Technology Trends & Implications

(Dick Fitz - SAIC)

• Perspective of a Technology Facilitator
• Issues Involved Include:
  • Wise expenditure of SAIC capital
  • Generating Technically Competitive Props
  • Risk Management on Programs
  • Infrastructure & Leveraging Tech Knowledge
What Is Technology Architecture?

Information Systems Architecture

- Application Architecture: The structure and relationships of the software that embody the business process.
- Data Architecture: The structure and models of the information assets of the organization, principally data bases.
- Technology Architecture: The underlying infrastructure that supports data stores and applications, including computing platforms, systems software, and networks.
- Development Architecture: The environment of tools, methods, processes and team structures for developing and maintaining systems.
- Management & Organization Architecture: The structure and roles of the people and processes that support the business and the IS architecture.
Relationships Between Architecture Model, Standards, & Products

- X.500 Schema
  - CDS Mail+Hub
    - 1993 X.500
      - ETA Directory Services
  - More Specific Design & Specs
    - Product Configurations & Specifications
      - Products
        - Industry Standards
          - More Abstract Pure Architecture
            - Abstract Services
              - Changes Seldom
    - Changes Often
Facilitating Technology at SAIC

- Education is Key
  - Unquenched thirst for computer scientist and system/network engineers
  - Sustaining Education
    - E.g., Sending many UCSD Sys Eng. Cert.
    - Microsoft Certification is the New Merit Badge
- Vendor Technology Briefings
- Acquisitions Accelerate Technology
  - Pending SAIC-Bellcore Merger
Technology Facilitation (Cont.)

- IntraNet Technology Infrastructure
  - First Level: Interest Groups
    - IS, SPI, SE, SI
  - Standards, Guidance and Reference
  - “Tools Web”
    - COTS - 80 Tools and Growing
      - Development & Maintenance
      - Run Time Applications
      - 2 page abstract, SAIC experience & avail. mentor
  - SAIC “Centric” - Major Issue in a Decentralize Co.
    - What do we have in each domain?
NSQUARE Overview of the COTS Capability/Integration Issues