

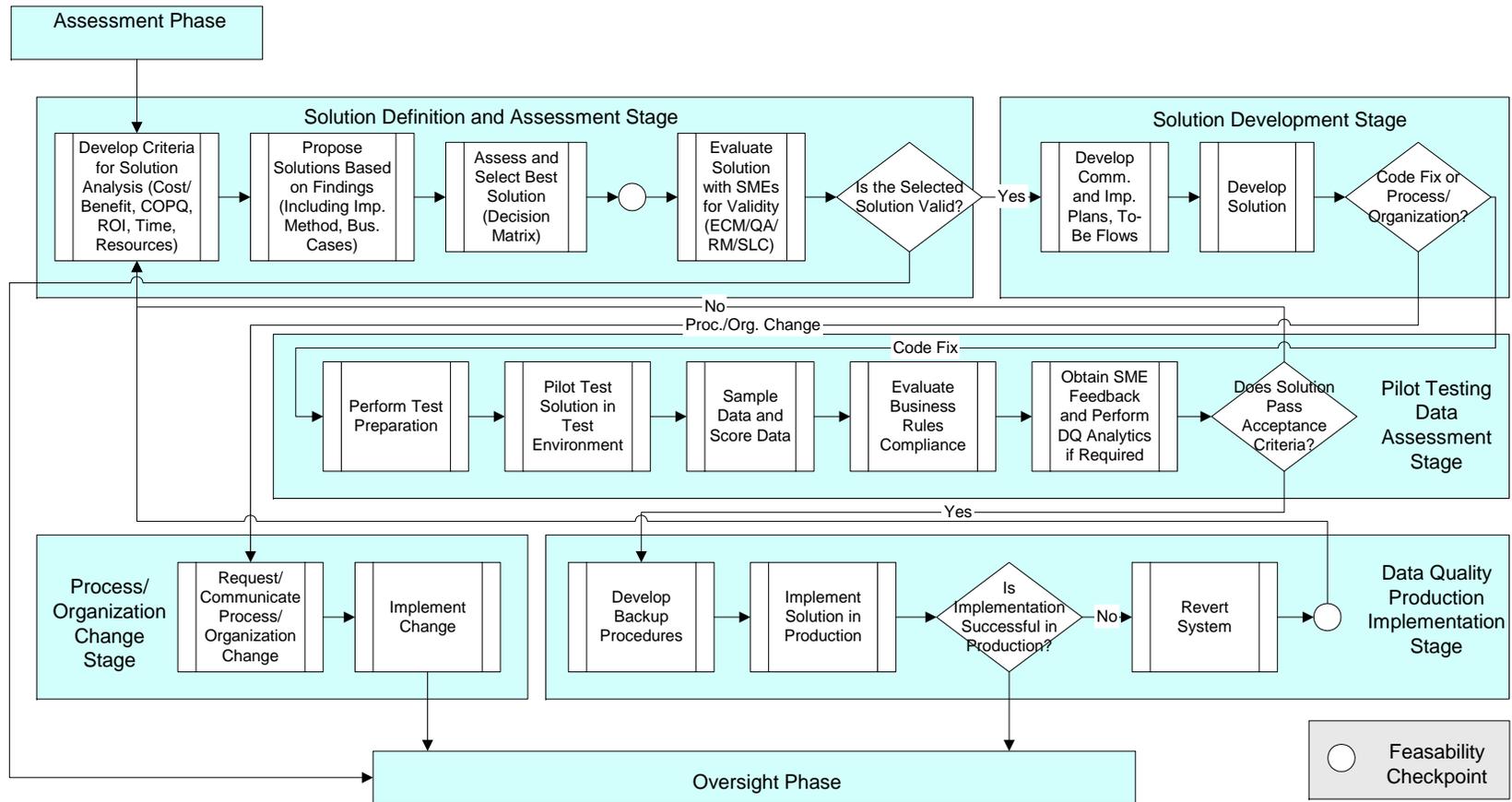


*“We Help
Put America
Through
School”*

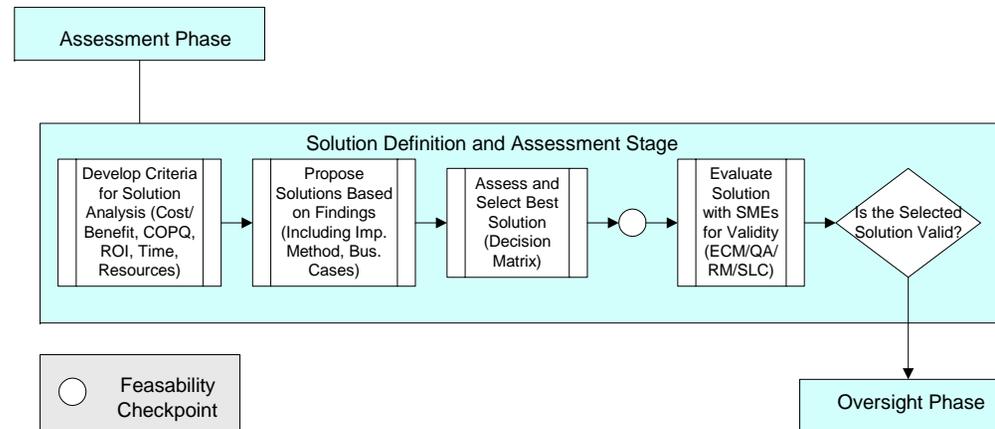
Data Strategy 2.0

Data Quality Implementation Methodology: Improvement Phase Business Templates

Improvement Phase



Improvement Phase – Solution Definition and Assessment Stage



- Develop Criteria for Solution Analysis* - Develop criteria for assessing the applicability, viability, and cost-effectiveness of all formulated solutions
- Propose Solutions Based on Findings – Utilize knowledge from Assessment Phase to develop solution, identify implementation method (cleaning and scrubbing, correction, reconciliation, process change, organizational change), and identify relationship to As-Is and To-Be flows
- Assess and Select Best Solution* - Develop solution criteria to assess solution such as Return on Investment, System Impact, Ease of Implementation, Customer Satisfaction, etc.
- Evaluate Solution with SMEs – Work with groups such as ECM, QA, Risk Management to align solution with groups' standards and policies

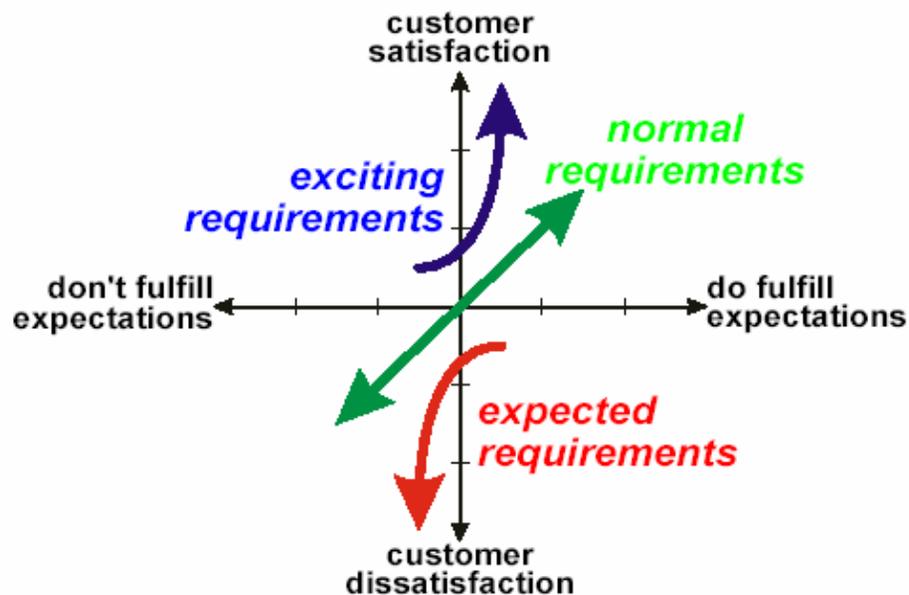
* = Associated business template(s)

Improvement Phase Business Templates – Kano Model



Objective:

Increase customer (internal and external) satisfaction by meeting expected, normal and exciting requirements



How to use this tool:

- Utilize information gathered from Voice of Customer analysis to classify requirements
- Identify additional requirements through critical to customer analysis
- Identify exciting requirements by pinpointing what may be exciting now but expected in the future
- Relate requirements to known data quality issues

Next Steps:

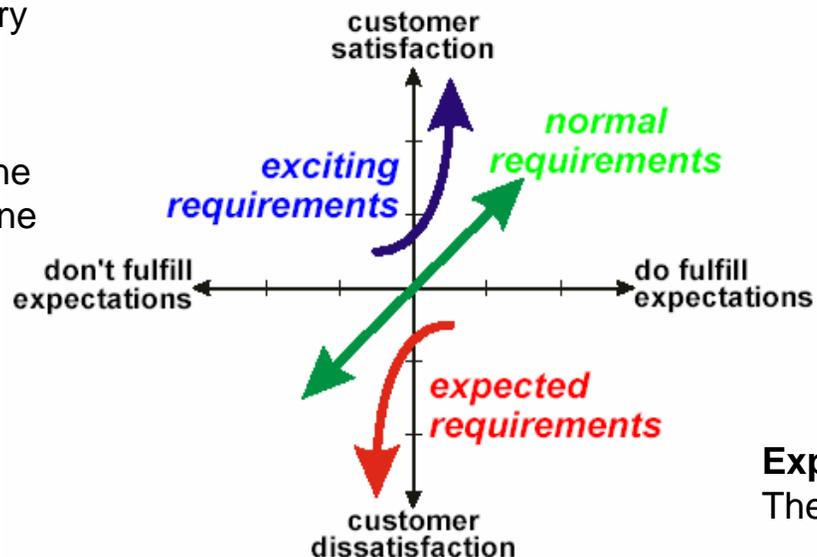
- Identify requirements that are exciting AND achievable
- Propose and develop solutions that meet requirements

Improvement Phase Business Templates – Kano Model Simple Example



Exciting:
Free overnight delivery

Exciting:
Caviar and champagne are served on the plane



Normal/Revealed:
Fast product delivery

Normal/Revealed:
The plane arrives on schedule

Expected:
The product is delivered in-tact

Expected:
The plane arrives in destination city

Improvement Phase Business Templates – Kano Model FSA Example

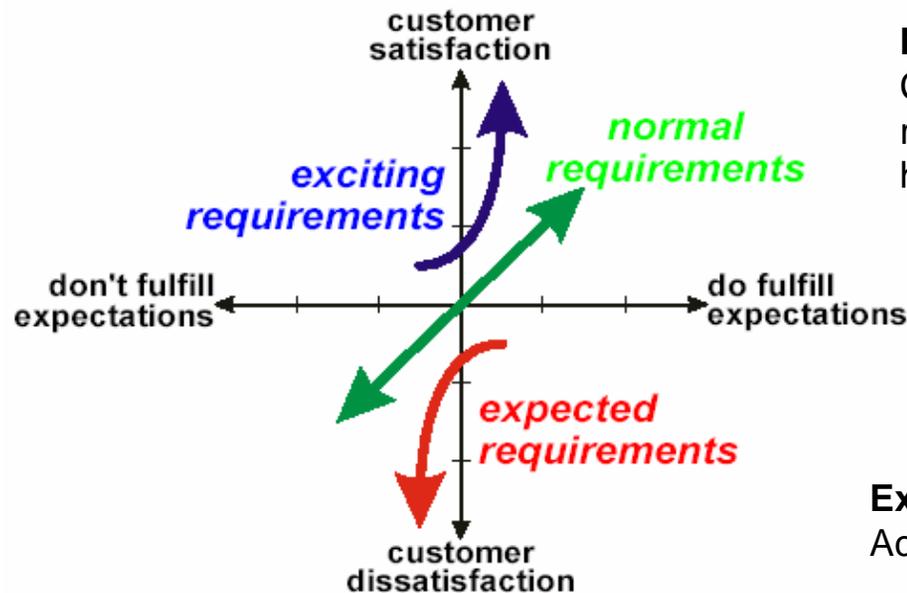


Example:

There is no ability to pull data from systems across the lifecycle to present a single, integrated student view complete with current status of a student's aid and "workflow" indicators relative to that student

Exciting:

User-configurable reporting capabilities



Normal/Revealed:

Cross-system data reports including data history auditing

Expected:

Accurate system data

Improvement Phase Business Templates – Solution Decision Matrix



Objective:

Identify best solution from a group of solutions using agreed upon criteria

How to use this tool:

- Develop criteria to rate solution
- Weight criteria
- Evaluate solutions against weighted criteria
- Identify best solution based on overall score

Solution Option	Criteria with Weights				Overall Score
	Criterion 1	Criterion 2	Criterion 3	Criterion 4	
	Weight 1	Weight 2	Weight 3	Weight 4	
A					
B					
C					

Next Steps:

- Review solution with SMEs for feasibility
- Develop communication and implementation plan
- Report back to Steering Committee
- Pilot solution
- Update issue report

Improvement Phase Business Templates – Solution Decision Matrix FSA Example

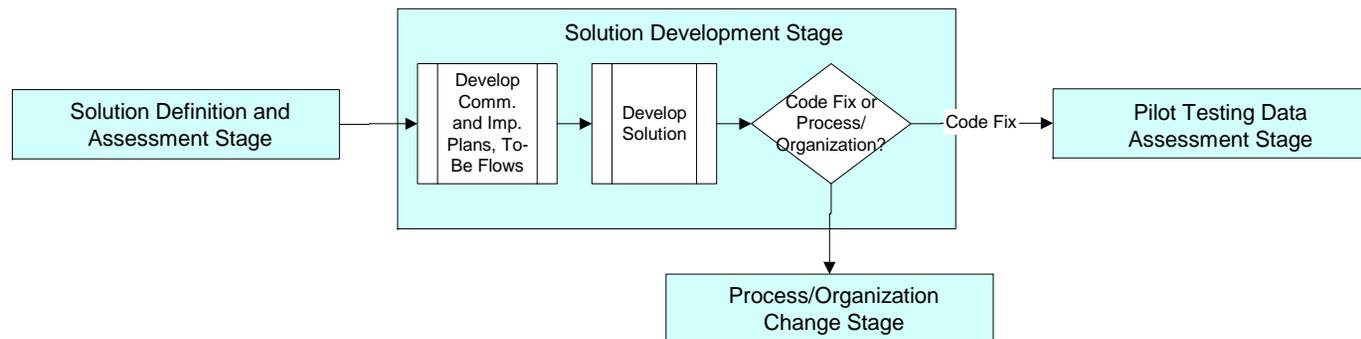


Solution Option	Criteria with Weights					Overall Score
	ROI	Deployment Speed	System Impact	Ease of Implementation	Customer Satisfaction	
	0.3	0.2	0.1	0.3	0.1	
A	2.4	1.6	0.8	2.4	0.8	5.6
B	3	2	1	3	1	7
C	1.8	1.2	0.6	1.8	0.6	4.2

(Sum of voted ranks) x weight of metric
[ex. (3+1+1+1)x0.3]

Highest Score = Best Overall Option

Improvement Phase – Solution Development Stage



- Develop Communication and Implementation Plans* - Develop comprehensive project plan for solution implementation based on type of implementation accounting for all necessary phases such as requirements capture, design, build, test, implementation, etc.
- Develop Solution – Develop system and process documentation, code, technical architecture, etc.

* = Associated business template(s)

Improvement Phase Business Templates – Change Leadership Process

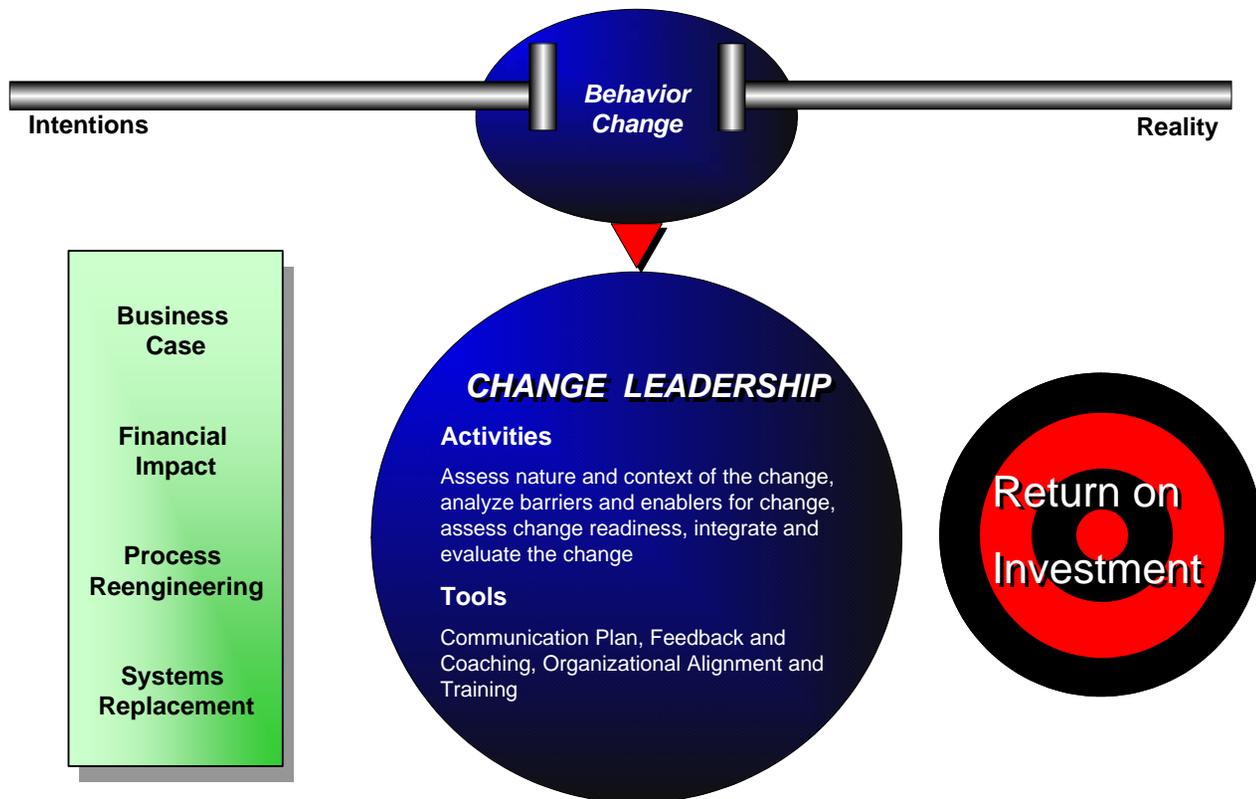


Objective:

Provide a framework to help align a new process within the organization’s strategy, culture, structure, and management practices.

How to use this tool:

- Identify areas of misalignment between solution and organization
- Contact stakeholders for input



Next Steps:

- Develop control and response plan

Improvement Phase Business Templates – Control and Response Plan



Objective:

Ensure sustained process performance by emplacing control mechanisms in the organization

How to use this tool:

- Identify process steps necessary for implementation
- Identify responsible party or parties for each step
- Identify inputs and outputs of each step
- Identify control method and response plan for departures from the process

Control and Response Plan							
Quality Issue:			Core Team:			Date (Orig)	
Key Contact:			Phone:			Date (Rev)	
Process Step	Resp.	Output	Input	Amount of Data	Frequency	Control Method	Response Plan

Next Steps:

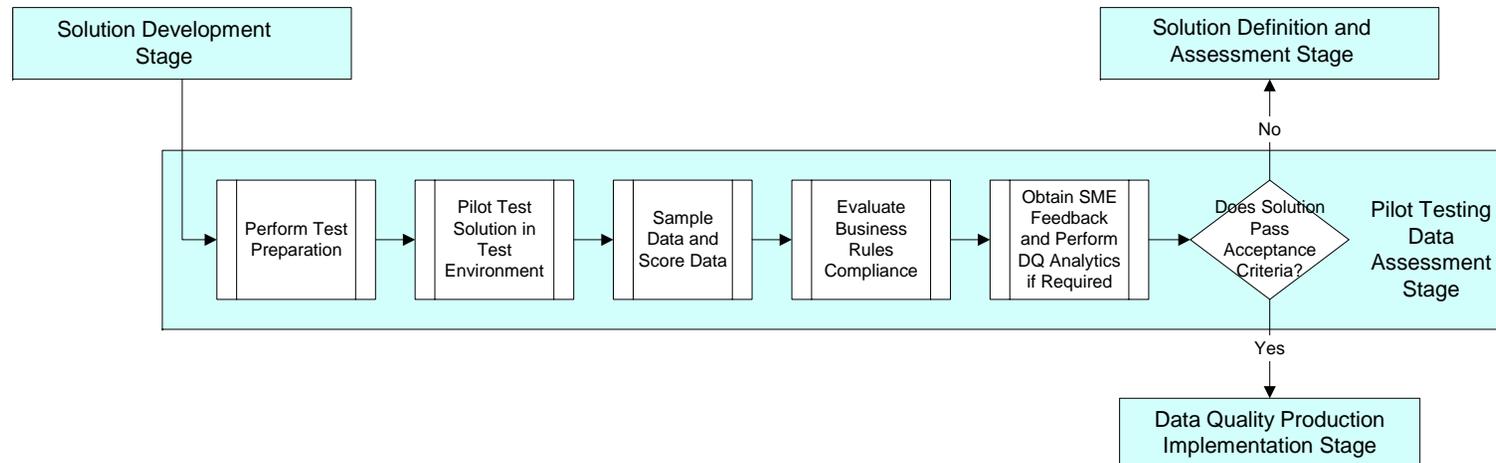
- Provide plan to Steering Committee for oversight
- Combine with implementation plan

Improvement Phase Business Templates – Control and Response Plan Example



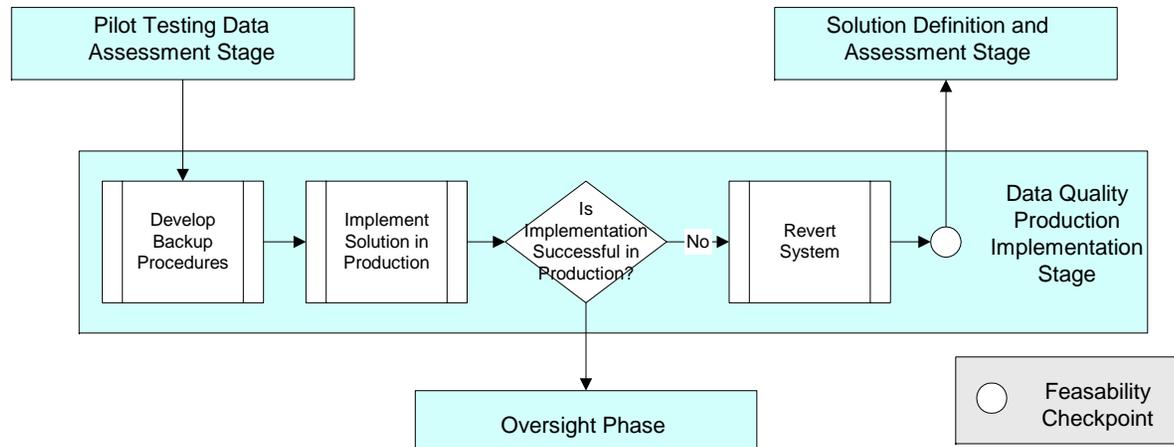
Control and Response Plan							
Quality Issue:	#15 - FAFSA mis-loads		Core Team:	DQ Working Group #3		Date (Orig):	10/31/2003
Key Contact:	Mike Brown		Phone:	xxx-xxx-xxxx		Davt (Rev):	
Process Step	Resp.	Output	Input	Amount of Data	Frequency	Control Method	Response Plan
Load FAFSA data	John Smith	Success	Applicant Data	50,000 rows	Daily	Field length validation, first and last name population.	Contact FAFSA technical analyst, verify system loads, etc

Improvement Phase – Pilot Testing Data Assessment Stage



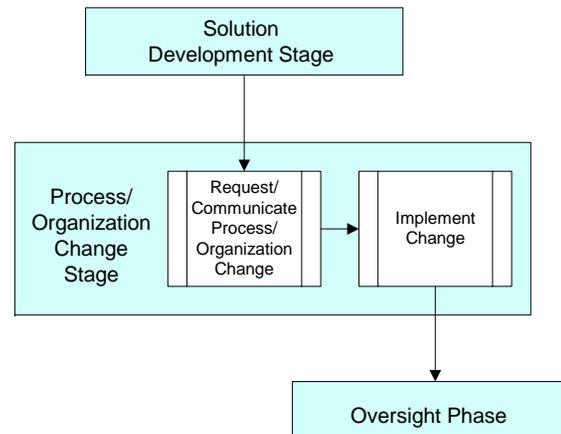
- Perform Test Preparation – Develop unit, integration, system, performance, and user acceptance test scripts and management guidelines as necessary
- Pilot Test Solution in Test Environment – Execute prepared test scripts in an isolated test environment, record results in report tool
- Sample Data and Score Data – Perform final data sampling and scoring based on standards set in Assessment Phase to validate that solution resolves data quality issue
- Evaluate Business Rules Compliance – Reevaluate sampled data against business rules to ensure integrity
- Obtain SME Feedback and Perform Analytics - Review assessment process and results with SMEs to verify comprehensiveness of assessment

Improvement Phase – Data Quality Production Implementation Stage



- Develop Backup Procedures – Develop rollback and safeguard procedures in case of failed implementation
- Implement Solution in Production - Implement the pilot-tested solution into production with all associated parties
- Revert System - Discontinue production and back out changes to the systems

Improvement Phase – Process/Organization Change Stage



- Request/Communicate Process/Organization Change – Initiate change process for policy and legislation changes, communicate process changes throughout FSA and the greater DoE community
- Implement Change - With approval from all affected parties, implement final changes

Questions?

