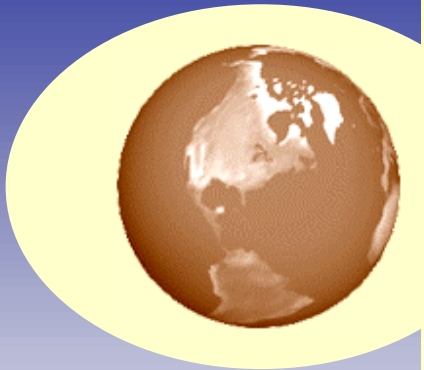


# Using the TOGAF

## Practice & Lessons Learned



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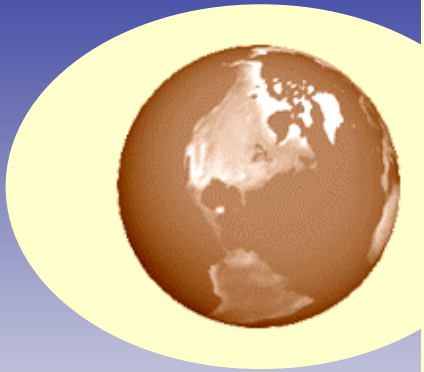
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# Use History



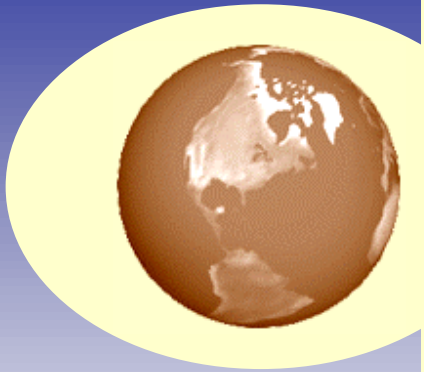
- Redesign of US Patent & Trademark Office project (1997)
- ADM concepts used to extend to internal Architecture Process within Systems Engineering Practice at Litton PRC
- New Project Start Up Activity

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# Using TOGAF to re-architect



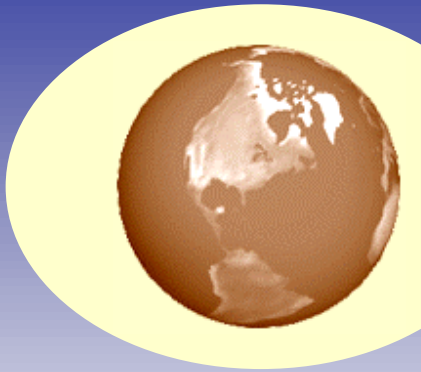
- USPTO Automated Patent System
  - Featured in 1989 x/Open periodical
  - Major elements of system replaced over time
    - Little impact to software applications environment
  - Opportunity in early 1996 to re-validate the architecture
    - Chose TOGAF ADM as a reasonable methodology

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# Background of Project Personnel

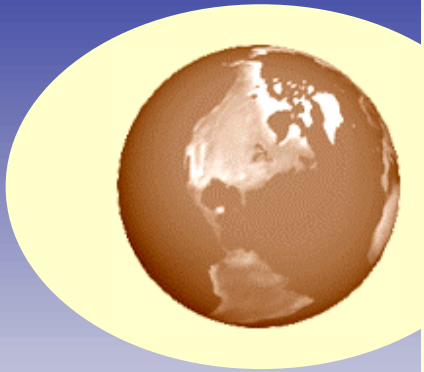


- Knowledgeable, technically proficient & familiar with APS
  - Familiar with use with access to operational staff
  - Familiar with details of existing implementation with access to Subject Matter Experts
- Technically proficient in architecture definition
- Generally unfamiliar with TOGAF
  - Required initial training in ADM

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# Architecture Team



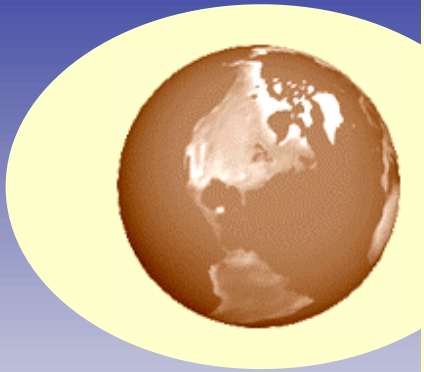
- Understood the general goals
- Knowledge of constraints and business goals
- Experienced in process definition
- Heritage of process use across project
- Had extensive “team” training
- Anxious to try a new method / process

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# Automated Patent System



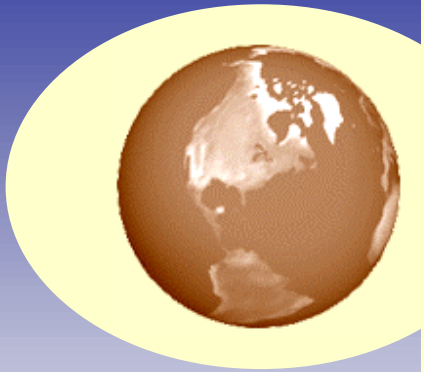
- 2600 Patent Examiner Users
- 5.8 million patent image file (since 1790)
- 2 million patent text file (since 1970)
- Unix image servers
- Optical and magnetic storage
- Mainframe text search system
- Hybrid database
- Triple FDDI Ring network

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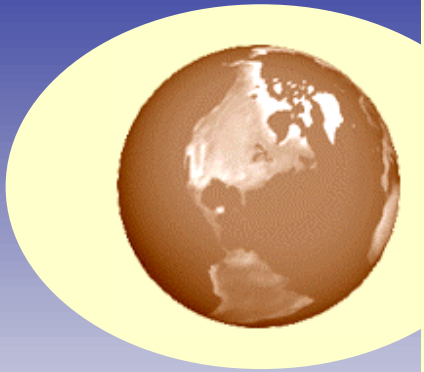
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# Feedback



- Initially did not like “Views” technique
  - Initially could not see the value
  - After use, found them valuable
    - Team eliminated some “artifacts” that were no longer necessary
    - Consolidated controls in new design
    - Streamlined data flows
- Claimed creating a target architecture was like ‘a miracle happens’
  - TOGAF didn’t provide a technique

# Results



- New APS architecture was completed with improvements incorporated
- More completely documented and mapped to requirements
- Feedback from team provided to TOGAF Authoring team
  - Improvements incorporated into Version 3.0 including the addition of Building Blocks
    - To eliminate the “miracle happens”

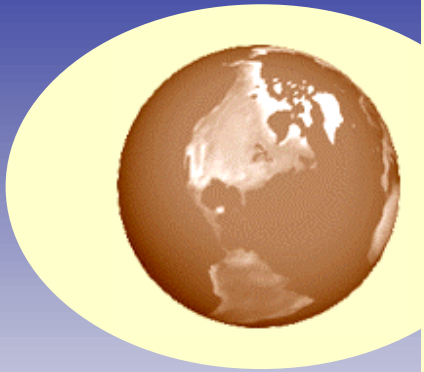
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# Litton PRC adopts TOGAF - 1997



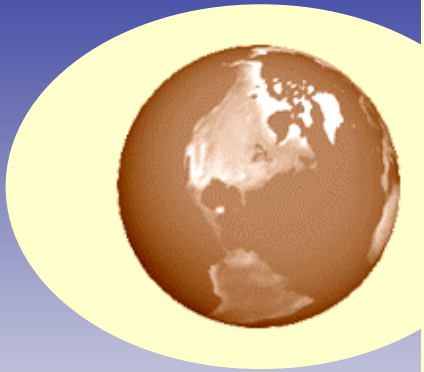
- Litton PRC's Systems Engineering Lead Team (SELT) revamped internal SE processes
  - TOGAF ADM was chosen as a basis for Architecture Design process
  - Team adapted the TOGAF to Litton PRC standard process notation
    - Adapted the terminology to match the Litton PRC SE lexicon
    - Linked the process steps to other Litton PRC processes

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# Status of the Litton PRC Process



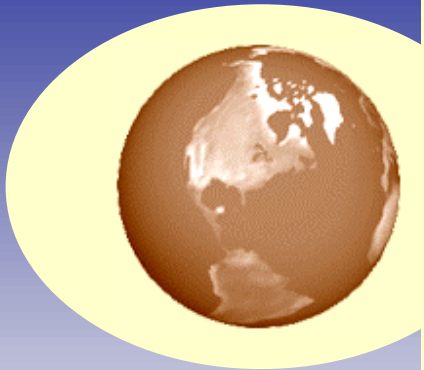
- Architecture Process is one of 18 Systems Engineering Processes
- Successfully pilot tested on one program to date
- Will be updated to incorporate Building Blocks in TOGAF Versions 3.0 & 4.0

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# Latest use of TOGAF



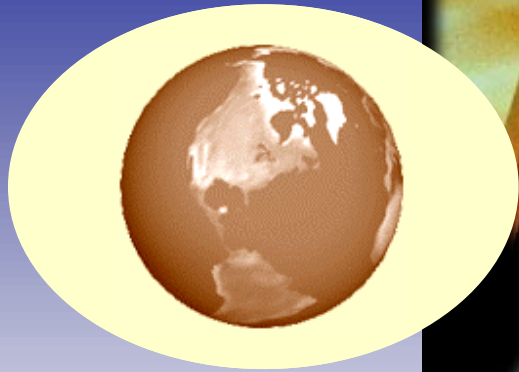
- TOGAF ADM is a base document for start up of a new program
  - Government - Client Patient Record Framework
    - Framework to interchange patient data from heritage systems in hundreds of Government Medical Treatment Facilities
  - ADM techniques are being used for creation of an Object Oriented Solution Architecture

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