Introducing the Canadian ISTAR Information Centric Collaborative Workspace

Paper Four:

From an Implementation Perspective

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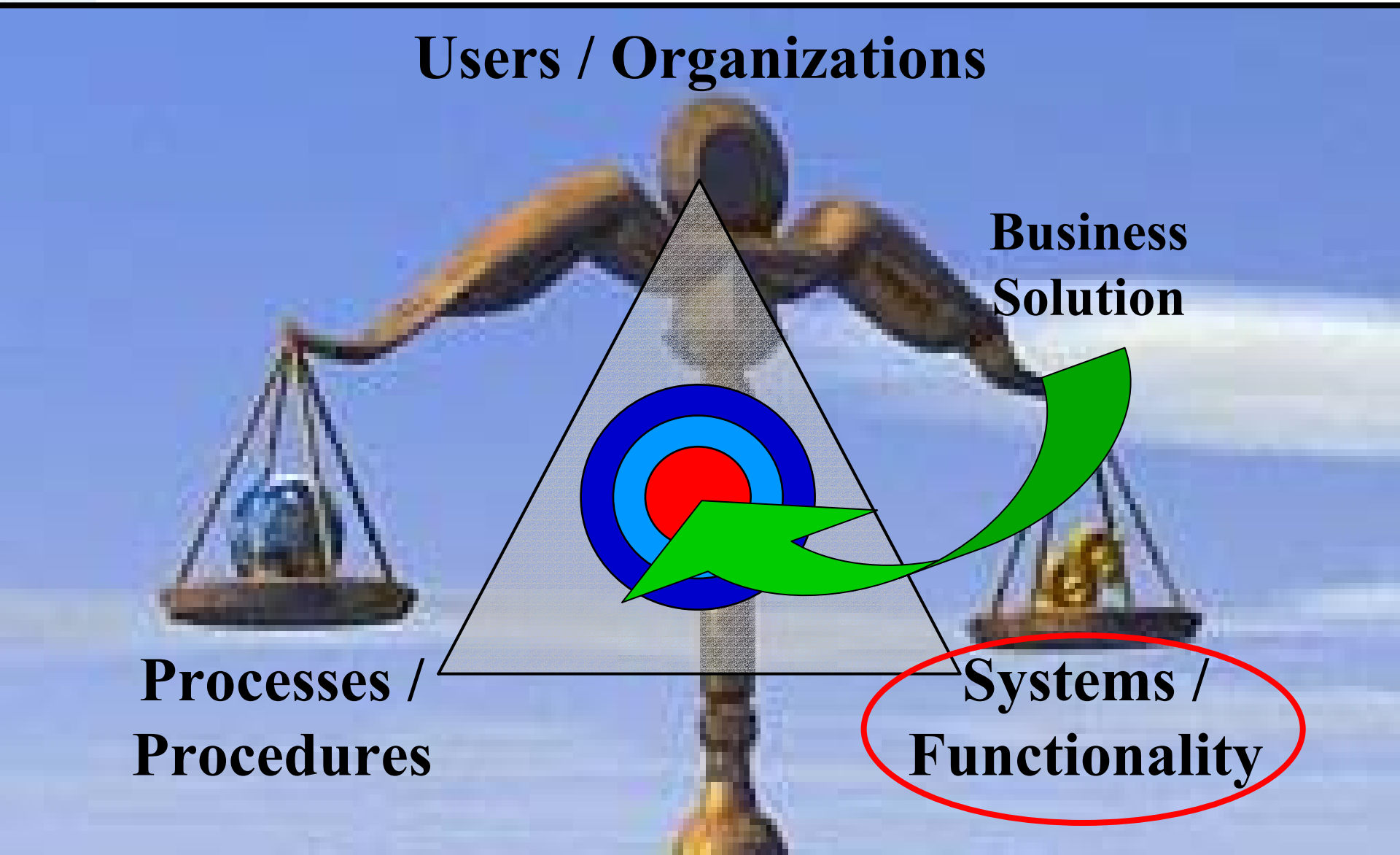
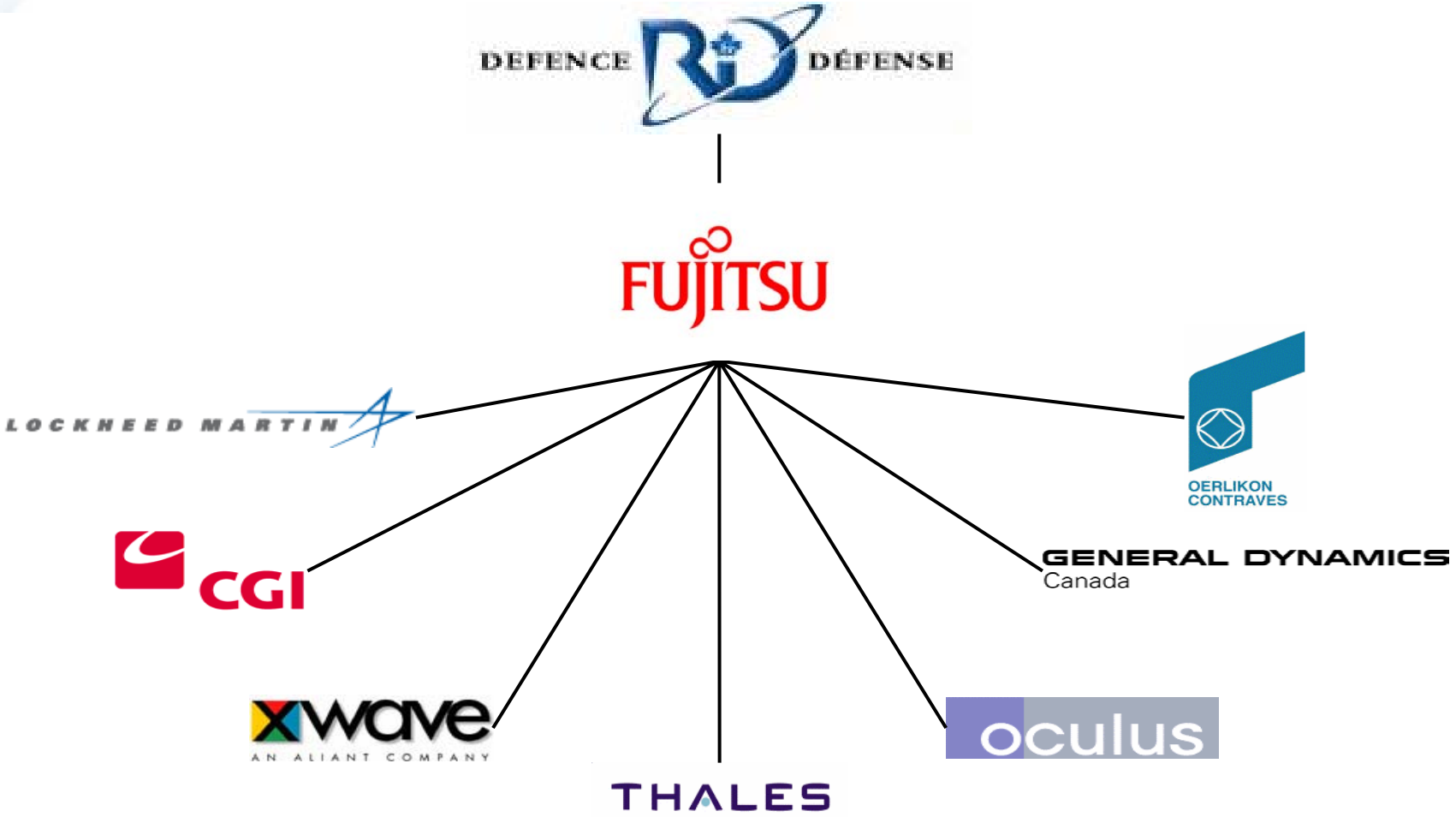
PERSPECTIVE AND BALANCE
System of Systems Harmony Triangle



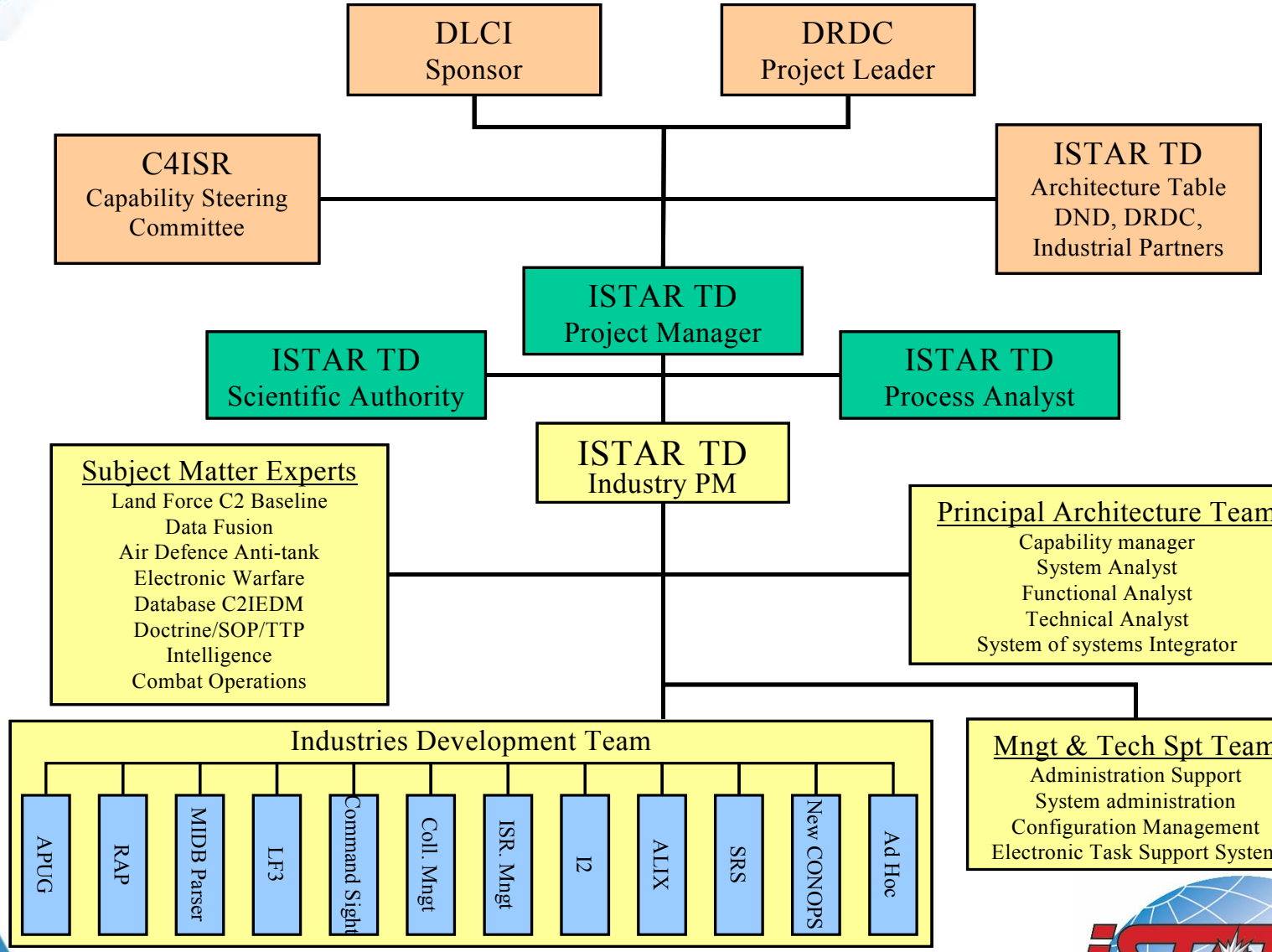
ISTAR TD Implementation Objectives

- Transition ability
  - Transition ability and viability of a solution requires to look at the big picture (holistic perspective).
- Intelligence
  - Main focus of ISTAR TD on intelligence functions.
- Fusion
  - Land fusion level 2, 3 and 4 is far more complex than expected.
- Dynamics
  - LFC2IS baseline addresses the planning and the viewing of operations.
  - We looked at the complete decision-action cycle of operations.

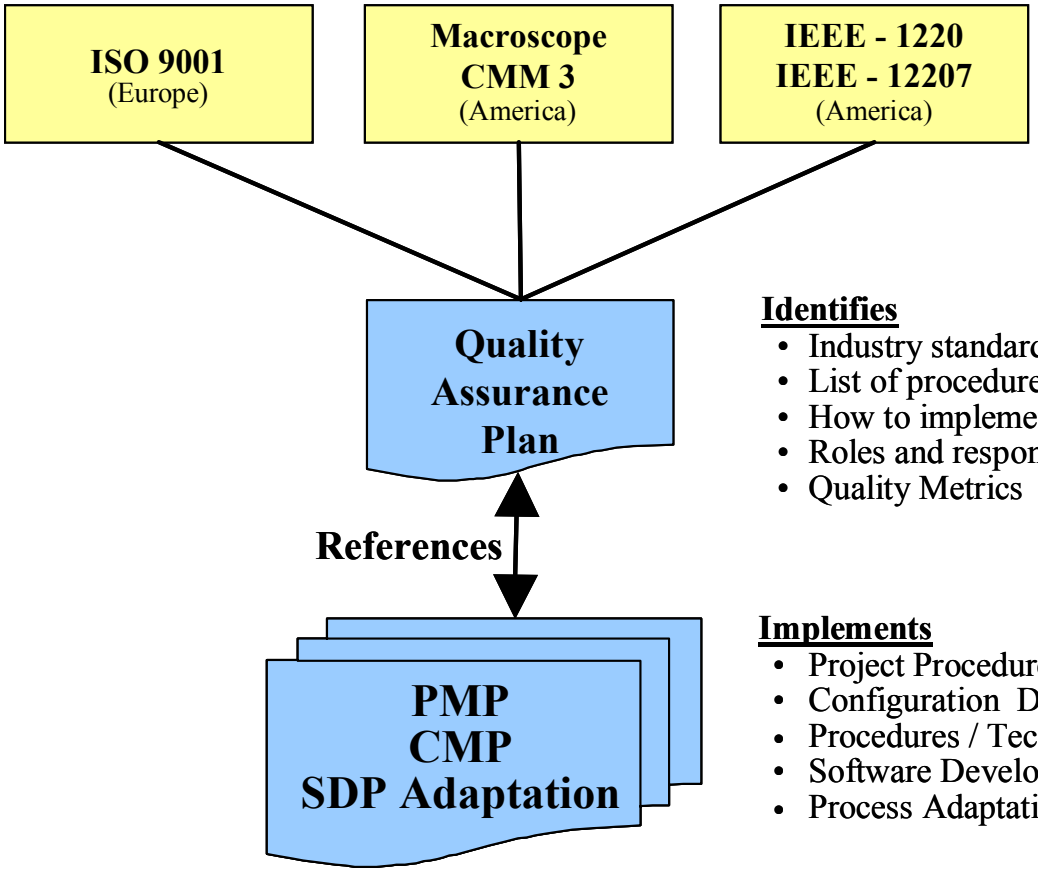
Multidisciplinary Teams



Program Organization Chart



Methodology



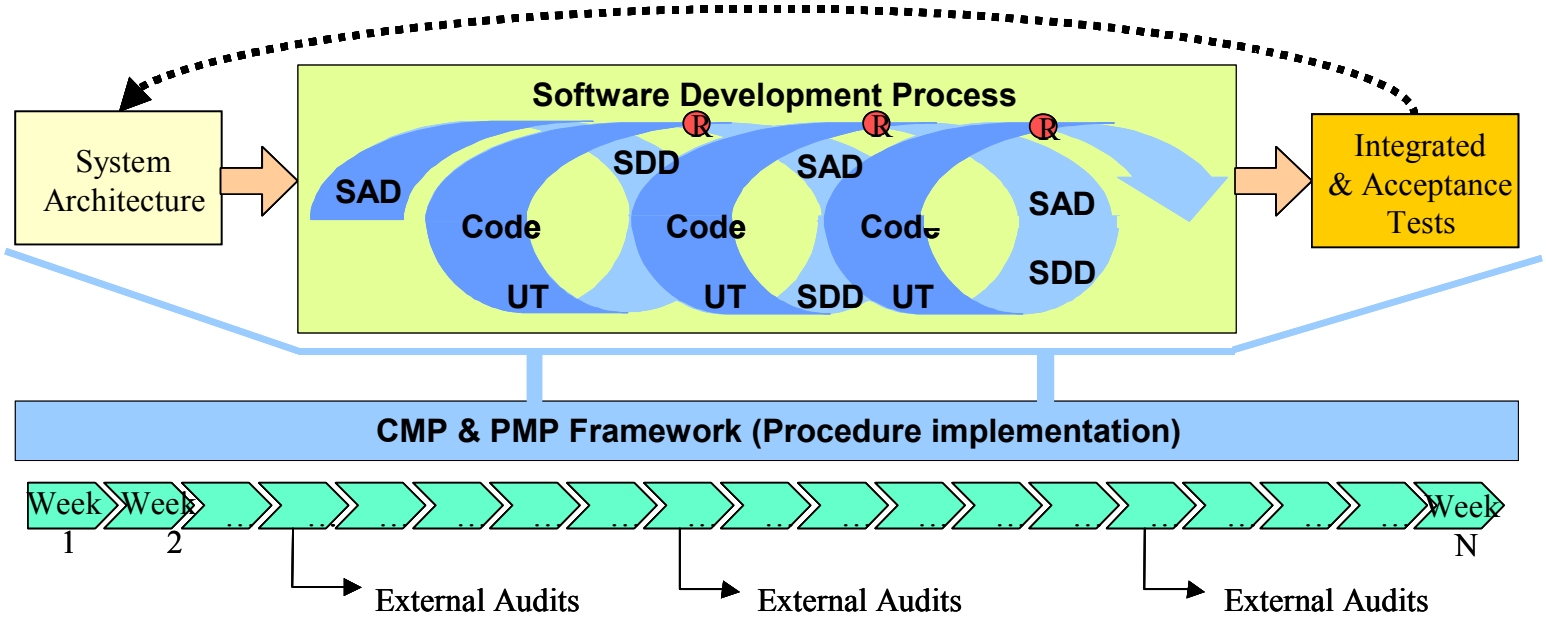
Identifies

- Industry standard requirements
- List of procedures to comply with
- How to implement it (Strategy)
- Roles and responsibilities
- Quality Metrics

Implements

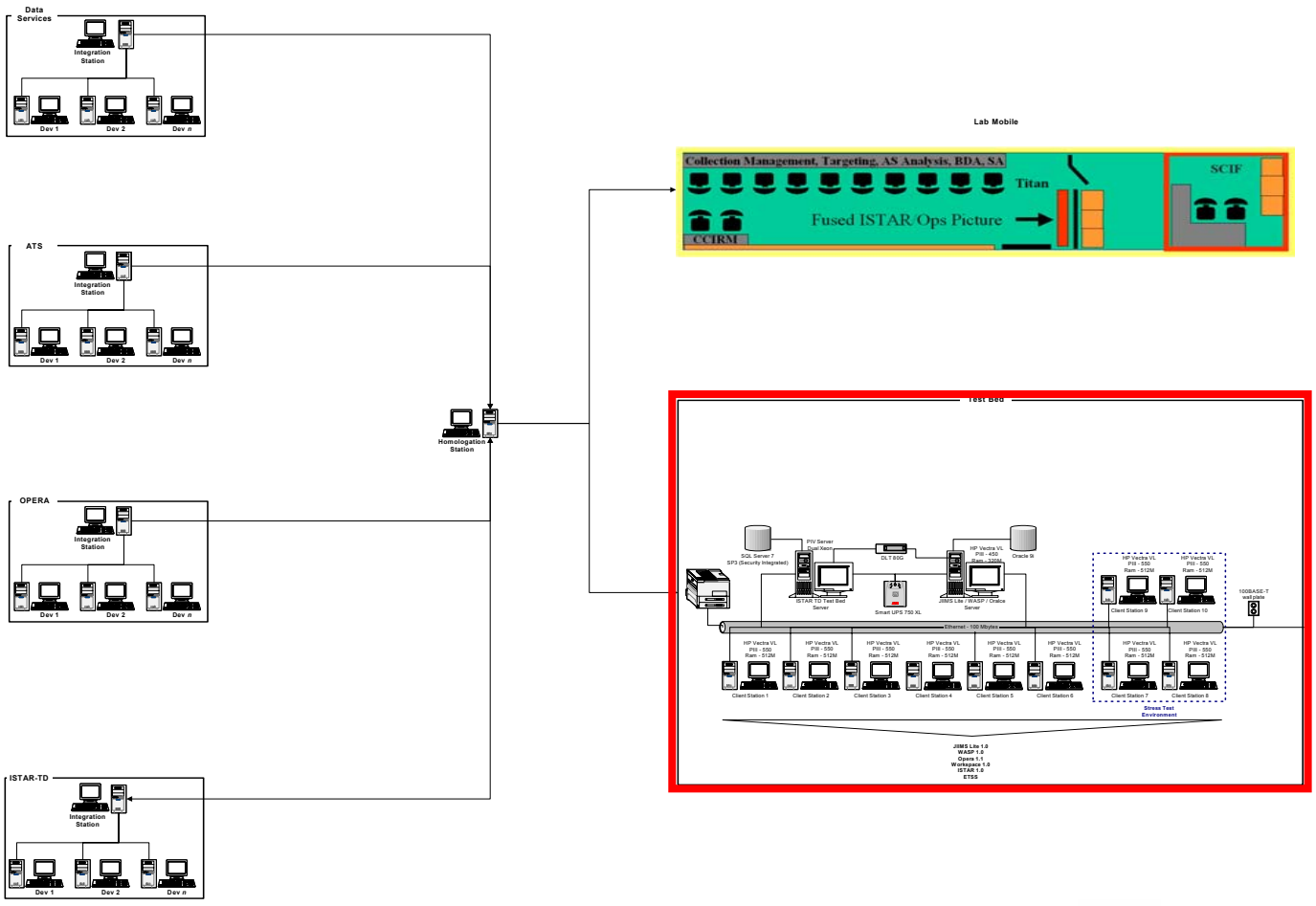
- Project Procedures
- Configuration Development
- Procedures / Techniques
- Software Development
- Process Adaptation

Approach

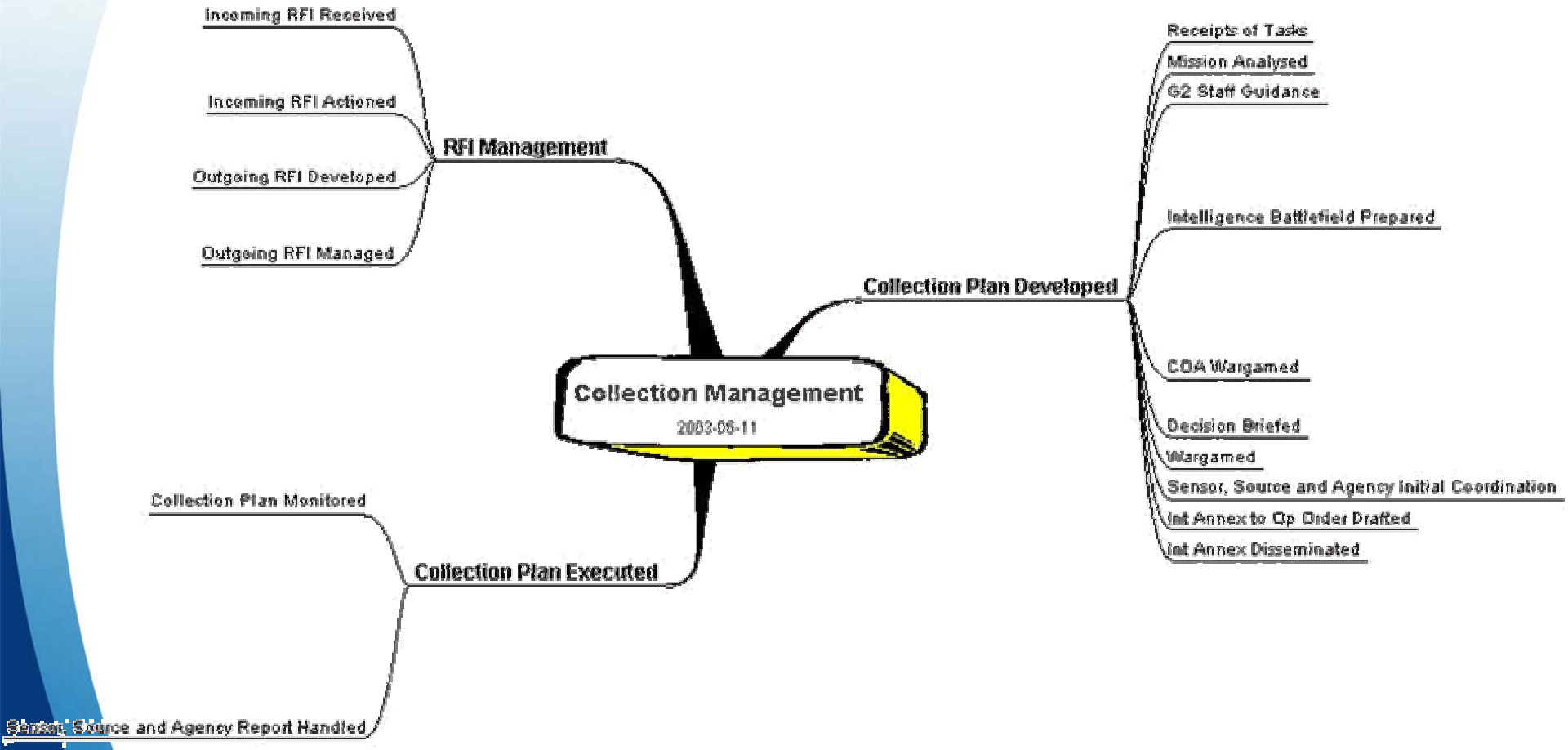


Software Proto-Cycling Adopted Approach

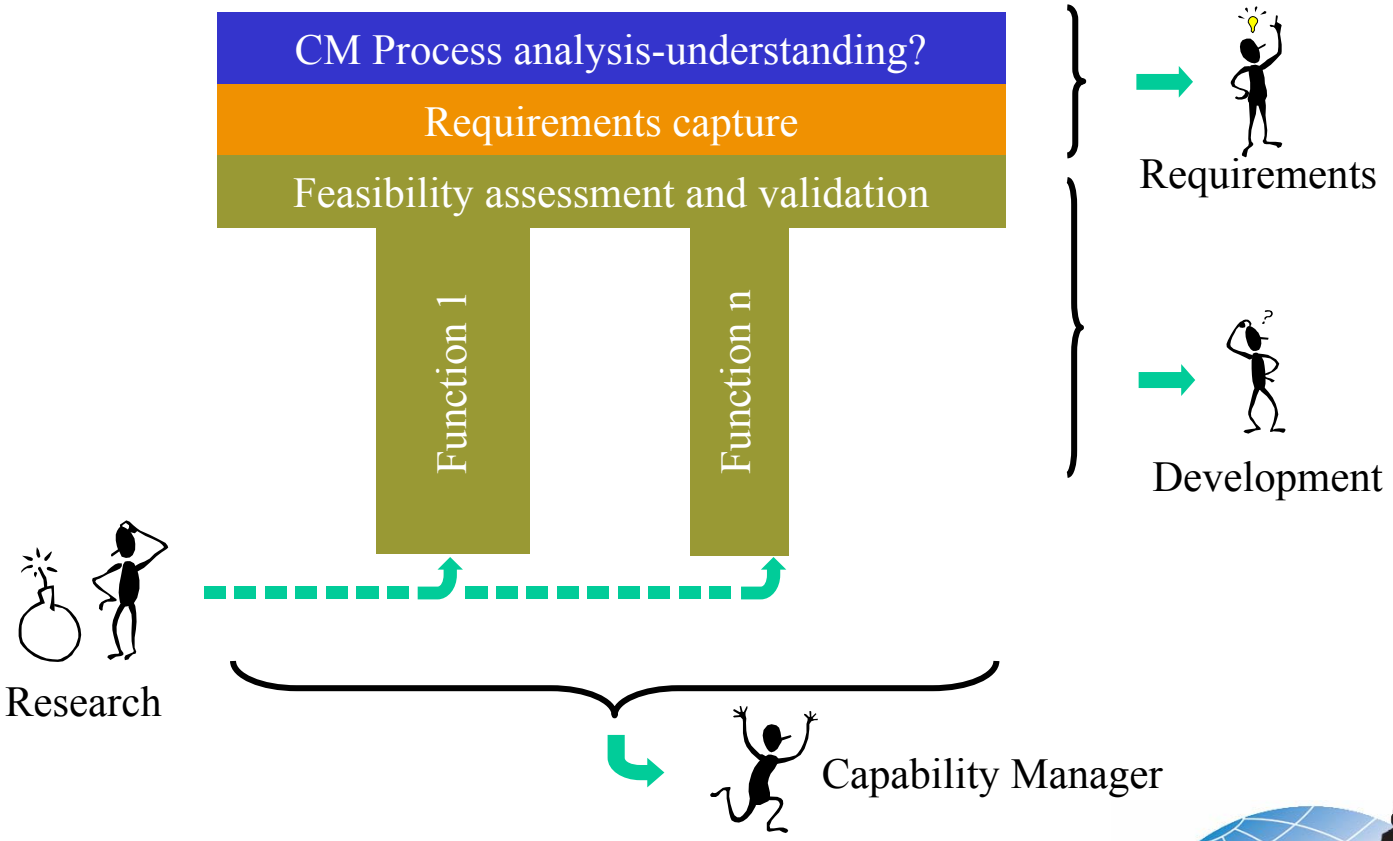
Testbed Environment



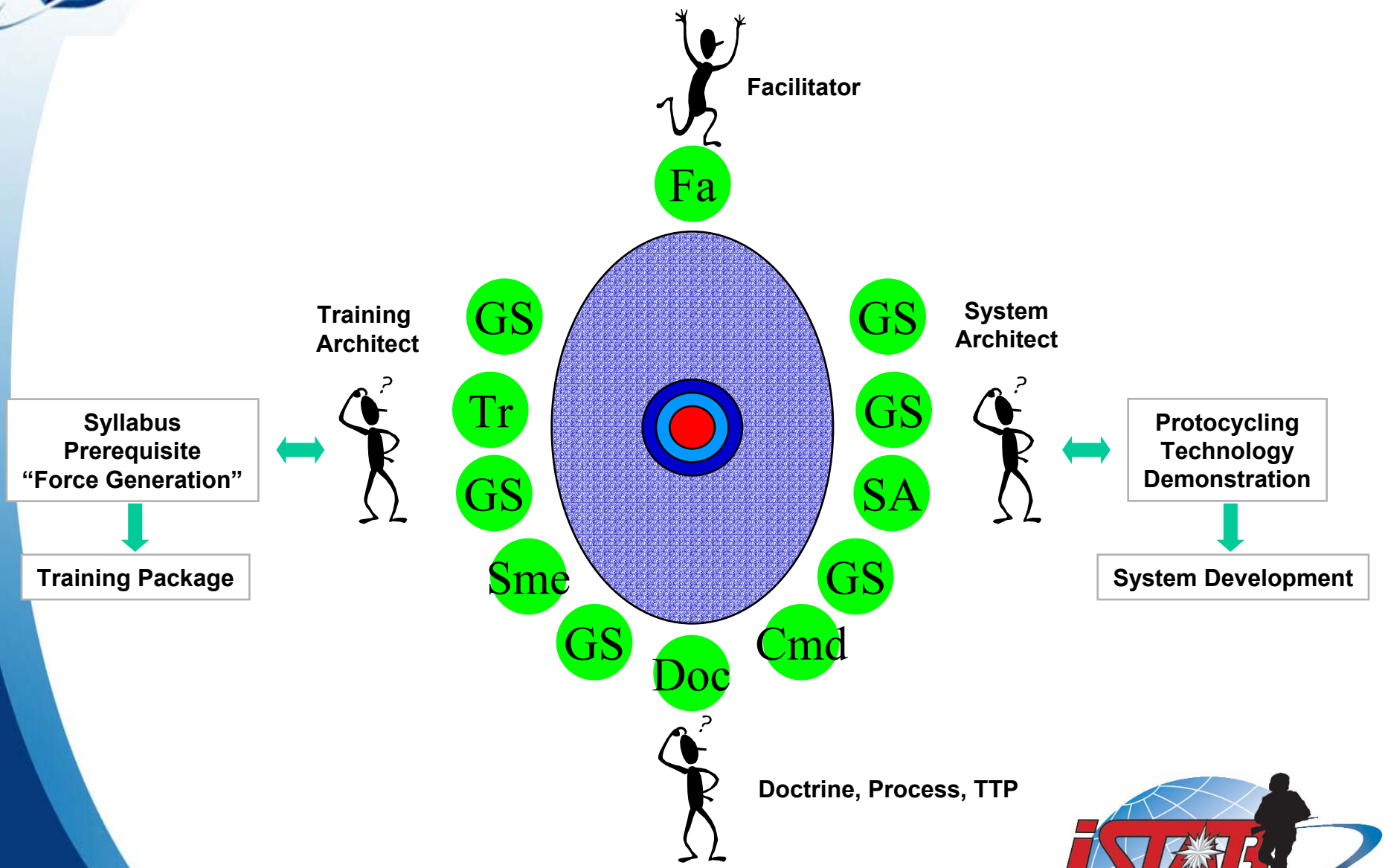
Starting point: The Processes



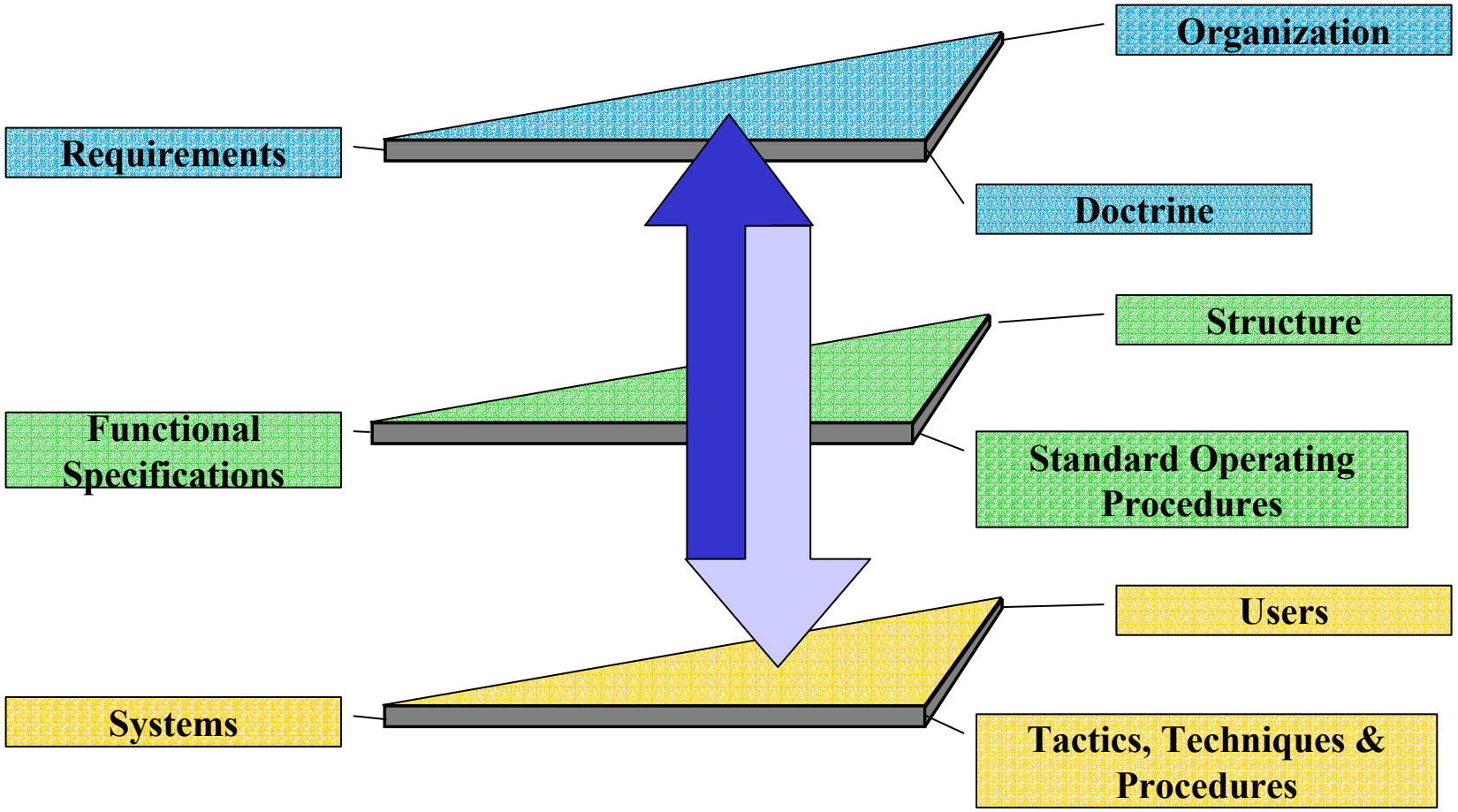
The "π" Approach



Joint Application Design (JAD) Workshop



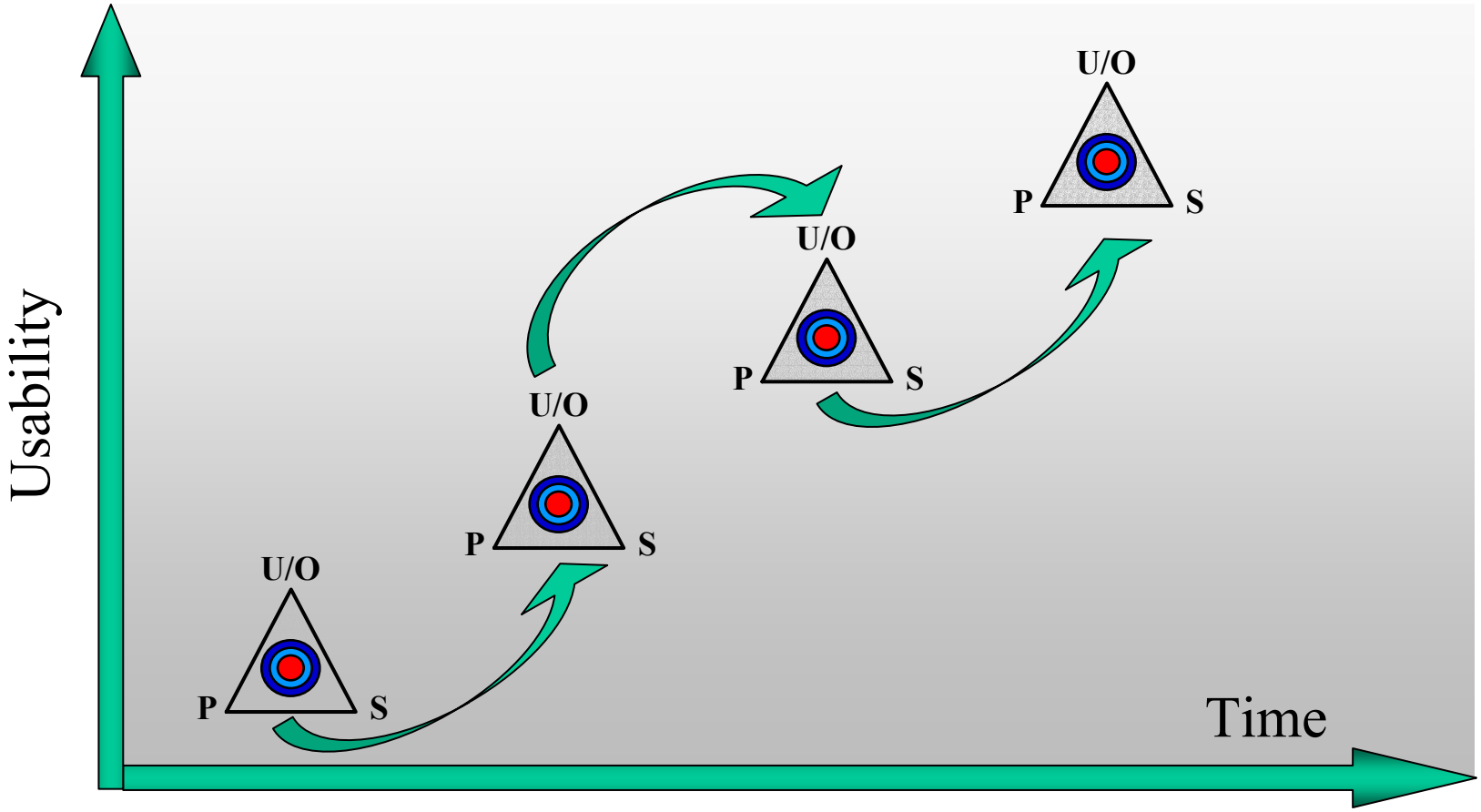
Top-Down versus Bottom Up



Usability

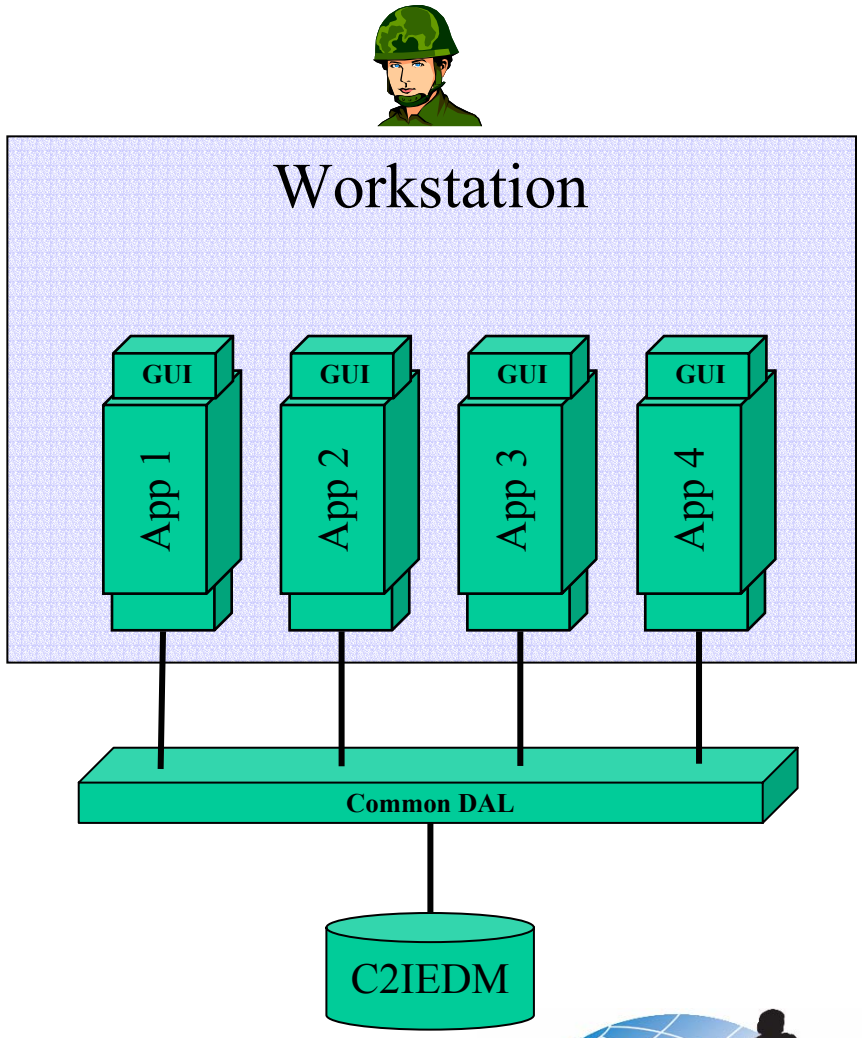
- Usability is define as the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency and satisfaction in a specified context of use. (ISO 9241-11 1998)
- Usability is different than utility which is the ability of something to satisfy a need.
- The word usability arises in relation with the Human-Computer Interface studies.
- The interface of a program or of a web site can be useful because it performs the whole range of operations specified, but can be of low usability, for example, due to a high complexity that makes it difficult to be used efficiently for non-trained people.

Evolution of Information Sharing Capability From a System of Systems Perspective



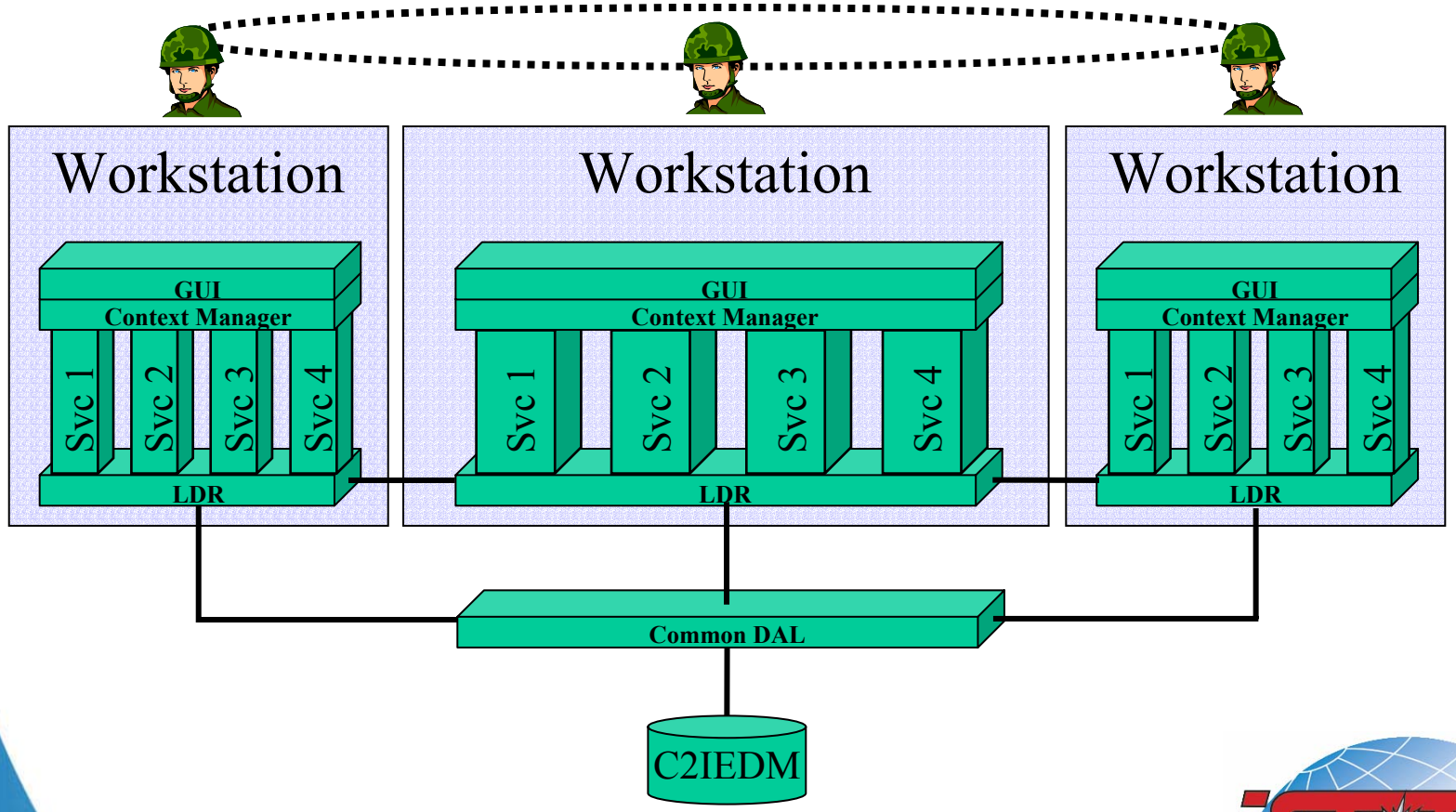
Data Centric Workspace

- **Data Centric Workspace:** Technological capability to have several applications accessing heterogeneous data bases using the same semantic. (CA ISTAR TD 2002)

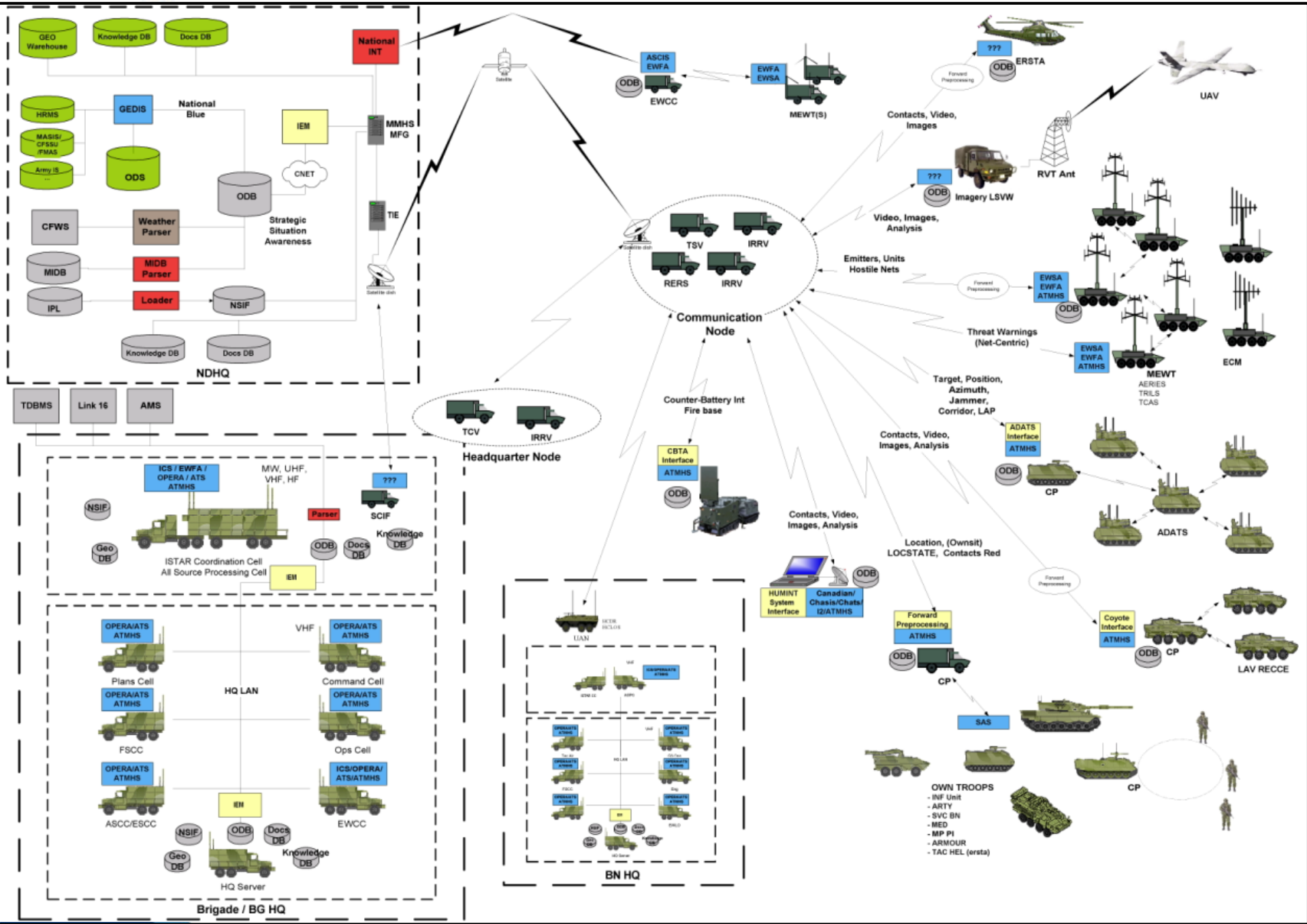


Information Centric Collaborative Workspace (Same Node)

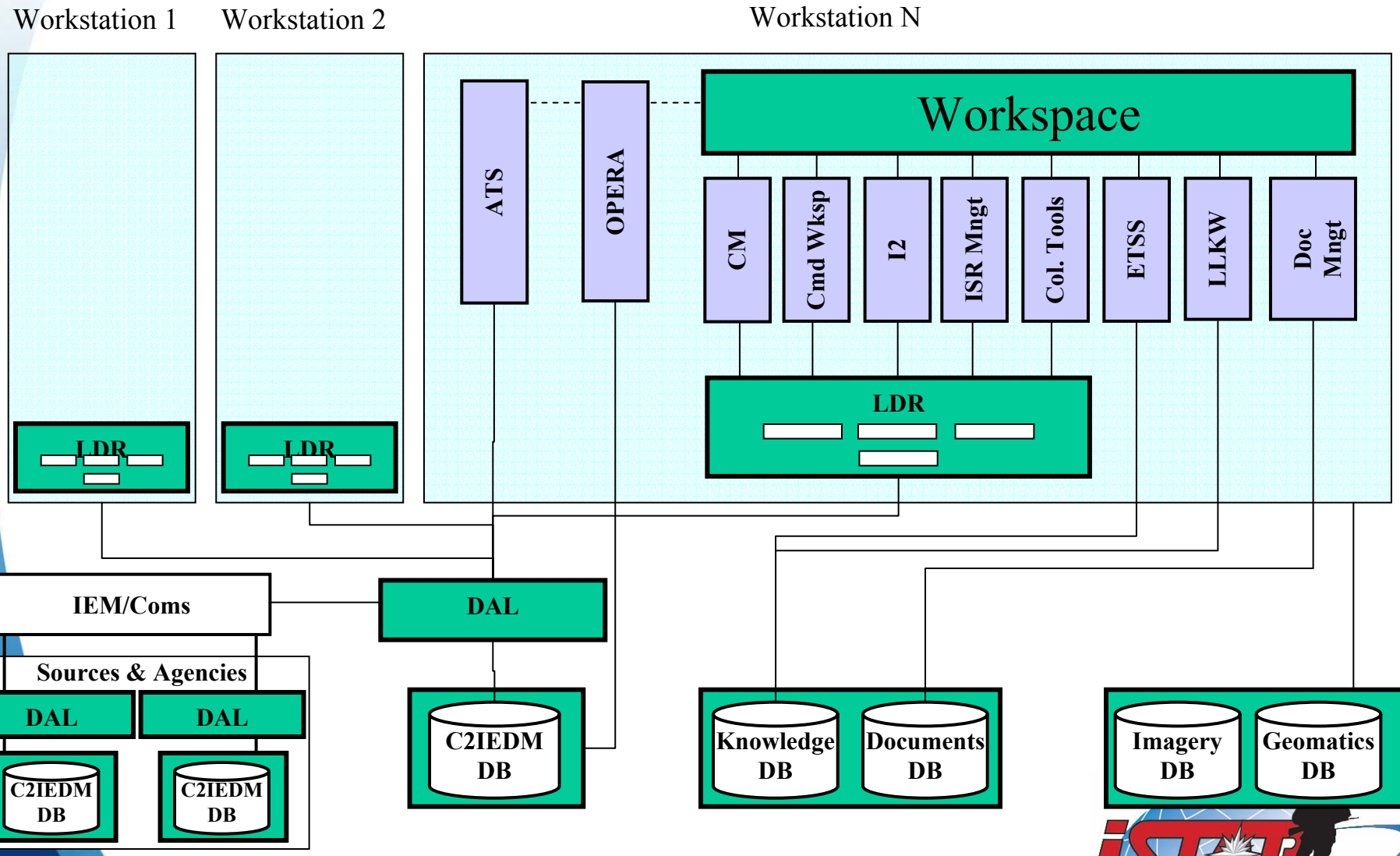
- An environment facilitating the cognitive and social processes through a System of systems services architecture (ICW). (CA ISTAR TD 2004)



ISTAR TD -Architecture



ICW Target Architecture Vision



Conclusion

- Develop a vision.
- Implement a method based on an adaptation of a software method.
- Build the project team with knowledgeable people (business, process and technology) with a common semantic.
- Do not forget that technology supports the users.
- Focus on user requirements and usability.
- Remember that software implementation is a continuous process.

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Questions?

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