Enterprise Infrastructure Architecture

RL Information Consulting LLC January 7, 2003

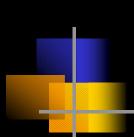
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Agenda

- Lifecycle of Distributed Systems
- Enterprise Infrastructure Architecture Model
- How the Model Fits Enterprise Business Applications



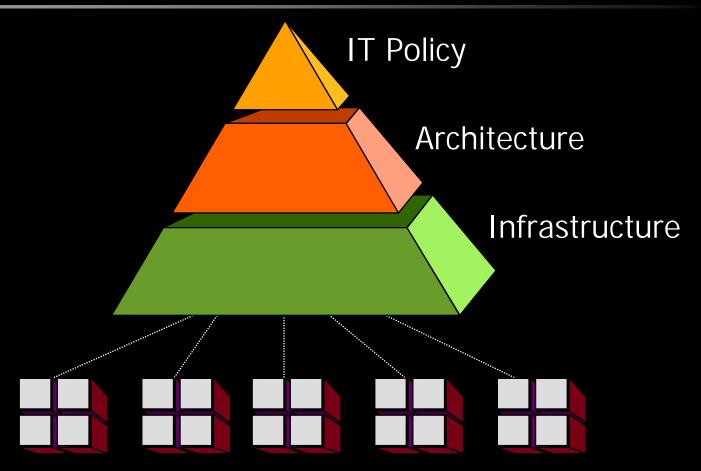
Enterprise Infrastructure Architecture (EIA) Defined

- Structured methodology and life-cycle for distributed systems, client/server technologies
 - 1) Enterprise Planning, Infrastructure Model
 - 2) Systems (Enterprise & Process) Design
 - 3) Tool Selection
 - Integration
 - 5) Deployment
 - 6) Support and Maintenance
- Process engineered independently from platform decisions and based on application and business needs





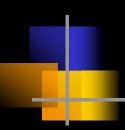
Enterprise View of Infrastructure & Architecture



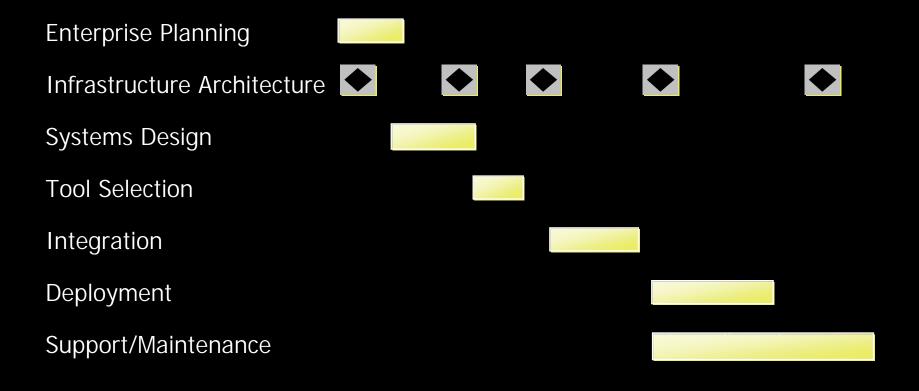
Application "Projects"







Lifecycle of Distributed Systems



Infrastructure Architecture Model

Current Environment

Transition Plan Target Environment

Business Functions

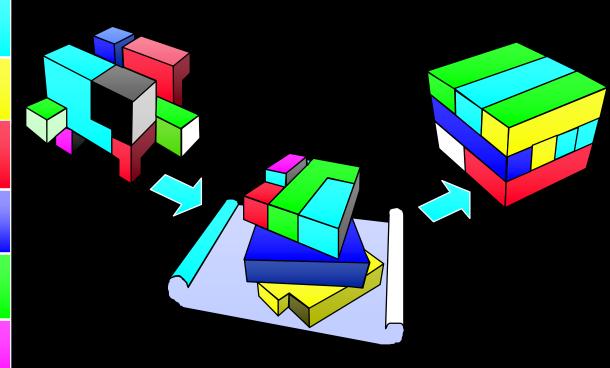
Architecture

Technology

Organization

Financial

Training



"Roadmap"

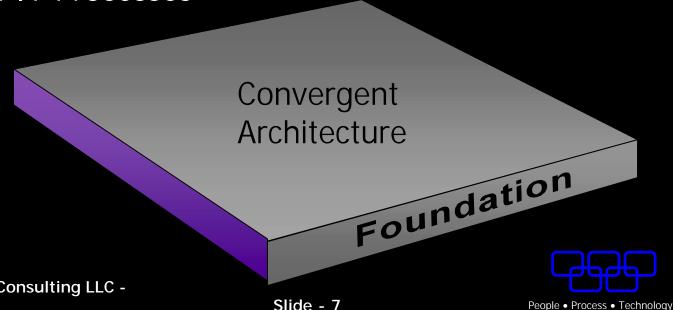




Infrastructure Architecture Model

Systems Foundation, that Requires:

- Structured Architecture Methodology
- Solid Business Practices
- Defined IT Processes

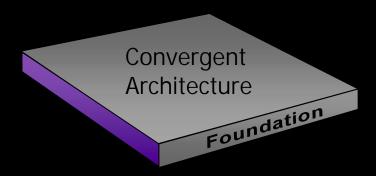


Organization • Integration

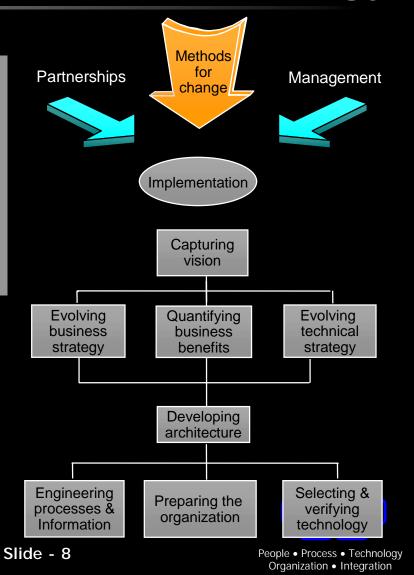


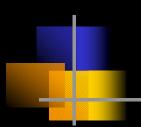
SolutionMethod™ Methodology

- SolutionMethod™ is a simple, certain method for undertaking systems integration in an open systems world
- Takes account of business, social and technical systems
- Exploits architecture-verified configurations

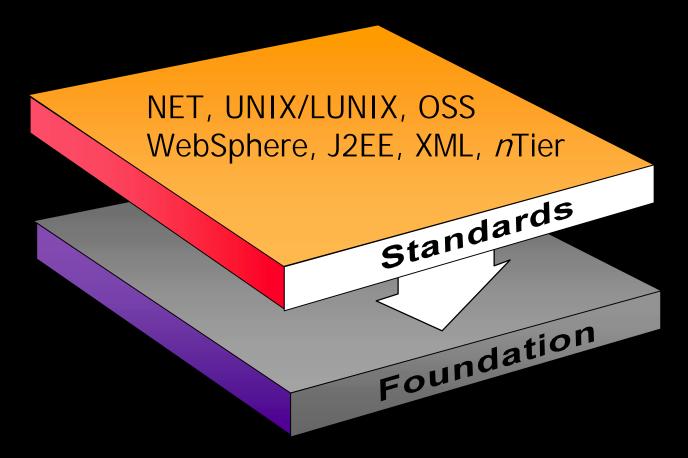


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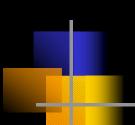




Convergent Architecture Standards



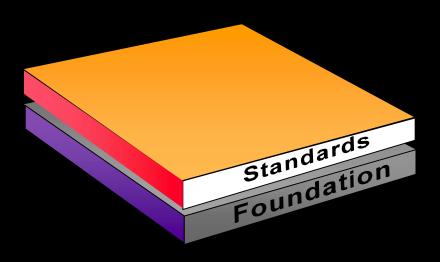




Infrastructure Architecture Standards

HARDWARE

- IBM, HP, EMC, etc.
- Environmentals
- Reliability, Availability, Service-ability



SOFTWARE

- HP/UX
- LUNIX, TCP/IP,OSI
- DB2, Oracle
- Websphere
- ODBC, SQL
- Versata
- XML
- Data Model
- Clover Leaf
- Language Standards





Hardware and Software

Hardware Selection Criteria

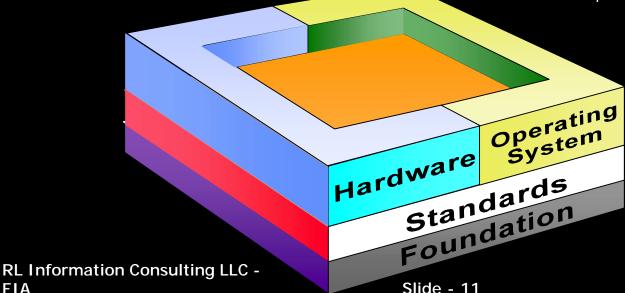
- RAS
- Scalability

EIA

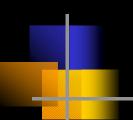
- Price/Performance
- Local experience/preference

OS & Middleware Selection Criteria

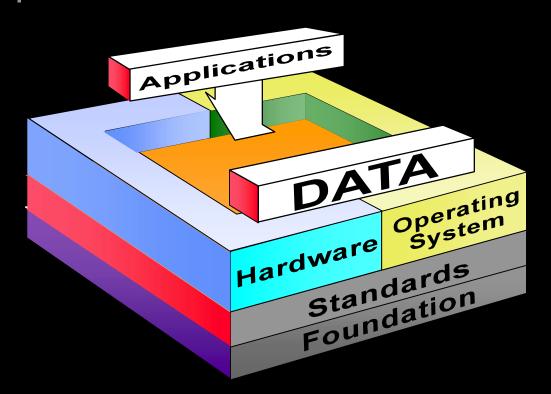
- Comply to standards
- Hardware decisions
- Make vs. Buy
- Experience, preference
- Scaleable, Portable







EIA Model Summary



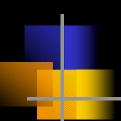
Applications

- Financial
- Manufacturing
- Engineering
- HR, Client Access
- 4GL Development

DBMS Selection

- Legacy Migration
- Standards Compliance
- Application Decision
- Price/Performance
- Data Model





EIA Management "Bricks"

Enterprise Management Disciplines, or "Bricks"

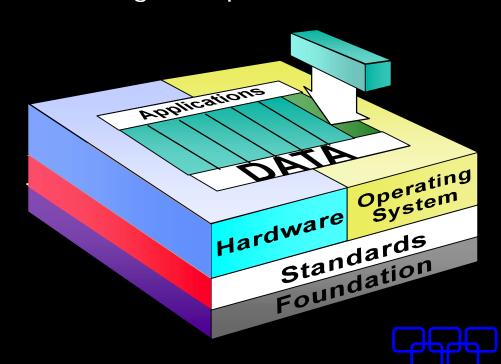
Support the entire infrastructure

Common OO data model to manage cooperative data

within the enterprise

 Encapsulated functions of the model

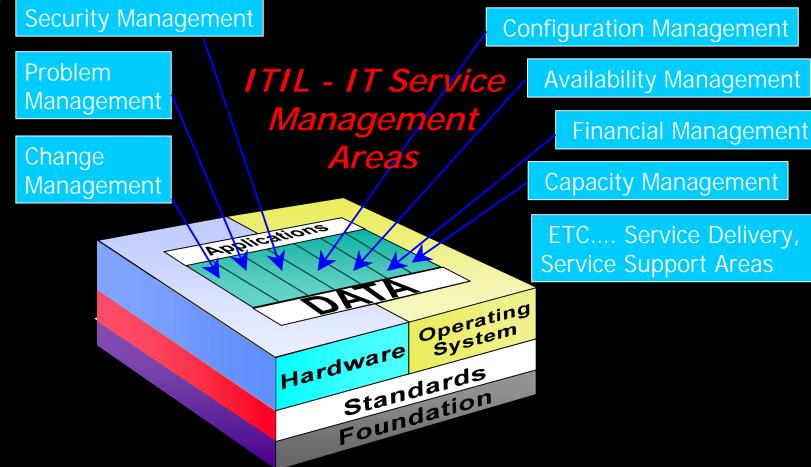
- Provisions for bricks must begin early
- Omission will cause downstream problems

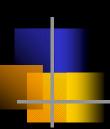


People • Process • Technology Organization • Integration



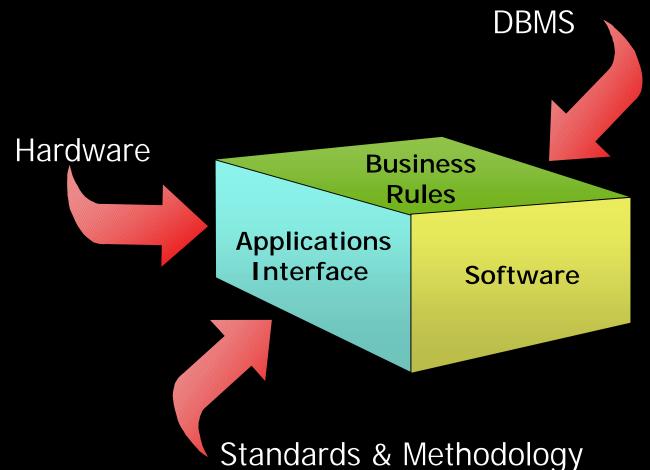
EIA Management "Bricks"





Physical and Logical Interfaces

with all other elements of the enterprise model







EIA Management "Bricks"

Capacity Management

- Performance & Tuning
- Capacity Planning

Asset Management

- Software Licensing
- Asset Register

Data Management

- Backup and Recovery
- Archiving
- Device Management

Network Management

- Operations
- Capacity Management

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Problem Management

- Fault Management
- Help Desk
- User Management

Security

ITIL

and

I TSM

- Data, Network
- Physical Assets
- Authentication

Application Management

- Database Management
- Application Administration

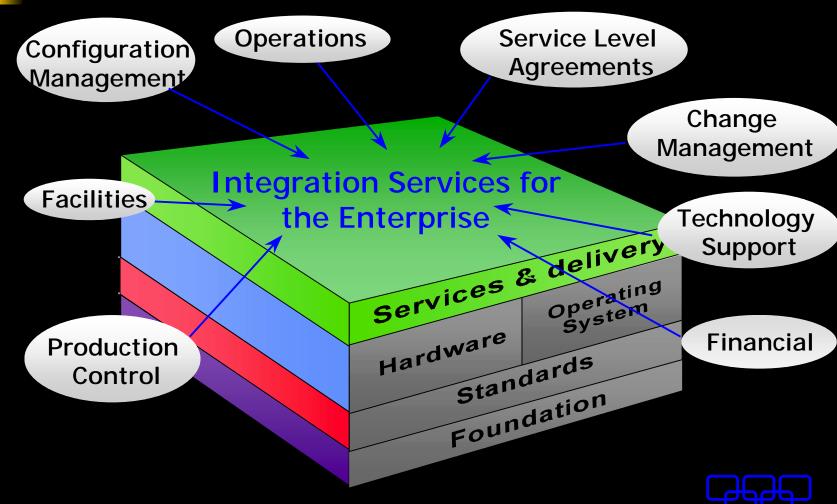
Other ITSM Areas ETC.

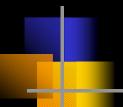
- Service Delivery
- Service Support



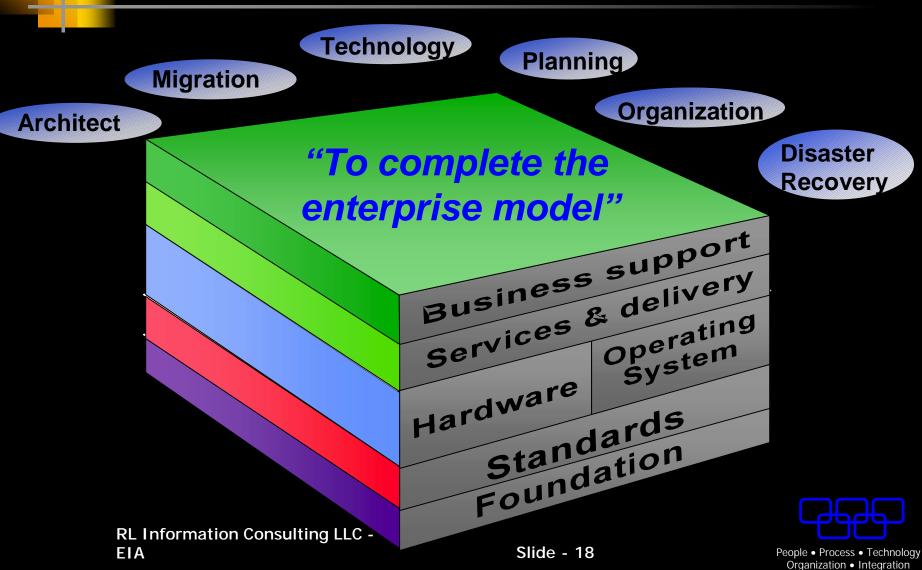
EIA Model

People • Process • Technology Organization • Integration

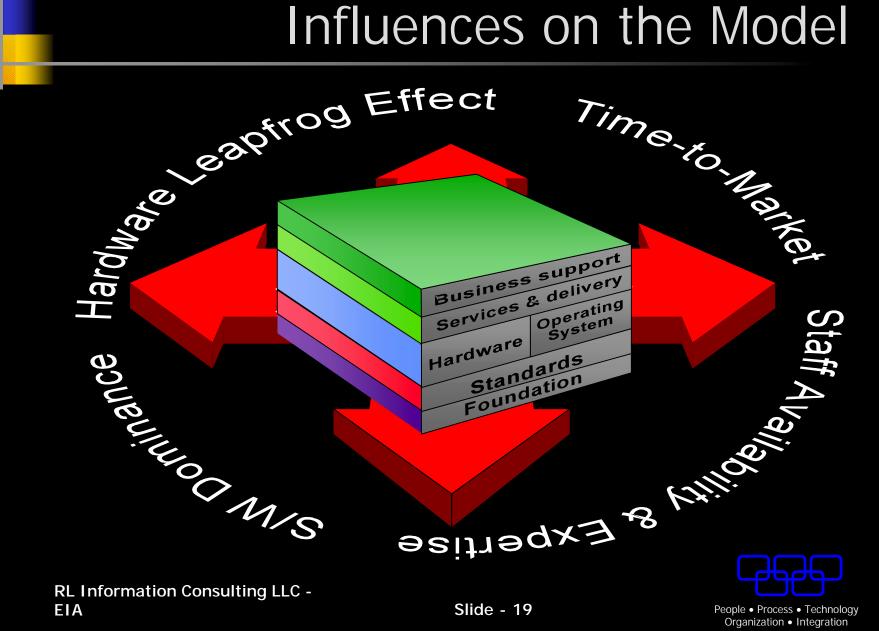




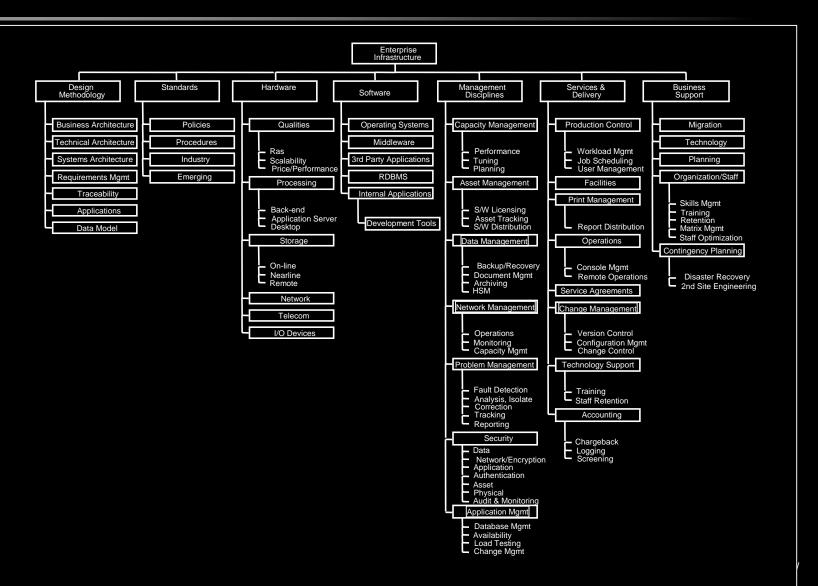
Plus . . .

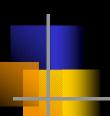


Influences on the Model

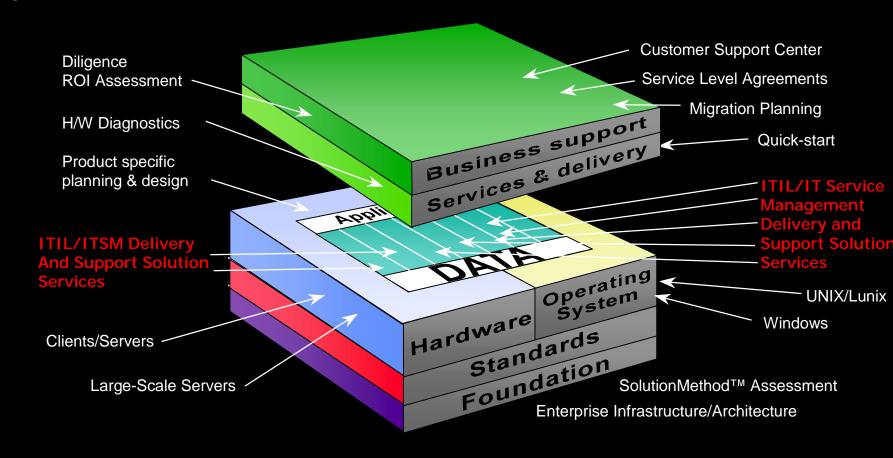


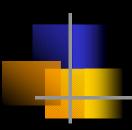
EIA Model Detail





EIA and ITIL/ITSM



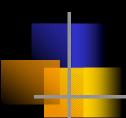


Design Methodologies

System qualities are:

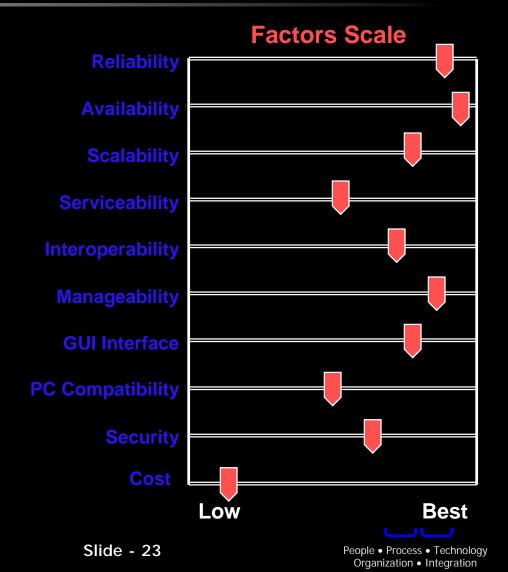
- Potential for Change, Availability, Usability, Security, and Performance
- Perspectives of Enterprise Managers, Users, Service Providers, and Application Developers
- Systems Architecture



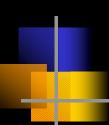


Design Factors

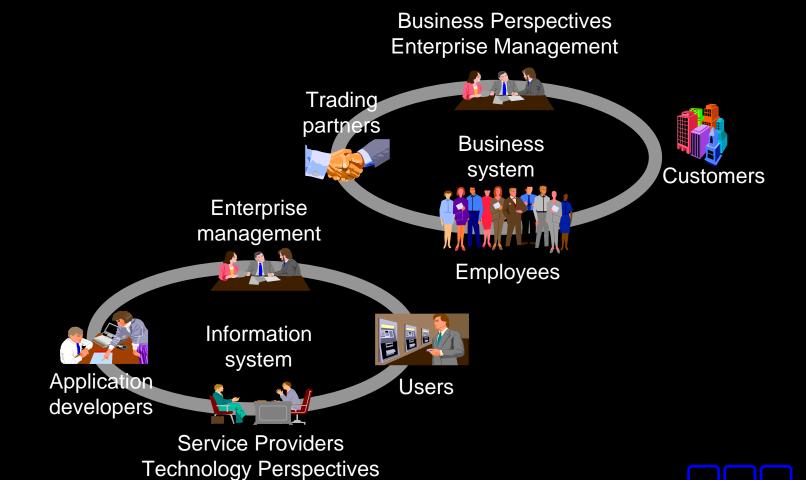
- Solutions will vary based on requirements:
 - Required Infrastructure characteristics
 - Current Environment
 - Budget
 - Future IT Strategy
 - Corporate Culture
- Infrastructure solution components vary, based upon sliding scale:
 - Hardware components
 - Software components
 - Service components
 - Support components



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Business and IT Perspectives

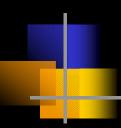


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Perspectives and Qualities Requirement Matrix

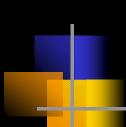
	Potential for Change	Availability	Usability	Performance	Security
Enterprise Management					
End Users					
Service Providers					
Application Developers					



Tool and Technology Selection

- Architecture Selection based on Business Requirements
- Functional Tool Selection traceable to business and technical architectures
- Potential benefits from vendor partnerships for large, strategic projects





How to Model and Plan for Your Business

- When right-sizing and re-engineering, assume you need client/server and plan around multiple "n-tiers"
- Provide business and requirements-based planning
- Apply existing methods, tools, expertise to distributed systems
- Adopt a structured approach to assessment, planning, design, and implementation of client/server initiative
- Utilize outside vendor partnerships to leverage knowledge, and share risks/benefits





Conclusion

- Modeling methods can be used to design and plan client/server services and applications
- SolutionMethod™ (or similar) methodology can provide legitimacy to the infrastructure and architecture enabling risk reduction
- Modeling is especially useful in audits/reviews of existing architectures and operations

Take apart and critique existing model Review brick by brick, modular approach

