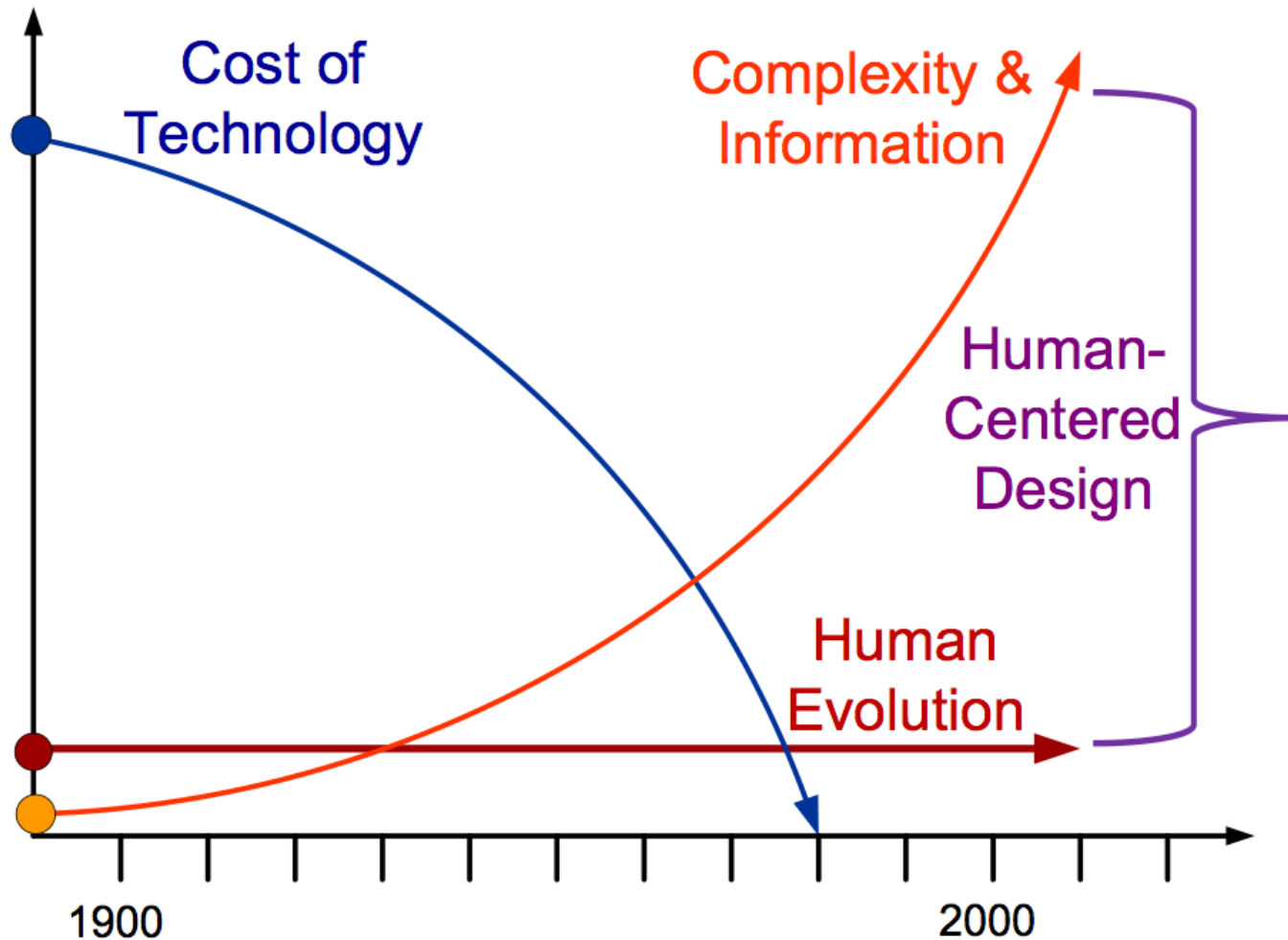
Society's problems are getting harder, broader, and deeper and are multidisciplinary in nature.

Engineers must provide high value by being immediate, innovative, integrative, conceptual, and multidisciplinary.



The ALM expedition

An new (easy) place



The ALM expedition

We need innovation

- Innovation

Innovation is Local.

You don't import it.

You don't export it.

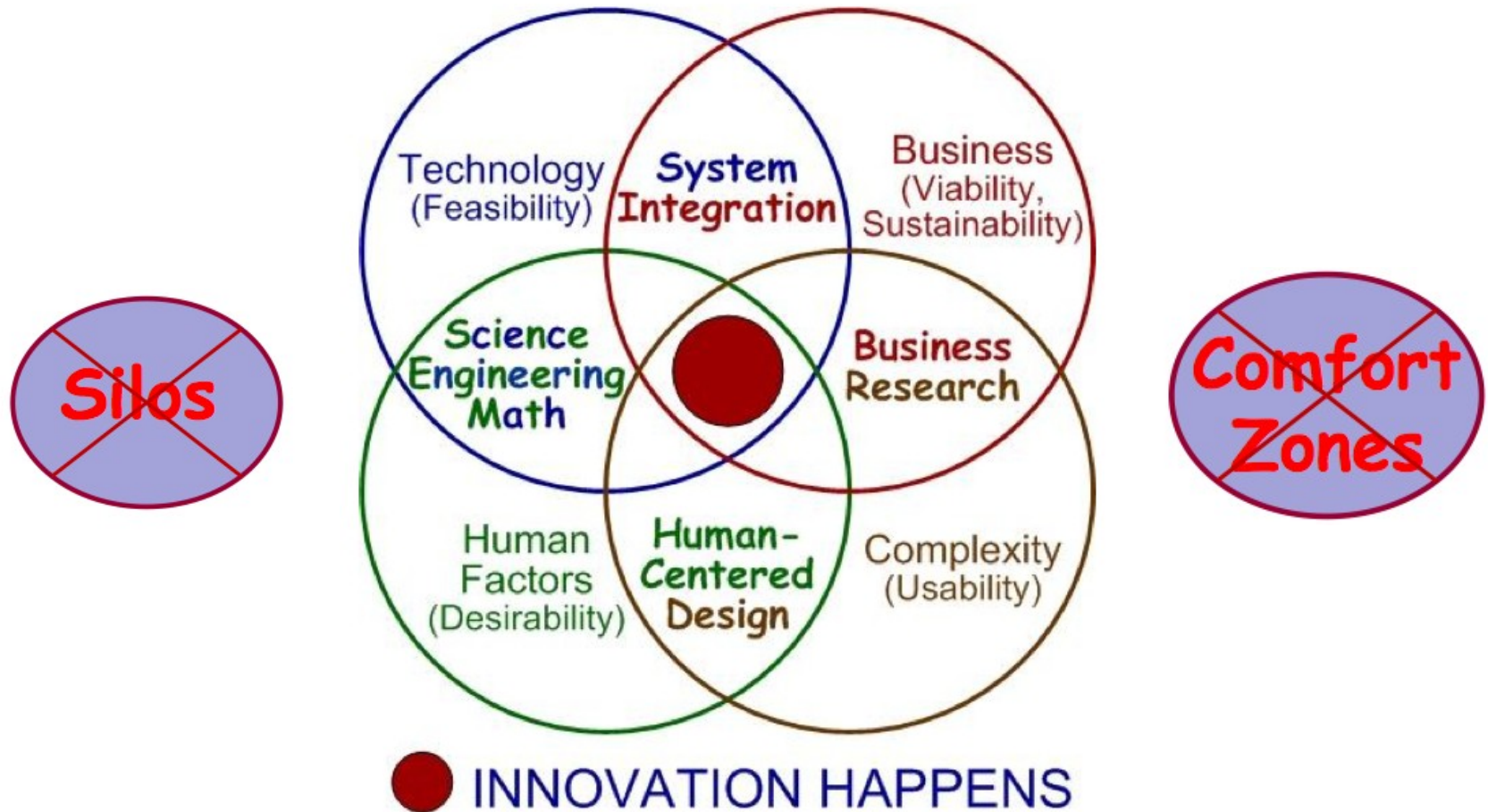
You create it.

It is a way of thinking,
communicating, and doing.



The ALM expedition

A place to innovate



- The place where innovation happens today is in documents.

Business plan

Financial plan

Feasibility study

Product plan

Product vision

Product specification

Technical specification

Requirements specification

Bill of material

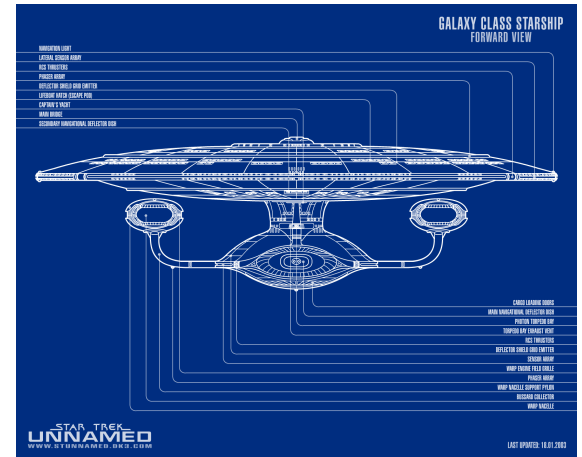
...



The ALM expedition

Innovation

- What are the problems with documents?
 - they represent comfort zones
 - collaboration is difficult
 - they give the chance to hide engineering in art
 - they are monolithic



- What is a document?

A document is a container of statements.

Innovation is in statements, not in documents.

Statements are kept in documents prisons.

- A statement is:

“A kind of expression in language” (Wikipedia)

Any language

Natural

Programming

Modeling

Sketching



“That’s our new mission statement.”

Music, media and players

Media evolution

In the beginning

- There was the record



Media evolution

Then ...

- There was the record
- ...came the tape



Media evolution

Then ...

- There was the record
- ...came the tape
- ... the CD



- The media and the player:

Live together

One is the reason of the other

The player evolves and you throw away all the media

And you have to buy another medium or try to convert your
music

Media evolution

Then ...

- There was the record
- ...came the tape
- ... the CD
- ... then **WHAT?**

JUST MUSIC



- Digital music files:

Rescued music from the Medium

You own your music, not the support on which it lies

You can even use your old players

(well... recording vinyl is not that easy....)

AND THESE WERE THE THREE KEYS OF SUCCESS

Statements, media and “players”

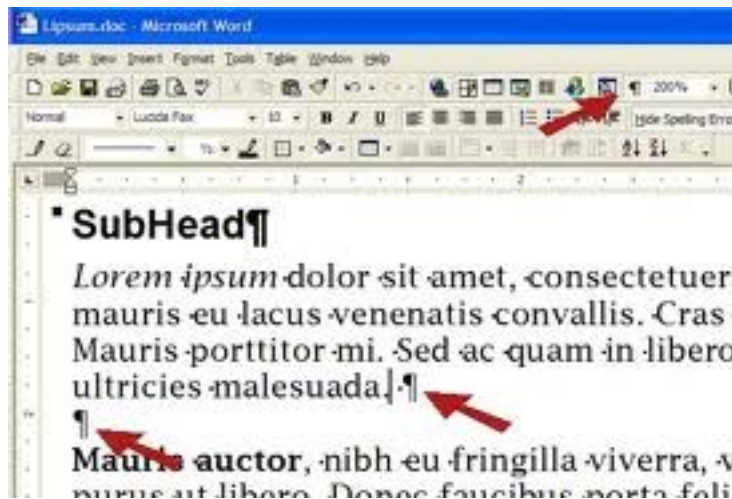
- There was the paper



StaM evolution

Then...

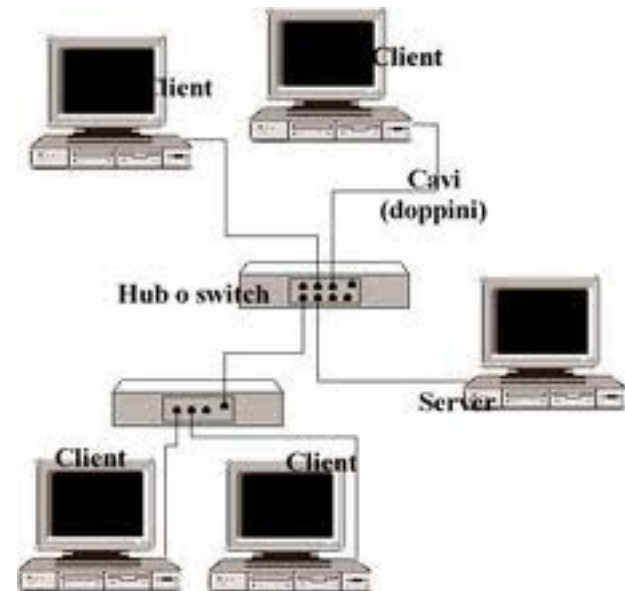
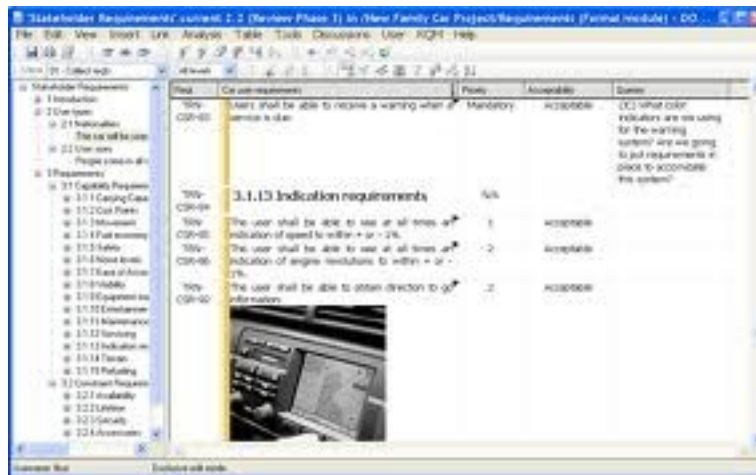
- There was the paper
- ...came the .doc



StaM evolution

Then...

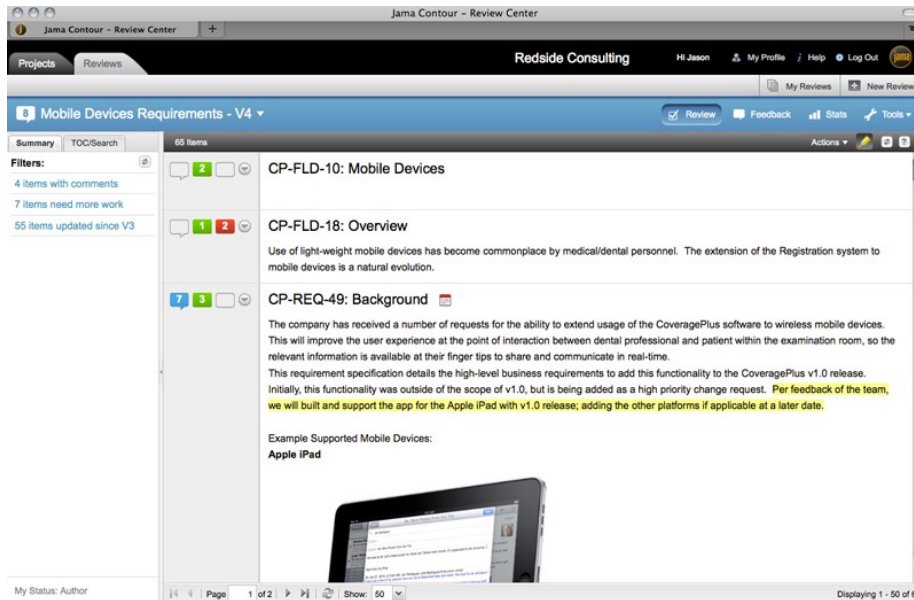
- There was the paper
- ...came the .doc
- ...came the *ALM tool*



StaM evolution

Then...

- There was the paper
- ...came the .doc
- ...came the *ALM tool*
- ...came the Web ALM



- The media and the player:

Live together

One is the reason of the other

The player evolves and you throw away all the media

And you have to write your statements again or try to
convert them

Media evolution

Then ...

- There was the paper
- ...came the .doc
- ...came the *ALM tool*
- ...came the web ALM
- ... then **WHAT?**

JUST STATEMENTS



ALM tomorrow

- Statement Management:

Will rescue statements from the Medium

You will own your statements, not the support on which they lie

You can even use your old players

(well... using papyrus will not be that easy....)

AND THESE WILL BE THE THREE KEYS OF SUCCESS



- Technology should be:
 - Connecting (flat world) - embrace multiple disciplines
 - Easy (bored by technology) - cover the evolution gap
 - Adaptive (change) - to embrace innovation
- ALM should be:
 - Connecting – instant collaboration on statements
 - Easy – embed process knowledge
 - Adaptive – manage any statement on any media

- ALM will be:

The place to share experience (connecting)

Instant collaboration on statements, anywhere

The place where ALM drives you (easy)

Embed process knowledge, any process

A multidisciplinary place (no)

Common denominator of knowl

A familiar place (easy)

We've been ever dealing with

A place to innovate (adapt)



- The innovation in ALM will have benefits like:
 - Save time to learn tools and processes
 - Less knowledge silos
 - Less comfort zones
 - Increased *brains* collaboration, anytime, everywhere
 - Automated forensic reports
 - Better ways to do things (better processes)
 - Huge impact on PLM





ALM is an easy, distributed, multichannel and dynamic **collaboration environment** where different disciplines meet in order to create and manage innovation in application and product development.



ALM provides the **embedded process knowledge** and the **statements management capabilities** needed by all the stakeholders that collaborate in the production and maintenance of applications and products.



The goal of ALM is to **steward the talent of people and leverage their collaboration** by automating clerk jobs like traceability assurance or forensic reporting.

Stefano Rizzo



Thank you

stefano.rizzo@polarion.com