



Business-Technology Alignment Architecture Support Group (ASG) Orientation

December 18, 2001



Agenda

- Welcome
- Overview of Business-Technology Alignment
- Role of the Architecture Support Group (ASG)
- How this Affects You

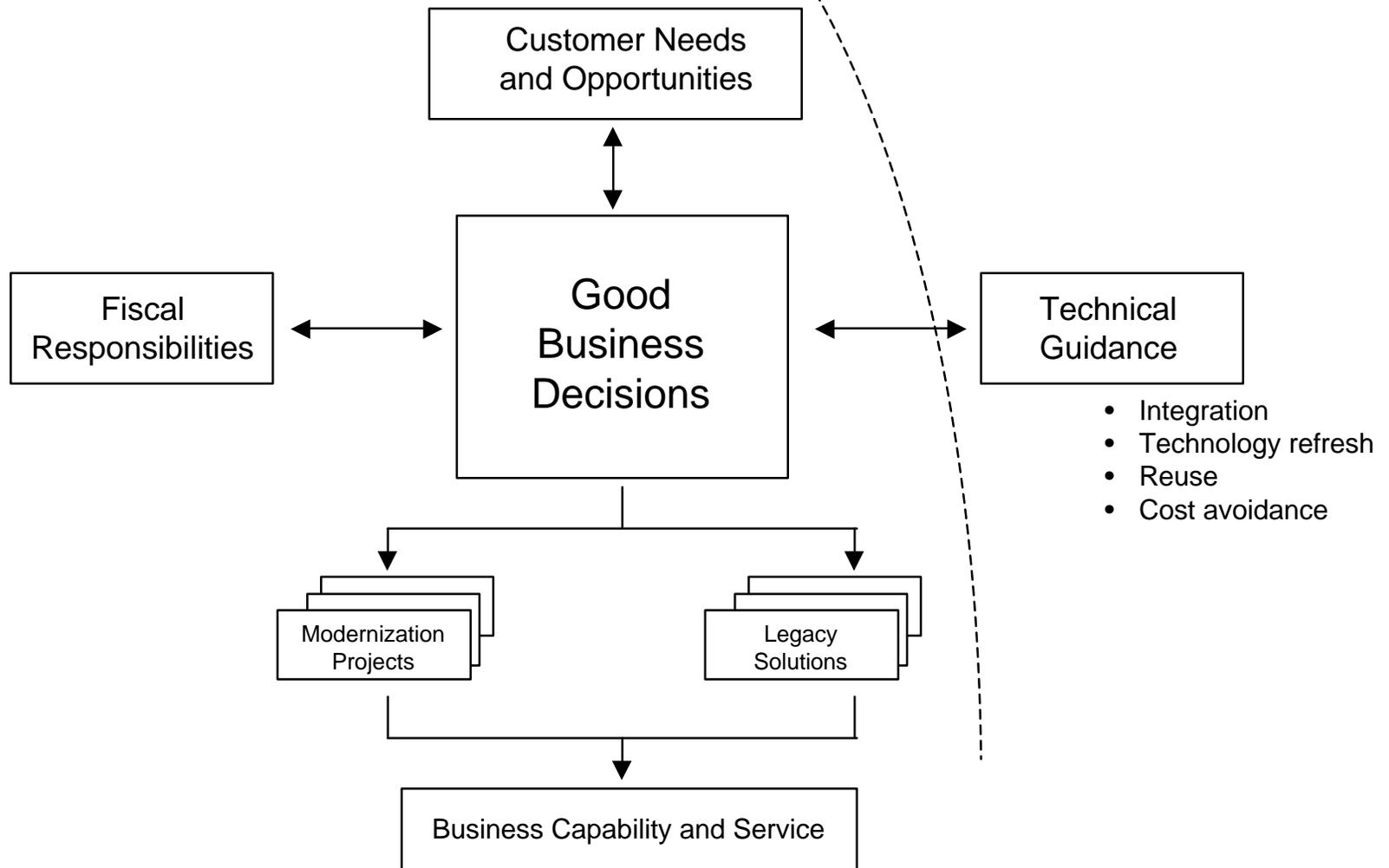


We need to make good business decisions based on sound, relevant information and disciplined processes.

So Far

...We Have Addressed

... Now We Need to Address





High level principles guided the design of the Business-Technology Alignment (BTA) organization and processes.

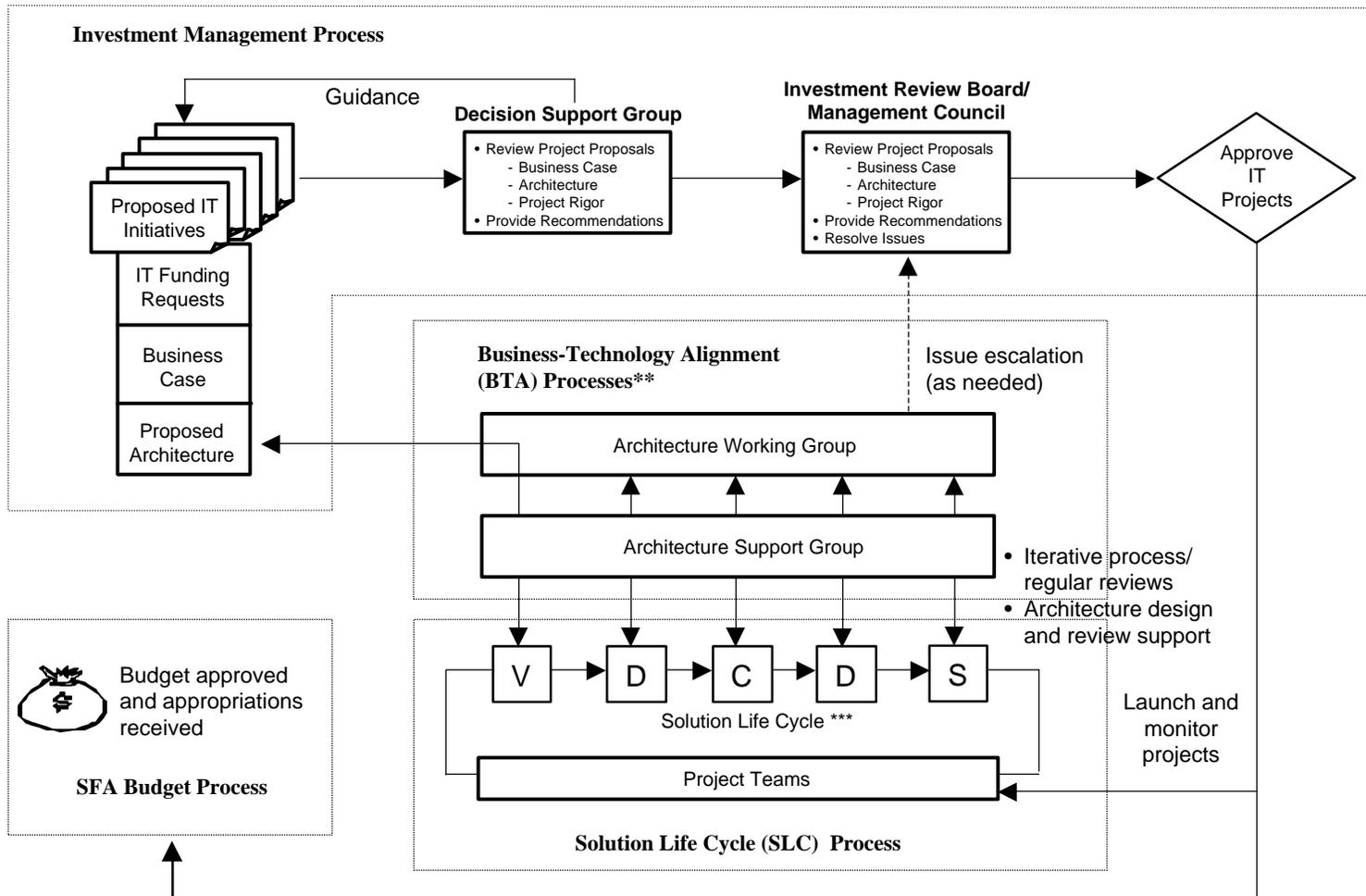
Principles Guiding BTA Design

- IT decisions based upon business drivers and customer impact
- Approximately 75% of IT working group representatives from major business initiatives and/or projects
- Manage information and data as enterprise-wide assets
- Unify planning, management and alignment of Business and Information Technology



BTA* processes complement the Investment Management and Solution Life Cycle processes, enabling business priorities to drive technology solutions.

SFA Processes



* Business-Technology Alignment

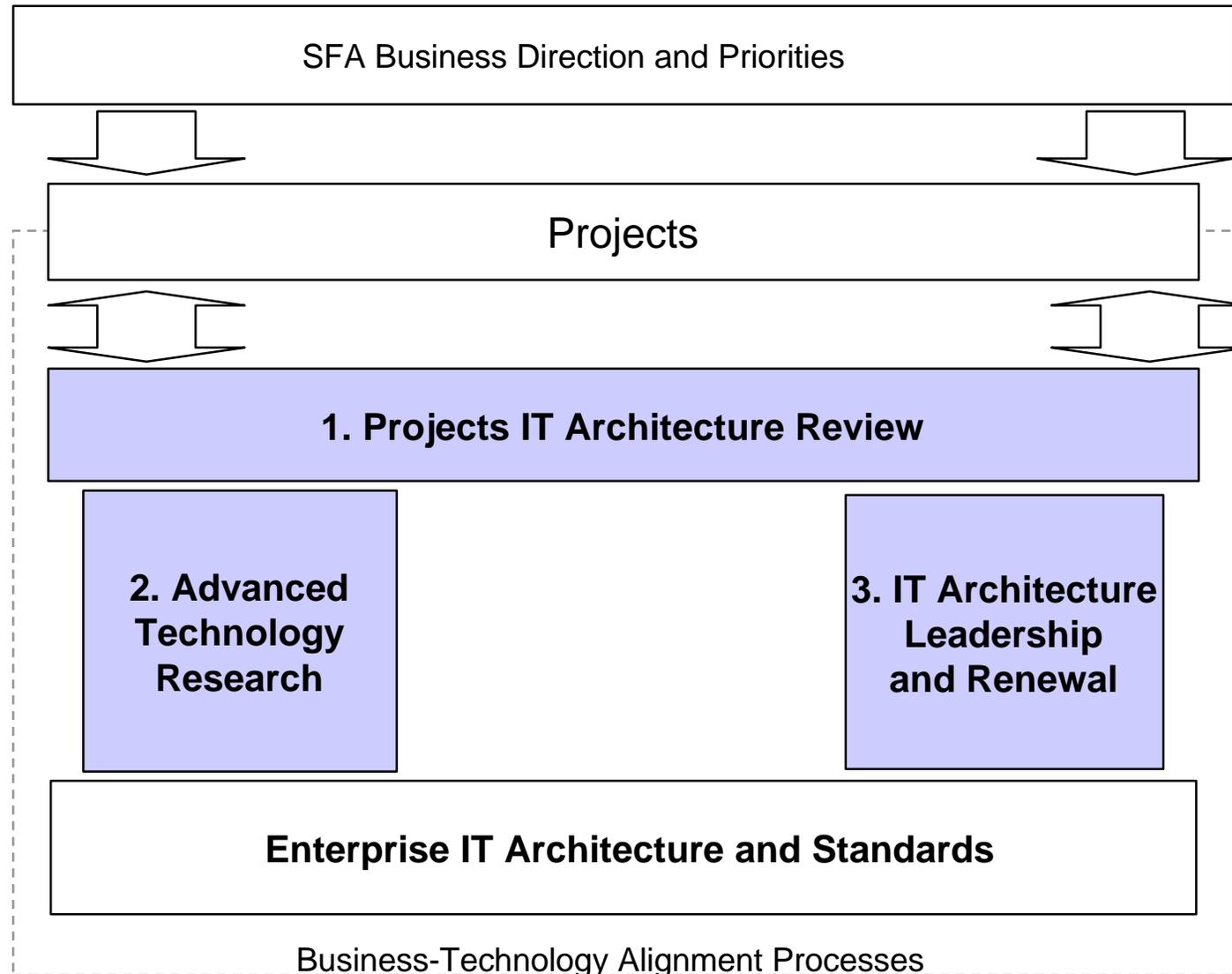
** Enhances compliance with Clinger-Cohen Act

*** Solution Life Cycle Steps: Vision, Design, Construct, Deploy, Support



BTA* consists of three major processes that help align design, integration and deployment of technology solutions to Enterprise standards.

BTA* Processes at SFA

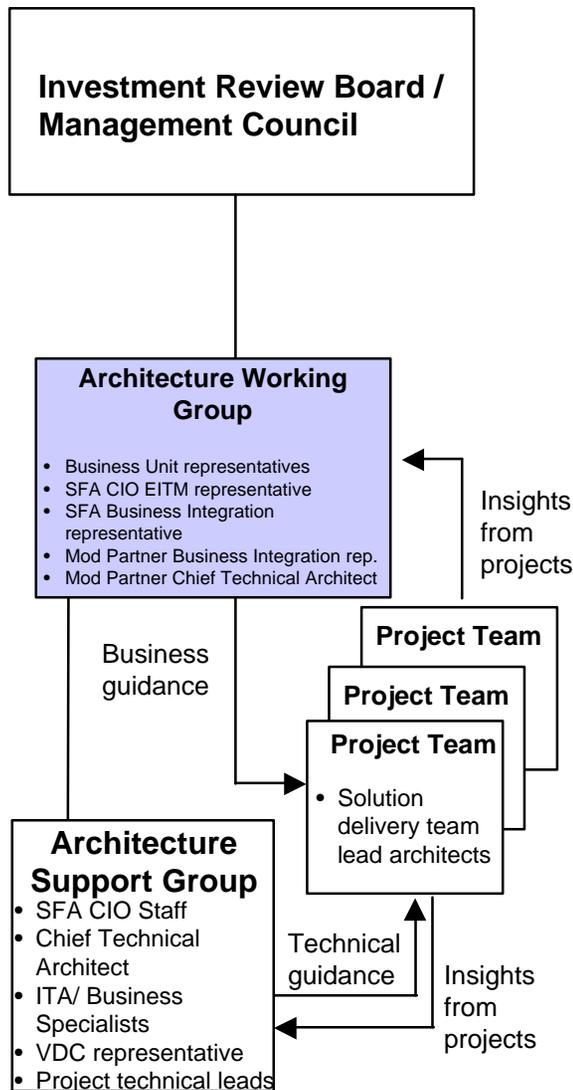


* BTA – Business-Technology Alignment



The Architecture Working Group (AWG) .

BTA Organization Summary



Architecture Working Group (AWG): Characteristics

- Permanent members; business representatives and technical architects;
- Approximately 75% business representation
- Representatives from Business Units, Modernization Partner, SFA CIO and major projects
- The AWG lead is elected by the AWG members. The role rotates among the members every three months
- The AWG Lead specifies the agenda and chairs the meetings

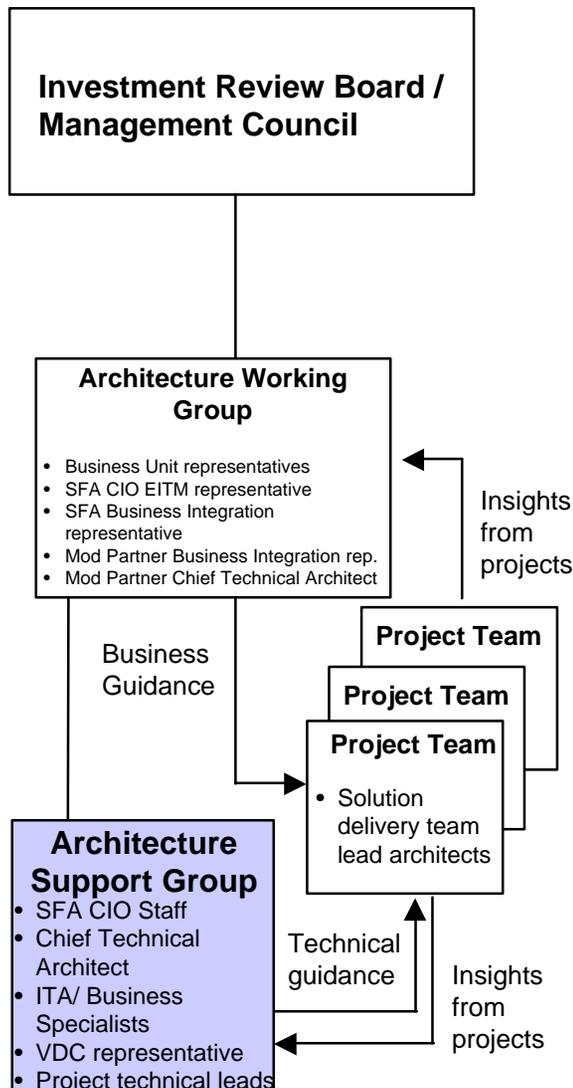
Architecture Working Group: Responsibilities

- Understand business and technical issues and implications
- Raise issues/exceptions to IRB/MC for resolution, as necessary
- Make recommendations (with implications, risks and costs) to IRB for setting direction
- Provide sponsorship for business-technology alignment efforts, such as development of architecture standards
 - This helps ensure there is a specific business need for necessary analyses
- Identify and communicate existing and emerging business-technology alignment issues between the business units and the AWG/ASG membership



The Architecture Support Group (ASG).

BTA Organization Summary



Architecture Support Group (ASG): Characteristics

- ❑ Pool of experienced resources called upon to discuss technology issues and make recommendations
- ❑ Candidates are major-project architecture leads from SFA, Modernization Partner and SFA CIO
- ❑ Selected members of the ASG will be called-upon on an “as-needed” to address specific technology architecture and standards issues

Architecture Support Group (ASG) Responsibilities

- ❑ “Trusted Advisors”: consultation, coaching, mentor roles
- ❑ Consultative roles to projects regarding interpretation, impact, the reasoning behind the technology choices, and advise on issues of migration to SFA IT architecture and standards
- ❑ Reviews with Project Teams, and identification of issues for AWG attention
- ❑ Maintenance and publication of architecture documentation
- ❑ Determine when smaller or larger changes to architecture are required and shepherd these through the approval process
- ❑ Drive the overall enterprise architecture process, creating and maintaining deliverables
- ❑ Conduct detailed technology, cost and risk evaluations for new technologies
- ❑ Conduct education sessions, publicity, demonstrations of architecture and its business case



The Architecture Working Group will be staffed with senior representatives from business and IT.

Role	AWG Representative
Business Unit Representatives	<ul style="list-style-type: none">■ Robert Laurence - Students Channel■ Anna Allen - Financial Partners Channel■ Paul Hill - Schools Channel■ Paul Stonner - CFO
SFA Business Integration Representative	<ul style="list-style-type: none">■ TBD
Mod. Partner Business Integration Representatives	<ul style="list-style-type: none">■ John Bogasky■ Linh Nguyen - SFAU, SFAHR, Ombudsman
VDC Business Services	<ul style="list-style-type: none">■ Jerry Ryznar■ Ray Thomas
AWG-ASG Coordination	<ul style="list-style-type: none">■ Denise Hill - SFA CIO EITM Representative■ Peter Elms / Paul Peck - Mod Partner Chief Technical Architect■ Karen Anderson - BTA Administration Support■ Bill Hughes - BTA Administration Support



The Architecture Support Group (ASG) members are specialists who are called upon to address specific technology issues.

Architecture Support Group (ASG) Representatives

Preliminary - For Discussion

Representing	SFA	Modernization / Operations Partner(s)	Subject Area Covered
Enterprise Infrastructure	■ Ganesh Reddy	Bruce Kingsley	- EAI
	■ Ganesh Reddy	Alex Lefur	- ITA
	■ Andy Boots	Mike Bruce	- Security
	■ Kathryn Pirnia, Jim Greene	Shyam Pai	- Data
	■ Bill Bush	Karen Anderson	- Standards and Architecture
	■ Keith Wilson	David C. Lass (CSC)	- VDC Operations
	■ Keith Wilson	Bob Malloy	- Operations Infrastructure
	■ David Elliott		- Network Infrastructure
Projects Representatives	■ Paul Hill	Paul Peck	- COD
	■ Paul Stonner	Jeff Ross	- FMS
	■ Jeanne Saunders	Chris Paladino	- FAFSA
	■ ??	Darrel Cravens	- Consistent Answers
	■ Robert Laurence	John Coleman	- Common Servicing (eServicing, DMCS)
	■ Steve Allison	Jacqueline Dufort	- Portals
	■ Tony Magro	Reggie Ewing	- Lender Redesign
	■ ??	Mike Bruce	- Single Sign-on
	■ Cheryl Queen	Bill Walsleben	- Electronics Record Mgmt. (ERM)
AWG-ASG Coordination	■ Denise Hill	Peter Elms/ Paul Peck	- CIO ITM
	■	Bill Hughes	- BTA Administration Support

Preliminary - For Discussion



Example Scenario: Project architecture review.

Objectives

Typical Issues Addressed

Architecture Working Group

- Help ensure that solution supports the business effectively and economically
- Using the SFA standard EAI bus (MQ Series) will delay the implementation of the solution, and is somewhat cumbersome for the user. What are the business implications of waiting or going with a non-standard workaround/ solution?

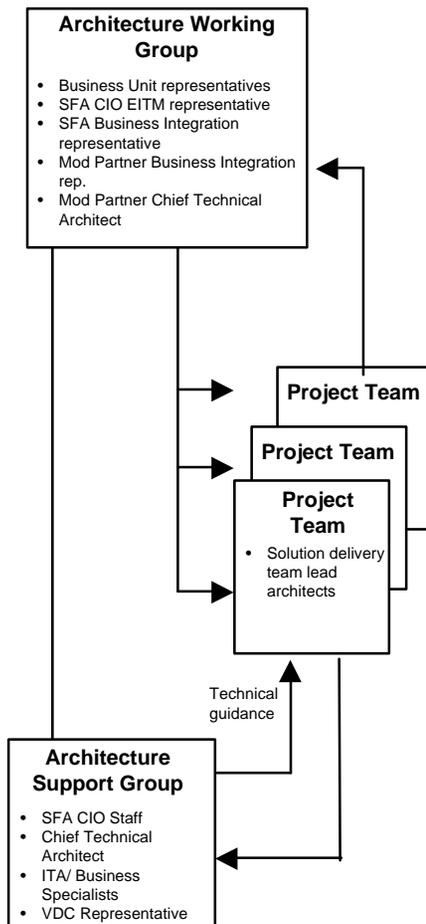
Project Teams

- Ensure optimum solution design is achieved
- Leverage best practice and knowledge
- The project does not plan to use the transformation capability of the SFA standard EAI bus (MQ Series)

Trigger Issue

Architecture Support Group

- Help project teams identify where solution may be not following SFA technology standards
- Help project teams identify and investigate alternatives
- Help transfer knowledge, solutions, and best practices across projects
- How can the project use SFA's data transformation capability more effectively?
- What are the SFA-wide implications of the project not using MQ Series?
- What alternatives exist, and what are the SFA-wide implications of these alternatives?





Example Scenario: Introduction of new technology.

Objectives

Typical Issues Addressed

Architecture Working Group

- Understand implications of using non-standard technology
- Either provide agreement or help achieve acceptable alternative

- What is the right level of security appropriate for business needs? (This will drive the technology employed)
- Should we have SFA telecomms security standards? (This reduces flexibility for communications solutions and drive up cost)

Project Teams

- Introduce non-standard technology into solution

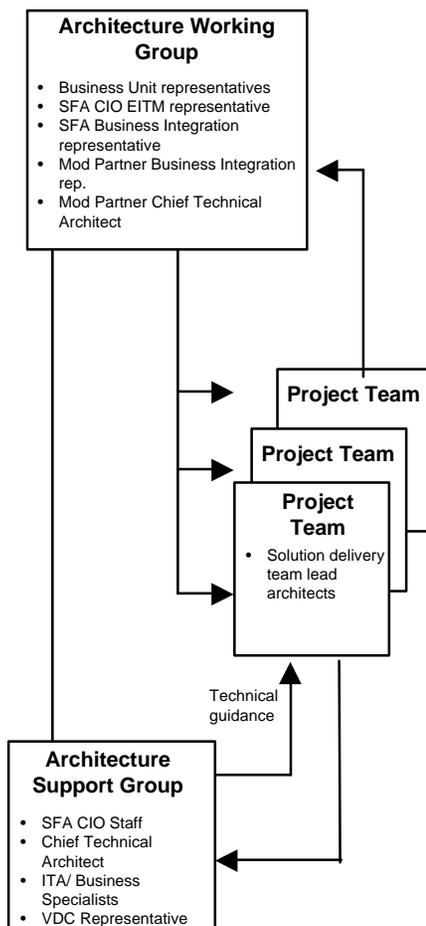
- Business unit needs to transmit sensitive data to third parties. Should we encrypt the data?
- Project team wishes to install ATM connection for this communication. Should we have telecommunications standards? What should they be?

Trigger Issue

Architecture Support Group

- Help project teams assess the benefits and issues in use of non-standards technologies from SFA-wide perspective

- What are the technologies and economics for each option?
- Does the use of ATM make sense from an enterprise perspective?
- Is an alternative solution more appropriate from SFA-wide perspective?





Example: The architecture and standards issue is documented and addressed to the AWG-ASG Coordinator(s).

Encryption

ILLUSTRATIVE

Issue

- Privacy data of customers and partners is not appropriately protected - as mandated by law.
- There appear to be some commonly accepted solutions for certain situations and lack of clarity on actual SFA policy

Description

- The issue is being addressed on an ad-hoc basis and individually being solved on a project by project basis (e.g. eServicing)
- Other applications such as COD are currently addressing the same issue
- An SFA policy needs to address data privacy for at least three cases:
 - Inside the data center at the data store level (e.g. log-in credentials)
 - Internet data transfer
 - Bulk data transfer
- SFA needs to determine which mechanism for protecting data are appropriate, and what the standards and permissible exceptions may be.

Risks

- Privacy data not encrypted when sent from SFA systems to partners (e.g. when sent from ACS to NCS for Loan Servicing). ACS, NSC or PSTN employees have physical access to hardware.
- Potential of hackers gaining access to network devices and data

Consequences

- Potential fines for SFA
- Compromised public trust arising from adverse publicity



Addressing a typical issue - Example.

ASG Representatives Addressing Encryption

Preliminary -
For Discussion

Activity	Responsibility	For Encryption - Performed By
Identifies the issue	<ul style="list-style-type: none"> ■ Multiple sources: projects, specialists, reviews 	<ul style="list-style-type: none"> ■ Mike Bruce
Scopes the issue for addressing by ASG/AWG	<ul style="list-style-type: none"> ■ Subject area specialist(s), AWG-ASG Coordinators 	<ul style="list-style-type: none"> ■ Mike Bruce, Peter Elms, Denise Hill
Sponsors the analysis	<ul style="list-style-type: none"> ■ Business unit representative for major project needing to address issue 	<ul style="list-style-type: none"> ■ Robert Laurence for eServicing
Assigns the responsibility (for analysis)	<ul style="list-style-type: none"> ■ AWG-ASG Coordinators 	<ul style="list-style-type: none"> ■ Denise Hill, Peter Elms
Conducts the analysis	<ul style="list-style-type: none"> ■ Subject area lead architect assisted by subject area specialists and sponsoring project representatives 	<ul style="list-style-type: none"> ■ Andy Boots ■ Mike Bruce
Performs the due diligence and accepts the analysis	<ul style="list-style-type: none"> ■ AWG Business representative as sponsor ■ Enterprise Infrastructure specialists ■ Project representatives 	<ul style="list-style-type: none"> ■ See suggested names on next page
Selects the option	<ul style="list-style-type: none"> ■ AWG ■ Sponsoring project 	<ul style="list-style-type: none"> ■ AWG members ■ Robert Laurence, John Coleman
Documents the new standards	<ul style="list-style-type: none"> ■ SFA Enterprise IT Management Team members 	<ul style="list-style-type: none"> ■ Andy Boots ■ Mike Bruce
Implements the standards	<ul style="list-style-type: none"> ■ Project teams 	<ul style="list-style-type: none"> ■ As needed



Due diligence and agreement of standards will be achieved with project representatives.

ASG Representatives Addressing Encryption

Preliminary - For Discussion

Activity	SFA	Modernization / Operations Partner(s)	For Encryption - Performed By
Conduct due diligence on options and recommendations	<ul style="list-style-type: none"> ■ Andy Boots ■ Bill Bush ■ Keith Wilson ■ Keith Wilson ■ David Elliott 	<ul style="list-style-type: none"> Mike Bruce Karen Anderson David C. Lass (CSC) Bob Malloy 	<ul style="list-style-type: none"> - Security - Standards and Architecture - VDC Operations - Operations Infrastructure - Network Infrastructure
Provide comments for due diligence	<ul style="list-style-type: none"> ■ Paul Hill ■ Paul Stonner ■ Jeanne Saunders ■ ?? ■ Robert Laurence ■ Steve Allison ■ Tony Magro ■ ?? 	<ul style="list-style-type: none"> Paul Peck Jeff Ross Chris Paladino Darrel Cravens John Coleman Jacqueline Dufort Reggie Ewing Mike Bruce 	<ul style="list-style-type: none"> - COD - FMS - FAFSA - Consistent Answers - eServicing - Portals - Lender Redesign - Single Sign-on

Preliminary - For Discussion



We are now in the process of implementing BTA.

Timetable

Activity	Dates
BTA Processes Developed	September – October 2001
Obtained Buy-in from GMs	October 2001
AWG Orientation held	November 2
1 st . AWG Meeting	November 15, 2001
CIO IT Management Staff Awareness	November 27, 2001
ASG Orientation	December 18, 2001
1 st ASG Project Issue Review	TBD
Identify and Implement Support Tool(s)	December '01 – September '02
On-going ASG and AWG Reviews	

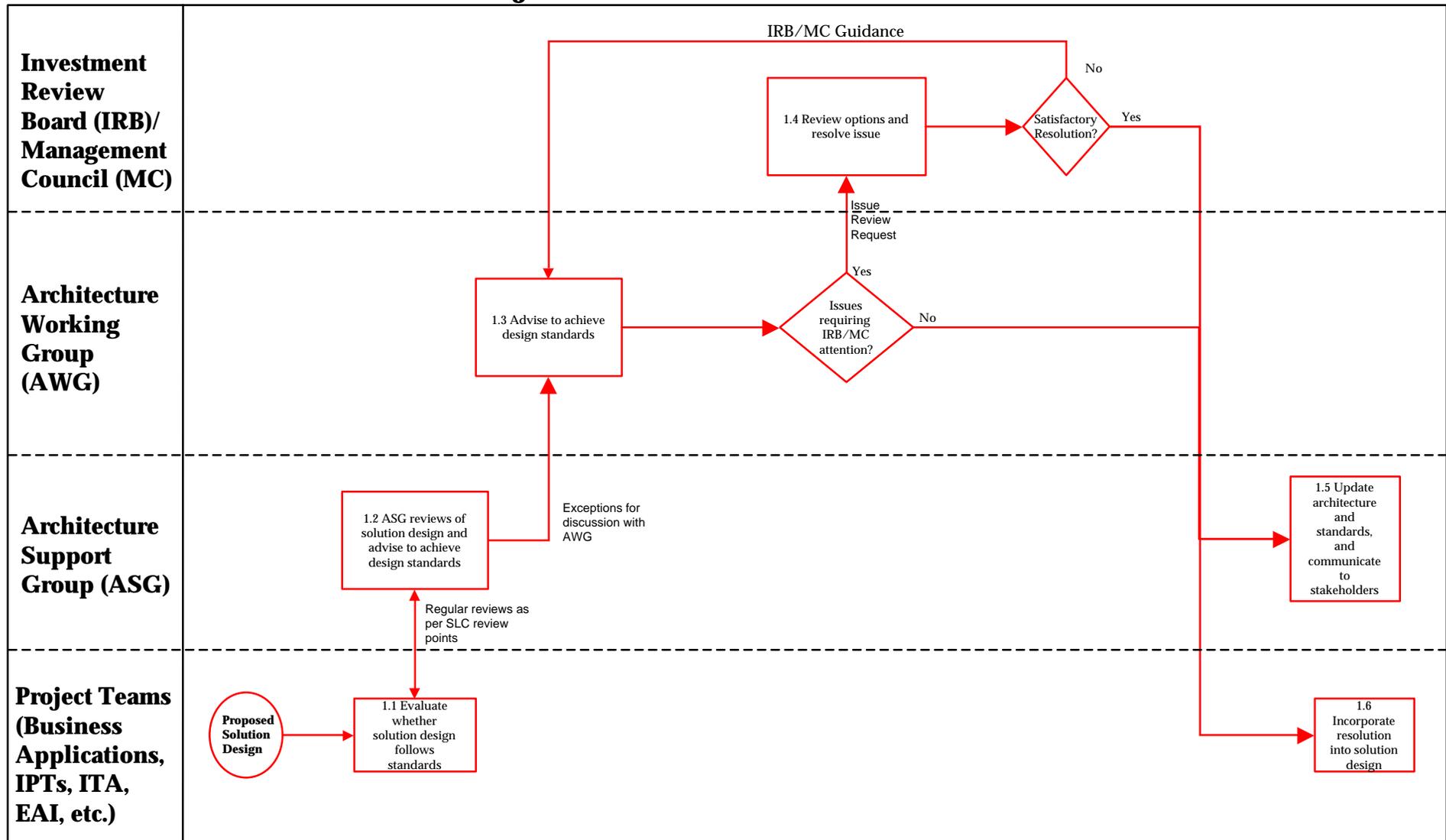


Appendix I: Business-Technology Alignment Processes



The Projects IT Architecture Review Process allows for fair consideration of exceptions to the solution design and architecture standards.

1. Projects IT Architecture Review Process

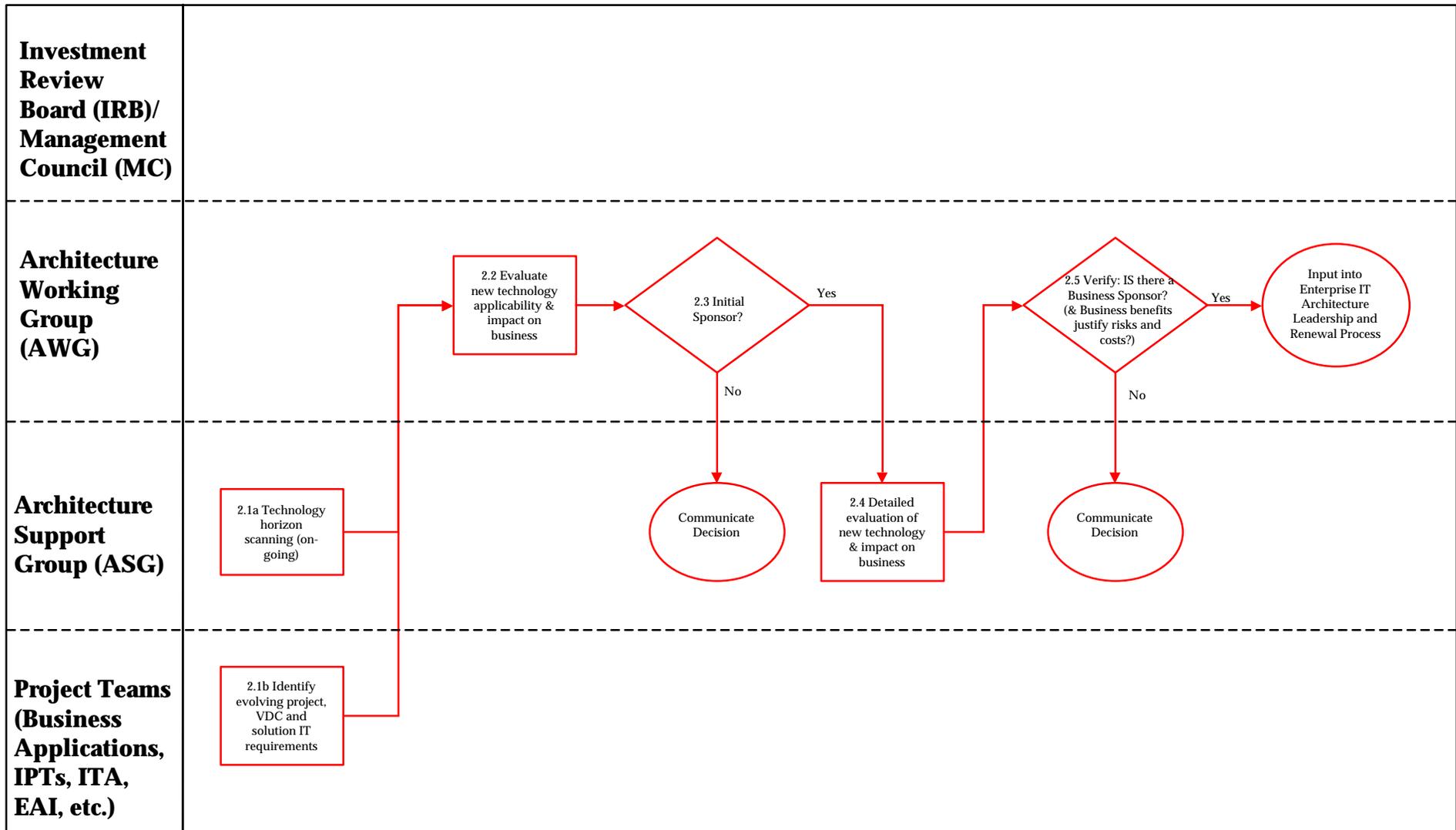




The Advanced Technology Research process enables new-technology decisions based on business value.

2. Advanced Technology Research Process

Function





The Architecture Leadership and Renewal process ensures that the architecture remains aligned with changing business needs.

Function

3. Enterprise IT Architecture Leadership and Renewal Process

