

Enterprise Resource Planning (ERP)

Planning and Readiness for an ERP Project



Introductions

- Mike Mucha
 - Director, Research and Consulting
 - Deputy Executive Director

- Experience leading 150+ ERP projects
- Small, mid-sized, and large governments
- Focus on business process improvements, implementation quality, and procurement strategy



NIGP, Governing Board Member

Overall Agenda

Day 1

- Getting Started
 - What is ERP
 - ERP Market
 - Project Governance
- Experience from ERP Projects
 - Why ERP
 - What to Expect
 - Steps in a Typical Implementation
 - Quality Assurance and Accountability
 - Organization Staff

Day 2

- ERP Business Case
 - Process/Policy Change
 - Process Documentation
- Procurement
 - Selecting the right vendor
- Readiness
 - Overall Planning and Readiness
 - Tasks / Checklists
 - Other Issues for Success



ERP Readiness and System Selection

Day 1-1: Getting Started

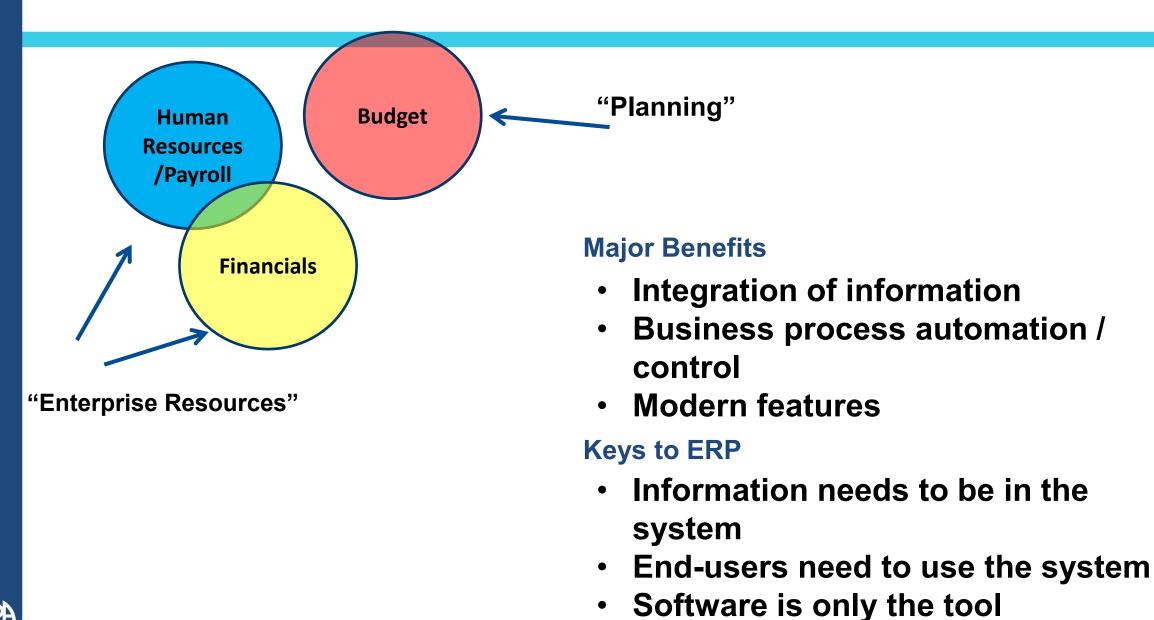


Government Finance Officers Association



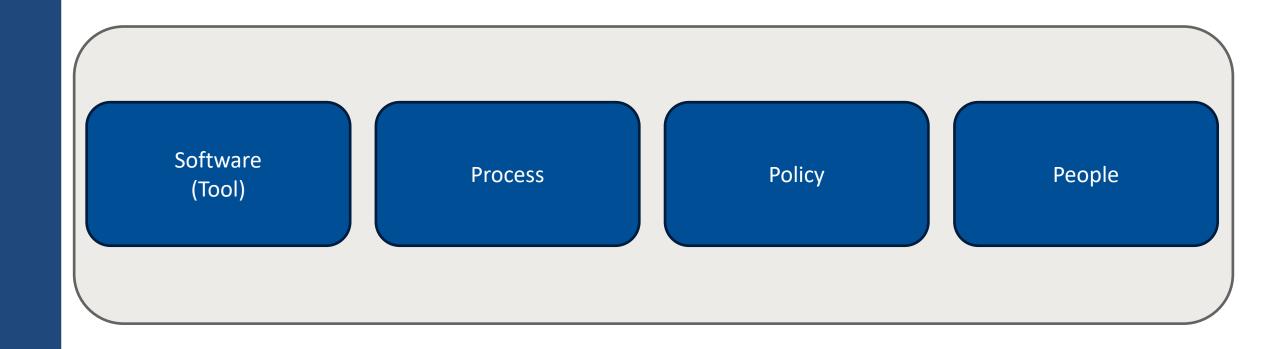
What is ERP?

Core of Public-Sector ERP





What is the ERP "System"





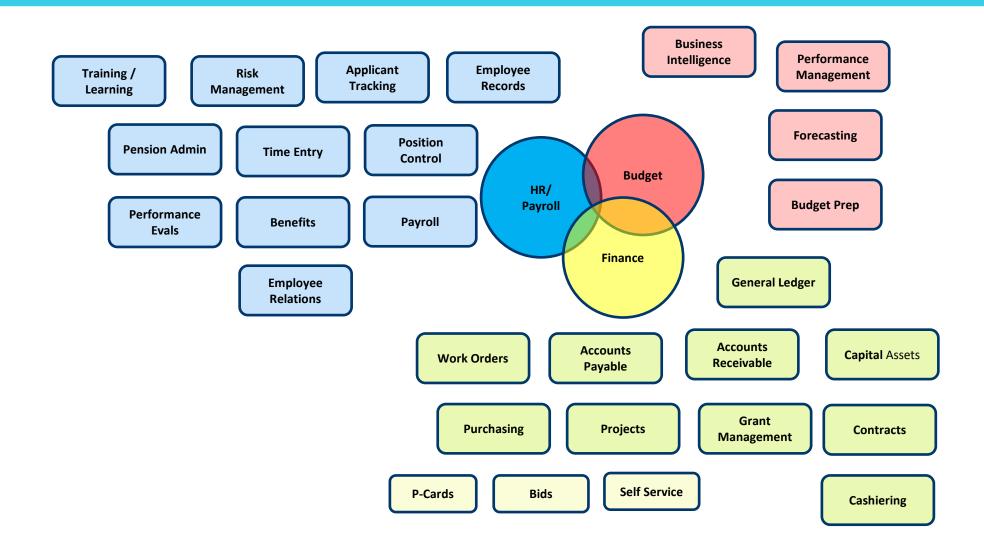
What makes an ERP project unique?



- No one "owns" the system
- Stakeholders have different needs
- Short term vs. long term success
- Success is linked



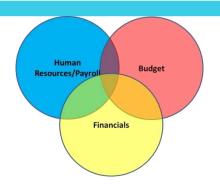
ERP projects are large and complex





Finance System Components

- General ledger
- Project / grant accounting
- Purchasing / contracts
- Inventory
- Accounts payable (vendors)
- Billing / AR
- Asset tracking



"Core"

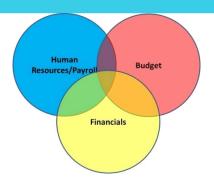
- Work orders / Asset management
- Advanced billing
- Extended purchasing



"Extended"

HR/Payroll Components

- Human Resources
- Positions
- Benefits
- Leave
- Payroll
- Time Entry*



"Core"

- Recruiting
- Professional development
- Evaluations
- Self-service
- Time Entry* / Scheduling

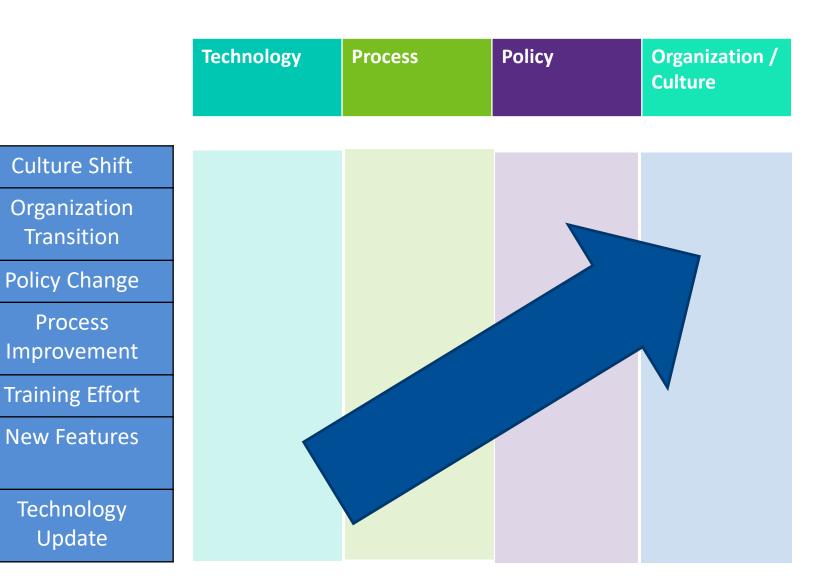
"Extended"



ERP projects are about much more than software

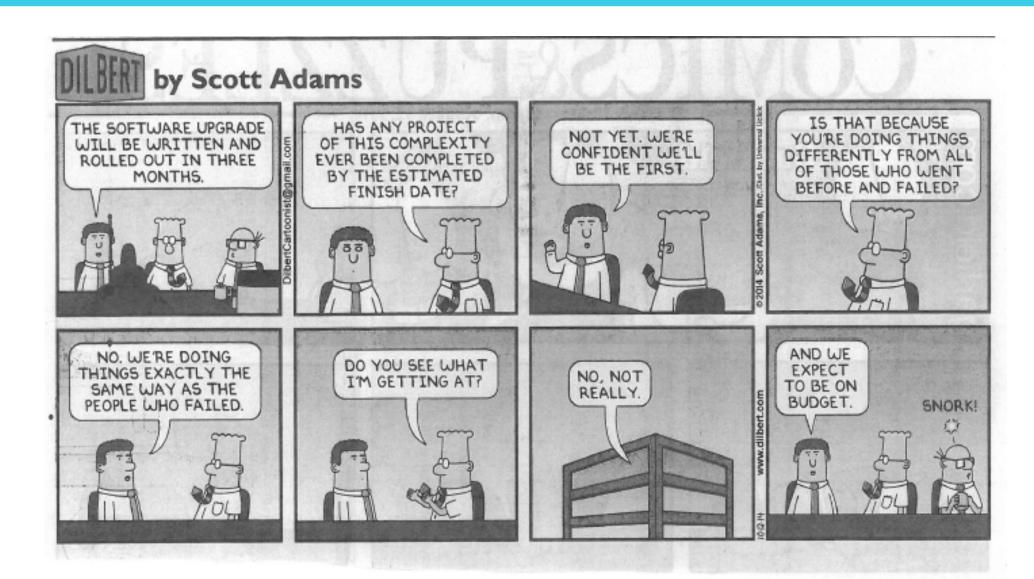
Process

Update





Fool me once.....





GFOA Top 10 ERP Problems

- 1. Not implementing modules / processes
- 2. Poor training of staff
- 3. No testing / Significant errors
- 4. No documentation of requirements
- 5. Departments abandon ERP
- 6. Redundant systems outside of ERP
- 7. Inconsistent chart of accounts
- 8. Distrust of users
- 9. Lack of governance / no upgrades
- 10. Willing to accept "D" level results



Keys to Success

- Vision. Focus on business process
 - Identify project goals
 - "Why are we doing this?"
 - Adopt process improvements and best practices
- Plan. Governance is essential
 - Governance / project management
 - Staffing
- Scope. Document. Document.
 - RFP
 - Requirements
 - Business process
- Accountability. Track and monitor for quality outcomes
 - Requirements traceability
 - Testing
 - Quality assurance







ERP Market Overview

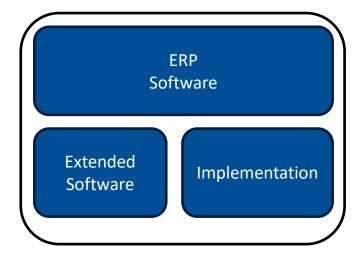
Ongoing findings from GFOA research

- Governments typically hold onto legacy technology longer than was expected
- Implementation challenges/deficiencies are never corrected
 - Workarounds
 - Additional systems
 - Manual effort / Dealing with the pain
- Industry still in the middle of large transition to cloud services
 - Original fears (lack of customization, security, control of data) not big issues
 - Ongoing challenges (failed implementation, change management, vendor accountability) still issues

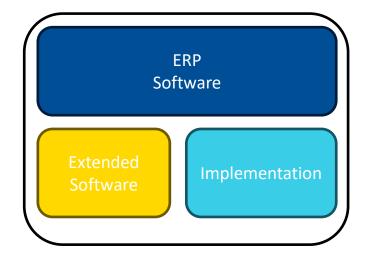


Different vendor models

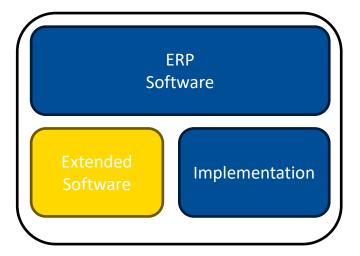
1) All Under One Umbrella



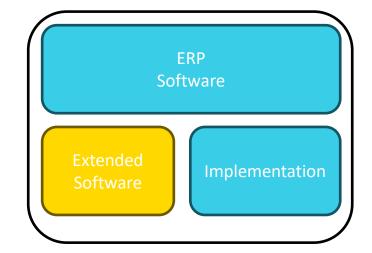
3) Software and Services Split



2) Best of Breed



4) Software Reseller





History of ERP / financial systems and the public sector

web-based software

What is next? (Hopefully)

- Actually getting software implemented
- Faster implementations
- Sustainable implementations

The future.....?

- Shared services
- Standardization

Mid 2000's: Vendors develop more public sector focused functionality Early 2000's: Push to create

2020's: Cloud

2010's: Usability and Mobile

Late 1990's: Y2K.

Late 1980's: Small ERP vendors emerge focusing exclusively on government

Early 1980's: ERP vendors start

focusing on public sector



ERP vendors use different models for implementation

- Vendor Implements Own Software
 - "One throat to choke"
 - No competition
- Vendor uses third party "system integrator"
 - Potential for "finger pointing"
 - Implementation firms focus on implementation
- Mixed Approach vendor provides consulting services, but also partners with outside firms



Implementation Model Differences

Consulting approach

- Significant vendor involvement in project
- Typically 1:1 match on the project team
- Strong project management, business process improvement
- Dedicated Team

Homework approach

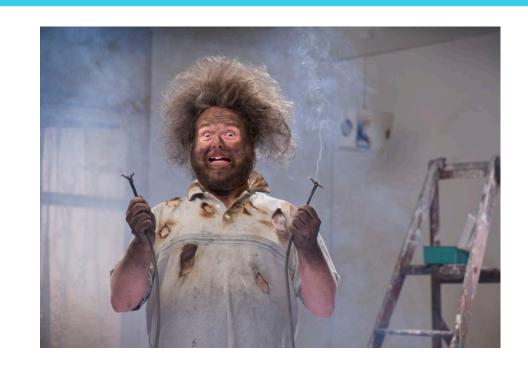
- Limited vendor involvement (primarily in training role)
- 1 consultant for entire project (or major function)
- Project management and business process improvement is responsibility of government
- Consultants split time between multiple projects



Standard vendor implementation model avoids accountability

Scope

- Lack of clearly defined scope
- As-is software
- No project outcomes



Cost

- Time and material (pay as the vendor burns hours) approaches
- Delays, failures, and change orders



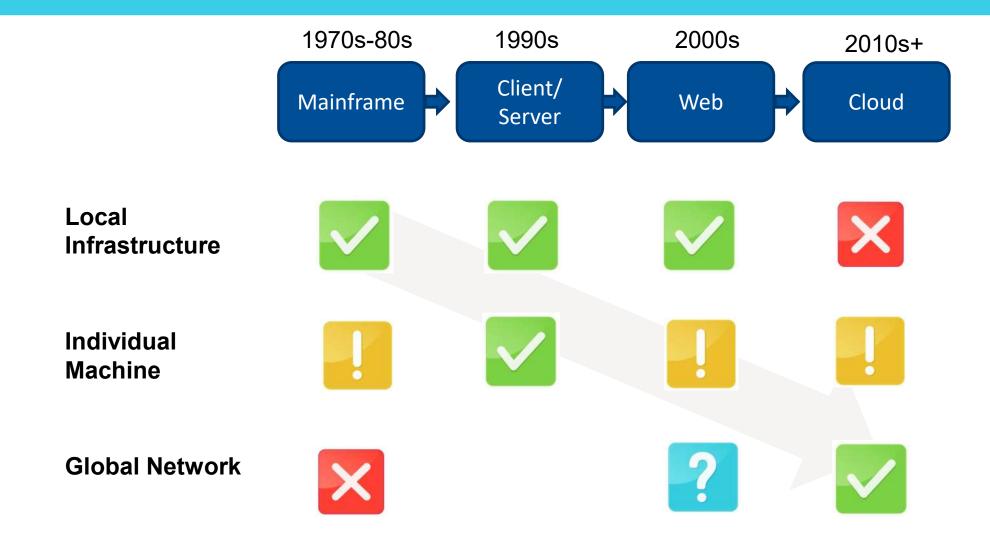
Cloud bringing about major change in government

- Governments core competency is not server administration
- Change, resiliency, updates
- Managed risk
- Allow for more powerful products and sophistication in smaller governments





Evolution of Software

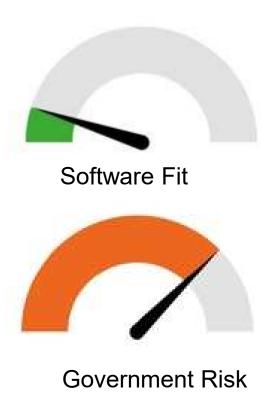




Overall Assessment for Public Sector

- Technology is mature
- Contract norms are not
- O Risk:







Cloud / Hosting = Outsourcing

- Vendor has advantage from ability to specialize and economies of scale
 - Specialized Security Management
 - Ability to recruit staff with specialized skillsets
- Customer (government) compensates vendor for providing services and for transfer of risk
 - Risk on vendor for performing services up to service level standard
 - Requires service level standards / service level agreements (SLAs)



Changing ERP Market

- Use of customizations has diminished
 - Standard processes
 - Business process change
- Reduced focus on technical support
- Makes it much more difficult to accommodate old (bad) process







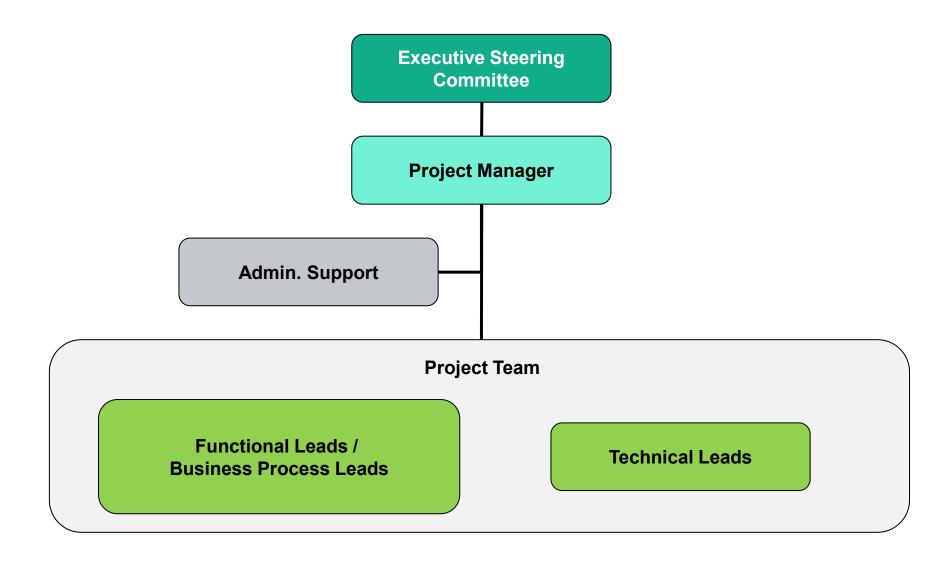
Project Governance

Importance of Project Governance

- Formal rules, procedures, and structures by which the project will be governed.
- Avoid informal assumptions that people have about how the project will be governed
 - Who can make what decisions?
 - Who settles disagreements on project issues?
 - What authority do team members, the project manager, executive steering committee members, and the executive sponsor have?

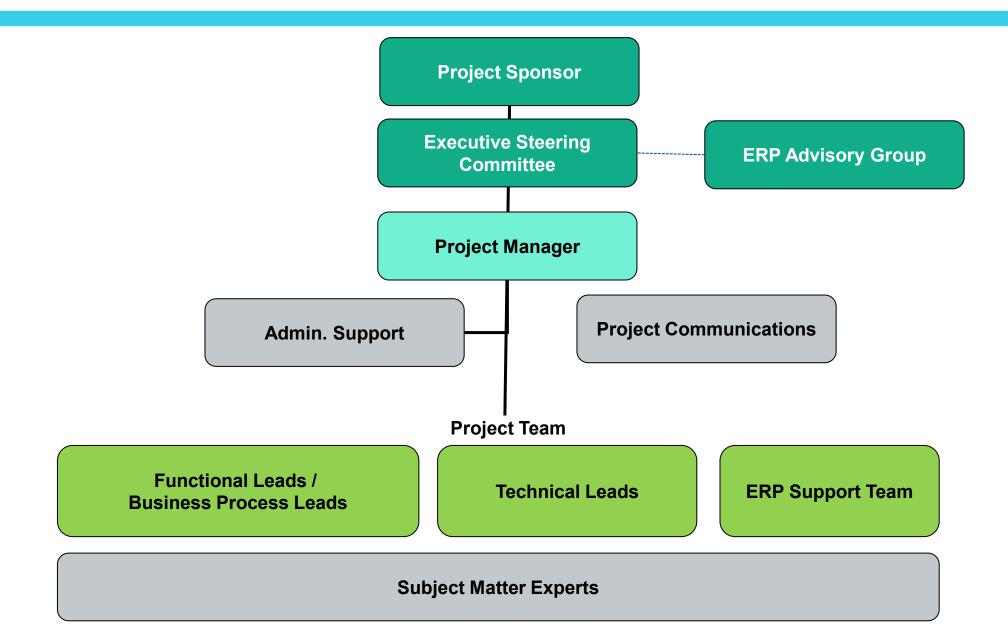


Simple Project Structure





(More Complex) Project Structure #2



Leadership Roles

- Project sponsor
 - Take interest
 - Communicate business case
 - Understand the pain
 - Listen (and when necessary act)
- Steering committee
 - Provides direction does not manage day-to-day
 - Makes major decisions
 - Free up resources
 - Criteria for Members:
 - Empowered to make project policy decisions
 - Champion for the project
 - "Work well" with the other committee members
 - Ability to support the project manager and project team



The "Core" Team

- Project manager
 - Coordinate the project
 - Manage the team
 - Ensure quality
- Business process lead / Project team
 - The "doers"
 - Take responsibility for project tasks
 - Make business process decisions
 - Coordinate subject matter experts
- Subject matter experts
 - Contribute organizational and functional knowledge
 - Attend and participate
 - Become system power users



The "Specialists"

- Technical Expert
 - Rigorous adherence to process and testing
 - Data conversion
 - Report writing
 - Interfaces
- Trainer
 - Develops training materials
 - Identifies FAQ
 - Delivers training
- Tester
 - Develops approach for testing system
 - Drafts test scripts
 - Documents issues / communicates feedback
- Support Resource
 - Initial point of contract for users
 - Calm "face" of the project
 - Learn as you go



The "Others"

- The system is only going to be as good as those who use it
- Participate in training
- Ask questions
- Use the system
- Run the organization
- Track feedback



A project manager has 3 roles





Where do you find a project manager

- Existing PMO
- IT Project Manager
- Finance or HR Manager
- Department Staff

- Semi-Retired Professional
- Contract PM (individual)
- Contract PM (firm)





ERP Readiness and System Selection

Day 1-2: Experience from Other Projects

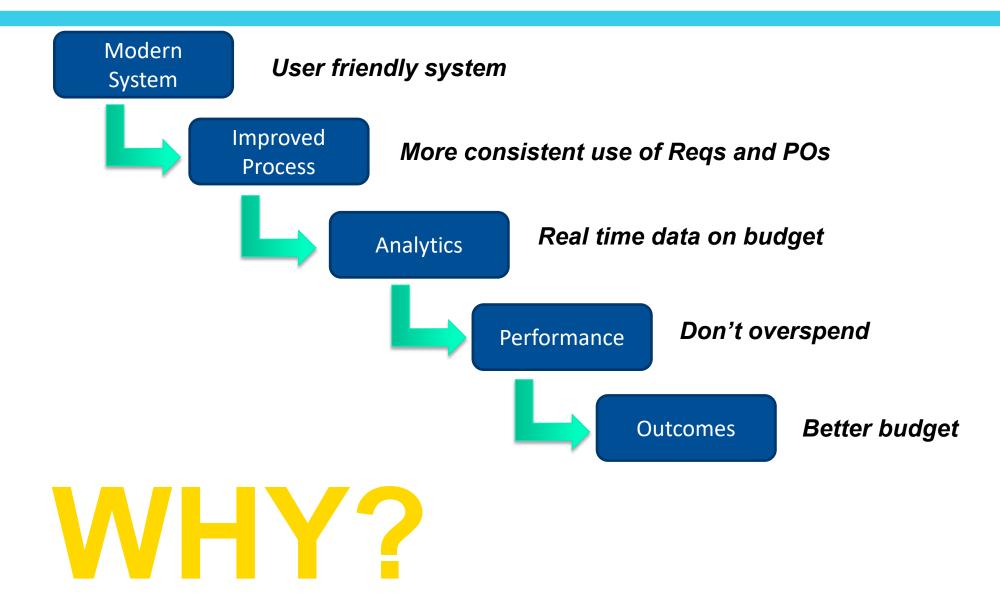


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Project Purpose and Goals

Communicating your goals





Clearly Define Scope

- Organizational scope
- Major goals
- Business process areas
- Future state process flows
- Requirements
 - What you need the system to do
 - Acceptance checklist





Exercise



What to Expect

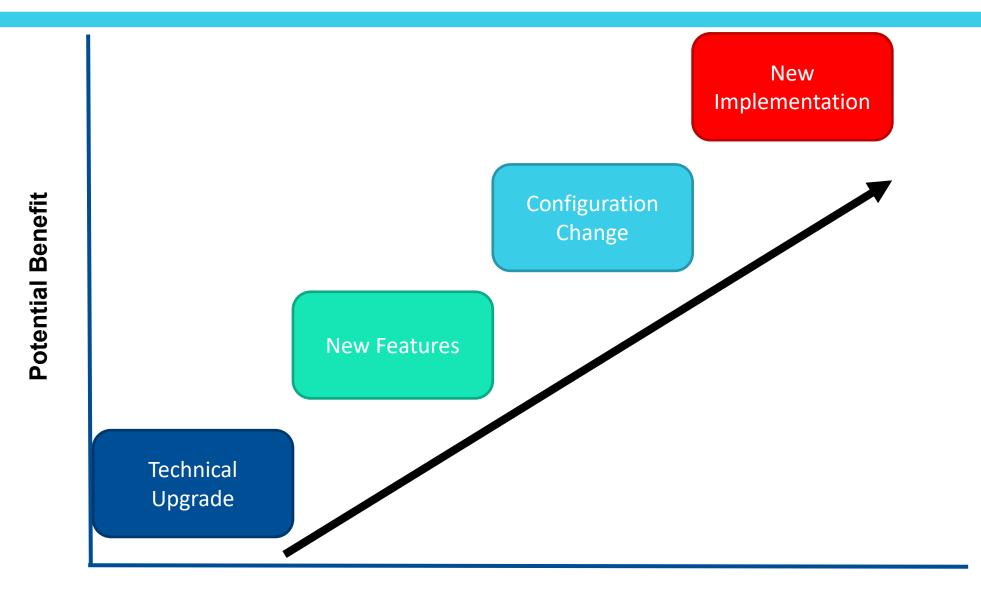
Facts of an ERP Implementation

- ERP projects are difficult
- ERP projects are <u>NOT</u> impossible
- Many organizations go into an ERP implementation unprepared
 - Project Direction
 - Staffing
 - Governance
 - Method of Accountability

 Managing an ERP project is about avoiding risks and focusing on project outcomes



All "upgrades" are not the same





Typical ERP Project Phases

Readiness/Procurement

Process Vendor Selection Contract / Ramp Up

- Project Planning
- Process improvement
- Documentation
 - Rules
 - Systems
 - Process
- Governance
- Goal Setting
- RFP Process
- Scope Refinement
- Vendor Selection
- Contract Finalization

Core Financials





Core HR/Payroll

Planning	Design / Configuration	Test / Train	7
-			•

- Project Planning
- System Training
- Documentation
- Testing
- Data Conversions
- Go-Live

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- Go-Live



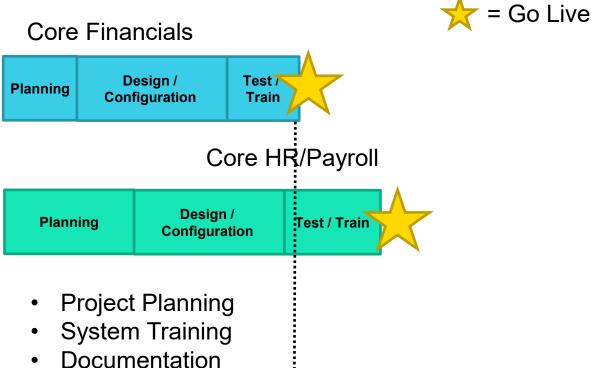
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Current Trends in ERP Project Phases

Readiness/Procurement



- Project Planning
- Process improvement
- Documentation
 - Rules
 - Systems
 - Process
- Governance
- Goal Setting
- RFP Process
- Scope Refinement
- Vendor Selection
- Contract Finalization





0 1 2

Data Conversions

Testing

Go-Live

Major Project Phases - Implementation



Implementation Model Differences

Consulting approach

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- Dedicated Team

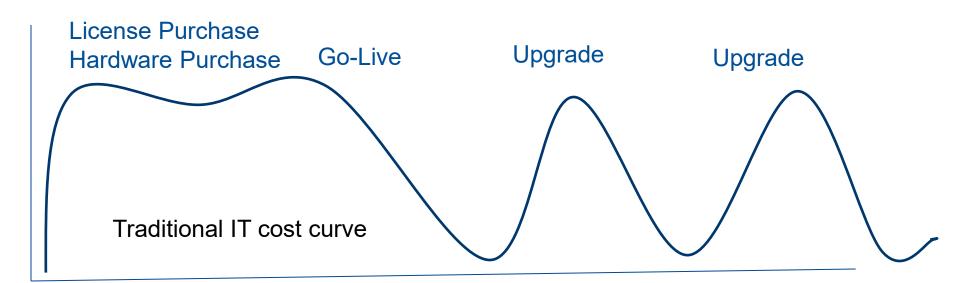
Homework approach

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Legacy Project Management Effort

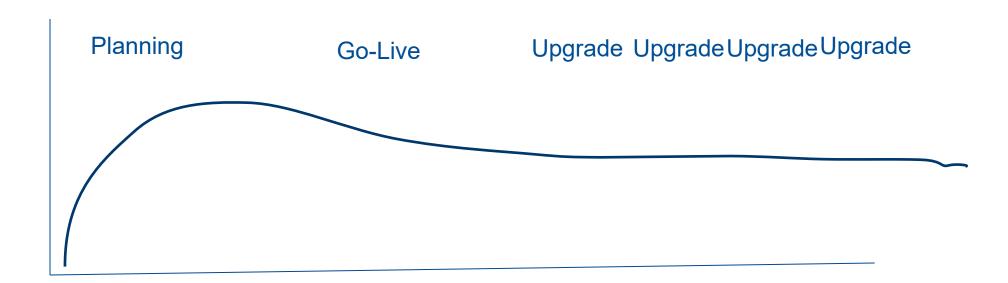
- Planning
- Infrastructure Planning
- Hardware Procurement and Set Up
- Design / Configuration
- Configuration
- Testing
- Go-Live
- Begin Working on Update





SaaS Project Management Effort

- Planning
- System Deployment
- Design / Configuration
- Configuration
- Testing
- Go-Live
- Upgrade Management







Mitigating Common Risks

Identifying Project Risk

- Contract Risk
- Technical Risk
- Project Risk
- People Risk
- Management Risk
- Organizational Risk





Mitigating Contract Risk

- Contract risks is financial
 - Payments
 - Payment withholding
 - Change orders
 - Penalties
 - Blame



Mitigating Technical Risk

- Documentation
 - Review and Acceptance
- Testing
 - Unit Testing
 - Integration Testing
 - Regression Testing
 - Parallel Testing
- Project Close-Out



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Mitigating Project Risk

- Project Goals
 - Scorecard
- Project Scope
 - Requirements
 - Design Documents
 - Requirements Traceability
- Documentation
 - Change Orders

Process List	
Process	Task / Topics
Accounting	 Chart of Accounts General Ledger Transactions Activity Costing Grant / Project Tracking Financial Reporting
Budget	 Forecasting Operating Budget Capital Improvement Planning (CIP) Capital Budget Budget Adjustments / Amendments
Procure – Pay	 Vendors Purchase Requisitions Bid Quote RFP / RFI / RFQ Purchase Orders Contracts Change Order Receiving Inventory Accounts Payable
Customer Billing (does not include specialized billing)	 Customer File Billing Accounts Receivable Aging Collections



Mitigating People Risk

- Planning appropriate staffing levels
 - Are vendor estimates realistic?
- O Planning for involvement from the right people?
 - Are necessary stakeholders involved?

l e e e e e e e e e e e e e e e e e e e													
Resource/Position	1	2	3	4	5	6	7	8	9	10	11	12	
CROSS-PHASE Training (Project Management)	T)												
Project Manager	54	16	16	16	16	16	16	16	16	16	16	16	
Installers/OSDBA Technicians	24												
Total Cross-Phase Hours	78	16	16	16	16	16	16	16	16	16	16	16	
Phase 1 - Financials													
Implementation Consultant(s)	30	88	88	88	88	88	88	134	52				
Conversion Programmer	29	23	23	23	23	23	23	29/					
Forms Designer	2	8											
Total for Scope Option #1 Vendor Hours	61	119	111	111	111	111	111	163	52	0	0	0	
Phase 2 - Payroll & HR													
Implementation Consultant(s)			14	40	40	40	40	40	40	30	30	24	
Conversion Programmer			12	10	10	10	10	10	10	б	6		
Forms Designer			2	8									



Mitigating Management Risk

- Communications
 - Status reports
 - Stakeholder updates
- Organization
 - Project plan
- Documentation
 - Issues list

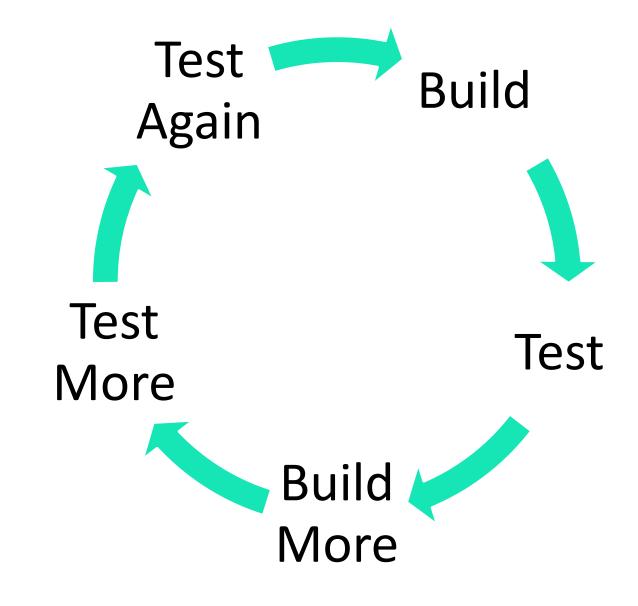


Managing Organizational Risk

- Leadership
 - Accountability
 - Support
 - Change management
- Culture
 - "Culture Eats Strategy for Breakfast"



Implementation should feature iterative testing







Organizing Staff

The Problem with the Project Team

- Project needs sufficient staffing and dedication
- Project teams were separated from the organization to allow project focus
 - Dedicated work space
 - Dedicated project staffing
- Project teams lose connect with organization
 - Communication lacking
 - Transparent decision making missing
- Change management!
- Another siloed function that needs effort to integrate into the project



GFOA's Approach to Project Team

- Need to include representatives from across the organization
- Include both central and operational departments (no one "owns" a process and no one will "own" the system)
- Multiple teams focused around business process

- Don't isolate. Bring the project to the users
- Transparency in decision making
- Building champions throughout the organization



Alternative to Traditional Project Teams

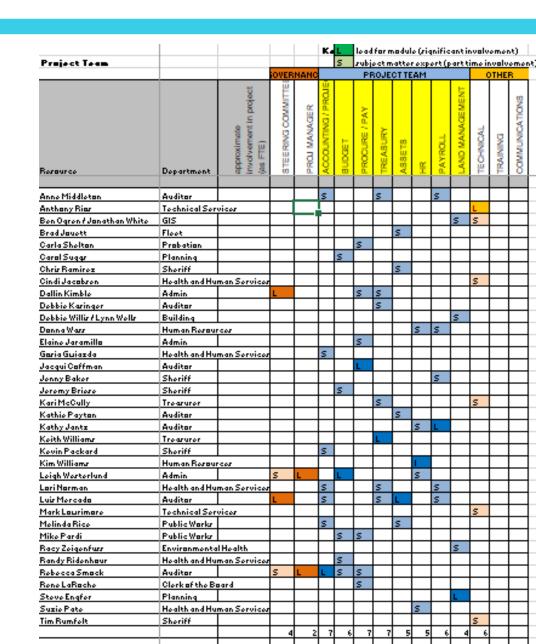
- "PIT Crews"
- Empowered team made up of representatives from county departments
 - Tasked with managing process documentation
 - Challenging the status quo
 - Why? Why? Why? Why?
 - Discussing improvements
 - Making recommendations





Staffing

- Staff serve on multiple teams
- Participation is important
- May need help with regular duties
- Required level of effort is not consistent throughout the project





What makes an ERP project unique?



- No one "owns" the system
- Stakeholders have different needs
- Short term vs. long term success
- Success is linked



Linking Tragedy of the Commons to Public Administration

Elinor Ostrom

- Nobel Price in Economics 2009
- Governing the Commons: the Evolution of Institutions for Collective Action (1990)
- When natural resources are jointly used by their users, in time, rules are established for how these are to be cared for and used in a way that is both economically and ecologically sustainable

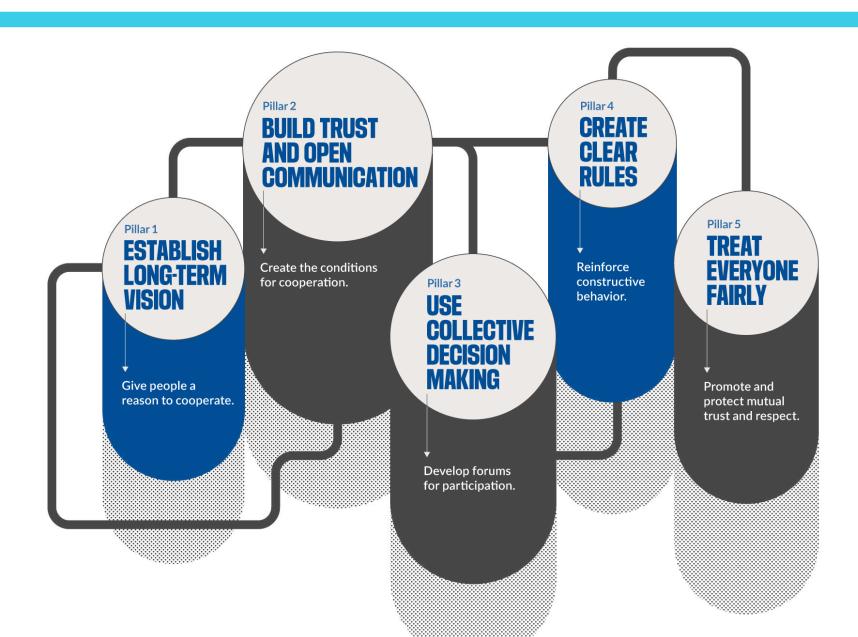


Practical Change Management and Leadership

- Ensure proper training (take away fear of unknown)
- Project communications (avoid confusion)
 - Awareness
 - Delivering key messages
 - Listening to feedback
- Resistance is inevitable (there will be challenges)
 - Consistency, perspective, support
- Build a culture that welcomes discussion (start early)
- Leadership and support (make it your own)



GFOA Financial Foundations Framework







Exercise

ERP Readiness and System Selection

Day 2-3: ERP Business Case





Process Improvement

There is no wrong way to do process improvement

- Many similarities among approaches
 - Thorough analysis / root-cause
 - Simplification
 - Standardization
 - Involvement of stakeholders
- O Differences exist in:
 - Terminology
 - Formality (scientific backing)
 - Emphasis
 - Branding



PDCA (plan, do, check, act)

- Iterative process that repeats 4 step model
- Known as "Deming cycle" or "Shewhart cycle"
- Many variations
 - PDSA (plan, do, study, act)
 - OPDCA (observe)





Six Sigma

- Set of techniques and tools for process improvement used at Motorola
- Focus on minimizing defects and reducing variation
 - Applied most naturally in manufacturing setting
- Very data driven



"Lean" Process Improvement

- Lean Process Improvement is the process of continually reviewing a process to identify and eliminate "waste"
- Lean encourages an organizational culture that shows respect for people while fostering an environment of continuous improvement.
- Lean management focuses not only on results, but also on what ultimately produces results: the process
- Respect for People
 - Creating a culture of trust and of commitment to the organization members, the mission, and each other;
 - The devolution of decision-making to people closest to a problem;
 - And self-managed and self-organized teams that recognize, analyze, and solve problems.



Kaizen

- First practiced by Japanese businesses after WWII
 - Made popular by Toyota
- Improvement events that feature all employees including the CEO, manager, and regular employees
 - Ideas for improvement come from existing workforce
- Focused improvement sessions. Significant investment in improvement event.
- Apply lean tools in structured setting and focus on improvement

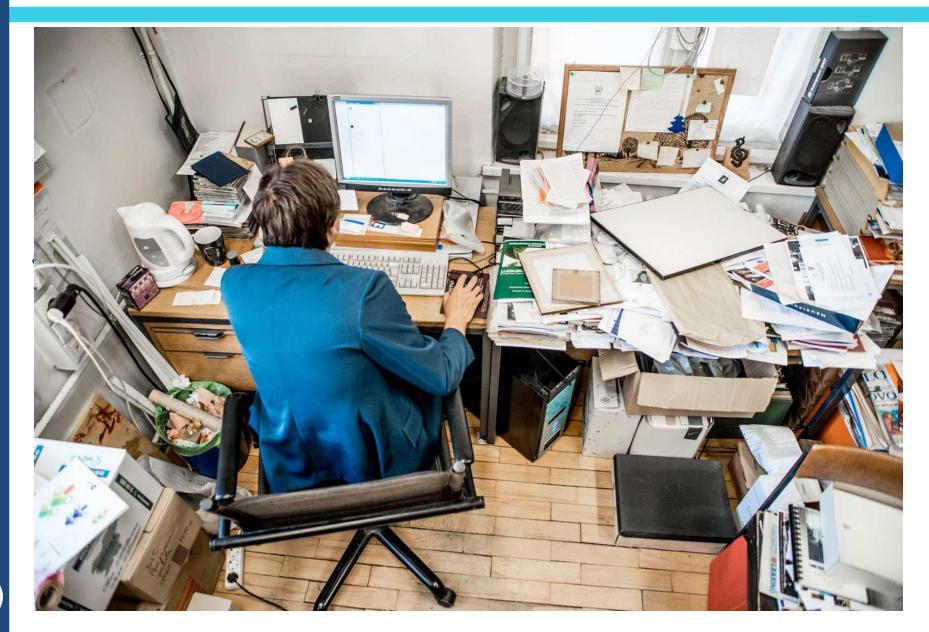


How to Define Waste

- Waste is anything that adds no value to the customer. This could include time, costs, etc.
- Waste is inherent in any business activity.
 - It is required to compensate for weaknesses internal to the process
- More waste leads to more delays in work



8 Forms of Waste







Why Change?

Employees can't tolerate status quo

- Ongoing deterioration of process eventually hits on "breaking point"
- Everyone knows its bad
 - It is now bad enough to do something about it
- Change is long overdue
- Staff is ready to change



Who is changing?





Process has simply failed to achieve outcome

- Process change can't hold out any longer
- Outcomes are no longer met
 - Significant errors
 - Delays
 - Additional costs
 - Not consistent with policy/regulations





Process and tools are noticeably outdated

- Outdated technology or outdated approach puts organization at a competitive disadvantage
- Transaction volume exceeds capacity



- Online payments
- Electronic documents
- Access to data
- Ease of training

- Business intelligence
- Mobile devices
- Integration



"Doing more with less"

- Recessions reduce revenue and require innovations
 - More automation
 - Reduction in effort
 - Re-allocation of resources





Changing mandates require process change

- State reporting requirements
- Compliance with standards
 - PCI
 - Debt management





What else needs to change?

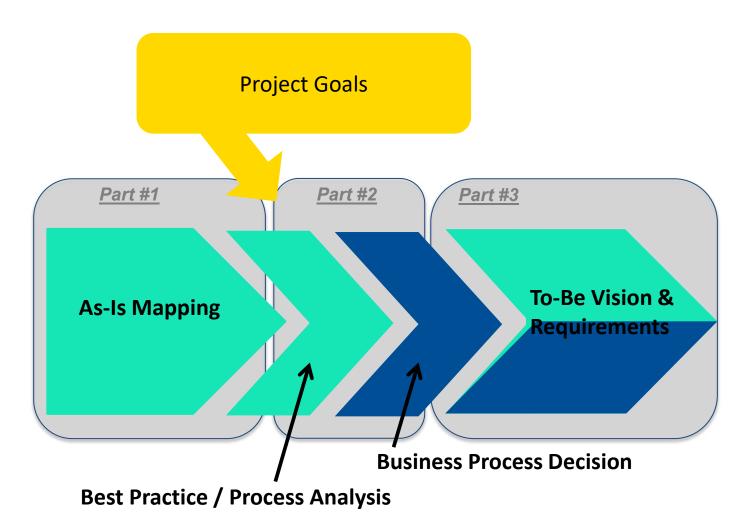
- Past implementation failure
 - Missing functionality
 - Components not configured correctly
 - Business needs change
 - Inconsistent use
- Functionality not previously available

How bad is the chart of accounts?





Business Process Improvement





Why? Why? Why? Why? Why? Why? Why? Why?

"We've always done it this way"

- Someone (and likely more than one) from every organization

Process focus mitigates implementation risk

- Projects don't often fail because of issues with software
 - Implementation is a far greater risk in almost all projects
 - Many organizations do not have a vision for how the system will be used
 - Vendors can't help with vision (or want to)
- Most organizations do not deploy 100% of the software seen at demos
 - Many organizations don't come close
- Many software vendors treat implementation as an afterthought



Common Areas for Improvement

- "Best Practice"
- Remove waste / "non-value added" tasks
 - Approvals
 - Storage
 - Paper
 - Poor Training
- Roles
 - Service Level Agreements
- Systems





"Easy" Process Improvements

Chart of Accounts

- Clearly define segments
 - One purpose per segment (department, program, etc.)
 - Don't store redundant info
- Reduce number of "funds"
- Utilize sub-systems
 - Projects / grants
 - Commodity codes
 - Inventory
 - Cashiering / AR
- Consider budget hierarchies



Capital Assets

- Track in the system
- Record assets at time of acquisition
- Connect assets to related systems
 - Work orders / Fleet / Facility systems
 - GIS
- Track maintenance costs
 - Life-cycle costing
 - CIP / Capital replacement



Human Resources / Payroll

- 1:1 Position Structure
 - 1 position / 1 employee
- Use job classification to group positions

- Electronic employee files
 - One shared file with security permissions

- Time entry data captured at the employee level
 - System calculated pay (not manual calculations)



Treasury

- Electronic payments
- Automated bank reconciliations
- Actually use accounts receivable functionality

- GFOA Best Practice: Electronic Payments
 - https://www.gfoa.org/materials/payments-made-by-governments



Best Practice Outcomes

Program budgeting

- Multi-Year CIP
- Long-Term Financial Planning
- Cash Flow Forecasting

Financial Transparency

Customer Service Improvements



System Foundation = Chart of Accounts

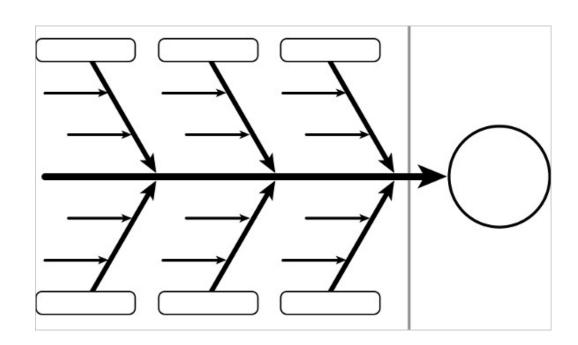
Fund
Organizational
Unit
Program /
Activity
Object /
Account
Project

- Fund (General Fund)
- Organizational unit (Facilities)
- Program/activity (New Construction)
- Account classification (Salary)
 - Expense
 - Revenue
 - Balance Sheet
- Project (Fitness Center)



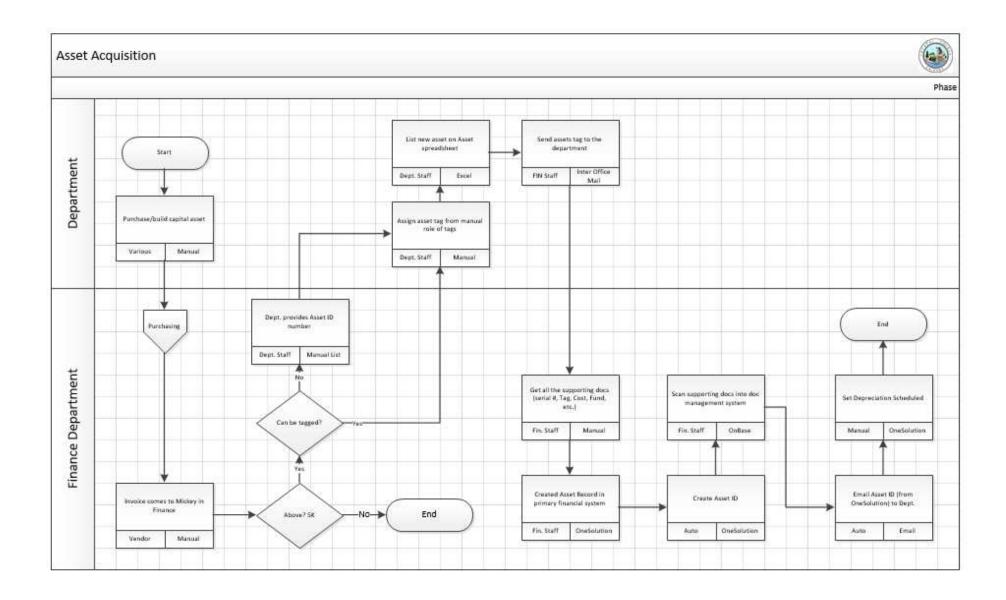
Tools for Challenging the Status Quo

- Process Map
- 5 Why Analysis
- Fishbone Diagram





Approach: BPI - Current State Map





Common Sense

- Apply simple "common sense" test
- O Have you made this more difficult than it needs to be?





Unnecessary approvals are a waste

- All processes should have controls
- Unnecessary approvals reduces control





Approvals should be purposeful

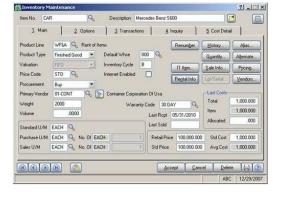
- Consider who really can approve
- Consider what it means to be an approver?
- Obefine what the approver is actually approving?
- Who is truly accountable?
- O Does the same person approve more than once?
 - Approval vs. Notification

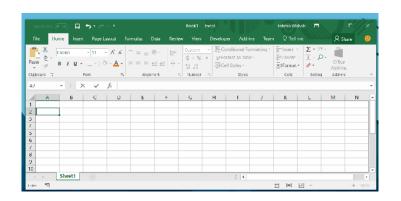




How many systems?

- System Inventory
 - All systems
 - Where is data stored?
 - How many times is it entered?
 - How do you report?











New Technology ► **New Process?**





"If I had asked people what they wanted, they would have said faster horses."

- Henry Ford

Are you asking the right questions?





Expectations for Modern Systems

Chart of Accounts

- Clearly define segments
 - One purpose per segment (department, program, etc.)
 - Don't store redundant info
- Reduce number of "funds"
- Utilize sub-systems
 - Projects / grants
 - Commodity codes
 - Inventory
 - Cashiering / AR
- Consider budget hierarchies



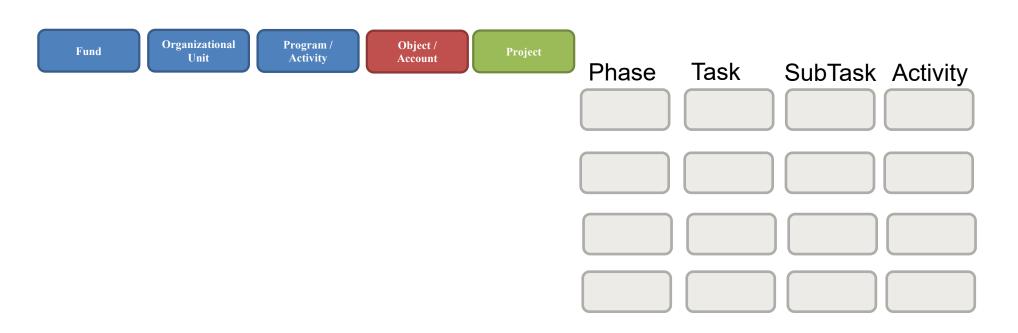
Chart of Account Components



- Fund (General Fund)
- Organizational unit (Police Department)
- Program/activity (Patrol)
- Account classification (Salary)
 - Expense
 - Revenue
 - Balance Sheet
- Project



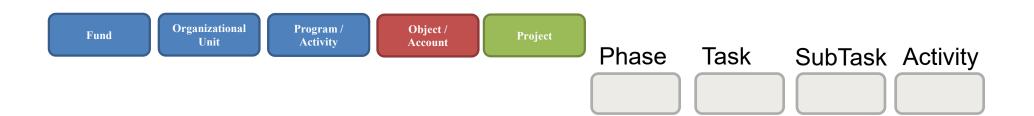
Use of project ledger allows for detail



- 1. Detailed sub-ledger components roll up to chart of accounts
- 2. Values within each segment can be set project by project
- 3. Extensive detail does not require expansion of chart



Use of project accounting "module" provides additional functionality



- 1. Ability to link multiple projects together under a "master" project
- 2. Identify project budget and control expenses against budget
- 3. Build and develop project budget before funding sources are confirmed
- 4. Identify and manage constraints

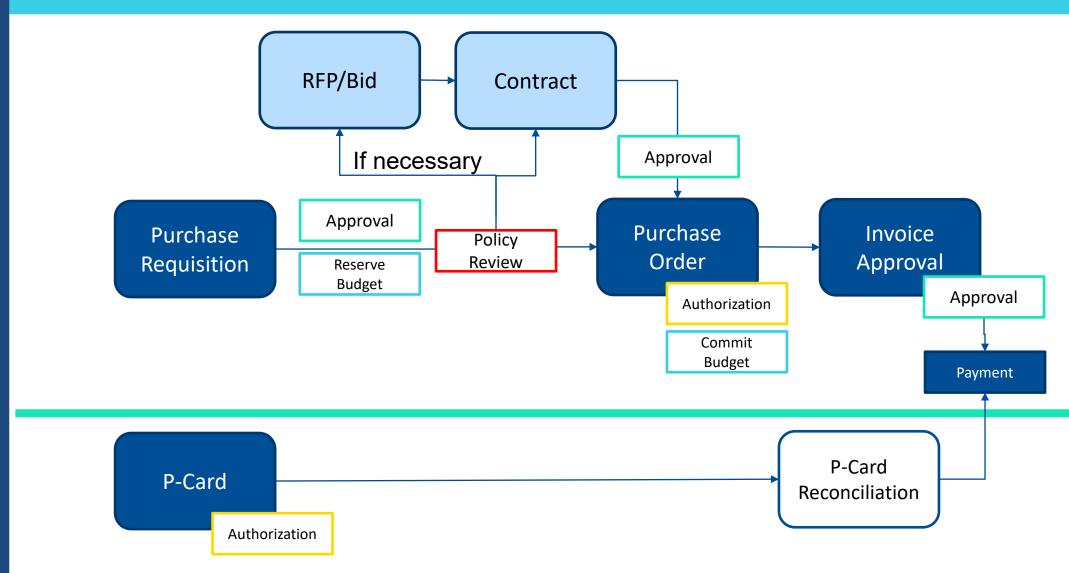


Procurement

- Use purchase requisitions
- Use contracts and associate POs to contracts
- Integrate p-cards into processes
 - System integration
 - Policy integration
- Consider e-procurement opportunities from a vendor perspective



Example Procure to Pay Process





Capital Assets

- Track in the system
- Record assets at time of acquisition
- Connect assets to related systems
 - Work orders / Fleet / Facility systems
 - GIS
- Track maintenance costs
 - Life-cycle costing
 - CIP / Capital replacement



Human Resources / Payroll

- 1:1 Position Structure
 - 1 position / 1 employee
- Use job classification to group positions

- Electronic employee files
 - One shared file with security permissions

- Time entry data captured at the employee level
 - System calculated pay (not manual calculations)



Treasury

- Electronic payments
- Automated bank reconciliations
- Actually use accounts receivable functionality

- GFOA Best Practice: Electronic Payments
 - https://www.gfoa.org/materials/payments-made-by-governments



Best Practice Outcomes

Program budgeting

- Multi-Year CIP
- Long-Term Financial Planning
- Cash Flow Forecasting

Financial Transparency

Customer Service Improvements





Process Mapping

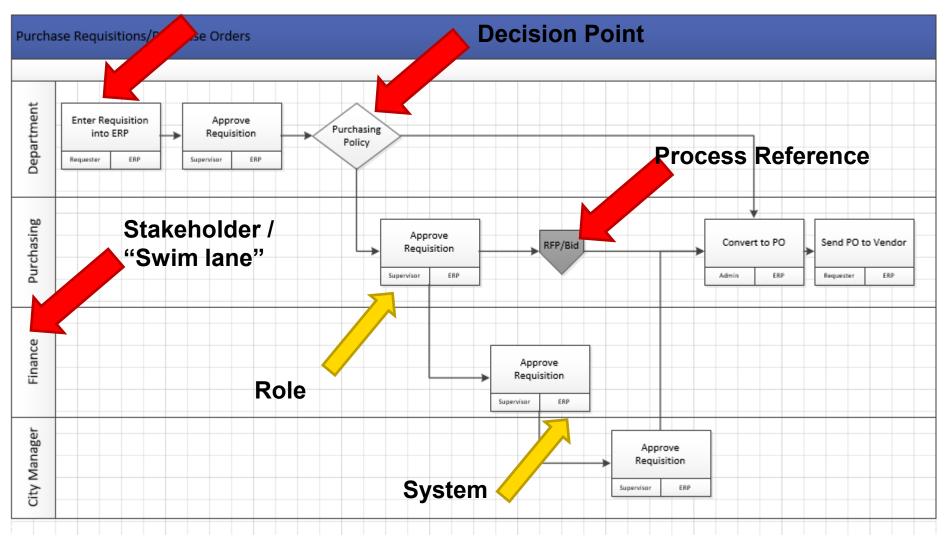
Simple tasks for process improvement

- Process mapping
- System inventory
- Benchmarking
- Applying Common Sense



Process Mapping 101

Process





Mapping Narratives

Process Documentation

Page 3 of 7

Asset Acquisition

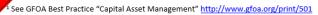
Asset acquisition is the process by which an organization formally records all of the assets it procures. Assets can be acquired through the procure-to-pay process or through construction. Assets are usually defined based on the cost of procurement or the overall project cost of construction. The total cost requiring an asset to be defined as such varies between governments.¹

Systems:

- OneSolution Capital Asset Tracking and Depreciation²
- . Micro Main Facilities Department / Work Orders / Capital Asset Tracking
- MS Excel (Capital Asset Spreadsheet) Public Works Department / Road Projects
- . MS Excel Capital Improvement Plan
- Road Master Work Orders only legacy software
- Cartegraph Asset Management (tracking the value street signs, condition of roads, etc.)
 Project budget tools as well.
- Fleet Service Deck (Homegrown System) / Fleet Department
- ServicePro ITS maintains all technology related inventory with some exceptions

GFOA Observations

- The County's capitalization threshold is \$5,000³
- Capital asset records are created by departments in Excel and emailed manual to Finance
- The Finance Department assigns a capital ID # or creates an Asset marked as "in-progress" in cases where construction is underway and the assets is not yet complete.
- Heavy equipment assets are owned directly by the department that uses them. Light
 equipment is normally purchased through the general fund.
- Assets worth \$3,000 \$5,000 often fall into a category called "Stewardship" where they are track in OneSolution as capital assets but not on the County's financial statements.
 - o Sherriff's Department uses excel for asset tracking
 - Fleet
 - Owns most vehicles (with some exceptions)
 - · Tracking number is manual and associated with the year and type of vehicle
 - AutoTrim used for stickers on the vehicles
- Assets that are purchased with multiple funds (e.g. two or more funds) can reflect multiple funding sources within OneSolution.
- Assets can be linked to each other (e.g. parent child relationship)
- Depreciation schedules are adjusted when assets are improved (e.g. major addition to a building).



² See GFOA Best Practice "Role of the Finance Director in Capital Asset Management": https://www.gfoa.org/materials/role-of-the-finance-director-in-capital-asset-management

³ See GFOA Best Practice "Capitalization Thresholds for Capital Assets" http://www.gfoa.org/print/400





Page 4 of 7

Capitalization Rules		
\$3,000 - \$5,000	Stewardship	
\$5,000	Equipment	
\$10,000	Land, Buildings, Infrastructure (Roads, Brides), Software, Constriction-in-Progress	

Issues/Challenges

- Staff reported minor issues related to constriction-in-progress asset records
- Staff scan documents related to capital assets into OnBase after entering the data into
 OneSolution. Information form OneSolution is also included as a PDF.
- . Staff do not have the ability to used "effective-dating" when creating capital assets
- · Asset numbers and project numbers don't always link up correctly (end of the month process)
- · Departments often must rely on ITS to create needed reports

Process Improvement Opportunities

- If a department gets the account number or asset ID wrong, they must delete the record and create a new one. Staff would like the ability to edit and update records after they are created.⁴
- The County would like a 360 degree view of assets allowing staff to find all relevant information about an assets in one place.
- The County would like auto notification capabilities in a future solution

Asset Lifecycle

The asset lifecycle is the process of recording all events that occur during the life of a defined asset and can include locational transfer, loss, betterment, and salvage or retirement.

GFOA Observations

- Public Works uses the Road Master system to track the condition of County roads. They use a 1100 grading scale for a period of 20 years for pavement. Improvement activities such as cracksealing can extend the life of an asset, as well. Other departments track the condition of their
 assets at the departmental-level as well, however this practice is not universal.
- The Facilities Department uses Micro-Main to track the condition of its most valuable assets.⁵

Issues/Challenges

None

Process Improvement Opportunities

None

⁴ See GFOA Best Practice "Technology in Capital Planning and Management" http://www.gfoa.org/print/522

⁵ See GFOA Best Practice "Multi-Year Capital Planning" http://www.gfoa.org/print/512

Approach: BPI

WHAT ITS NOT

- Detailed listing of every step in every business process
- Desktop audit
- Documentation of every possible issue and outcome for every department

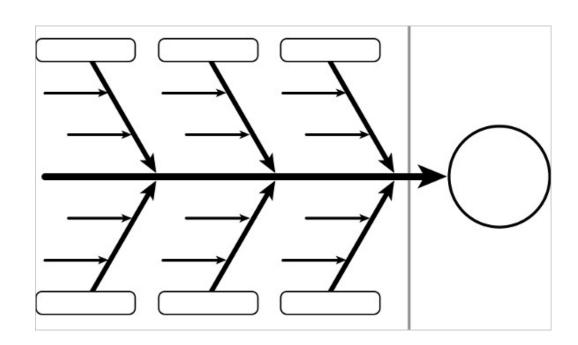
WHAT IT IS

- Summary of key issues
- Mid-to-high level depiction of major business process steps
- Best practices and common approaches to addressing the issues identified



Tools for Challenging the Status Quo

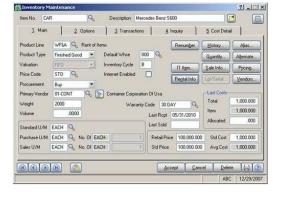
- Process Map
- 5 Why Analysis
- Fishbone Diagram

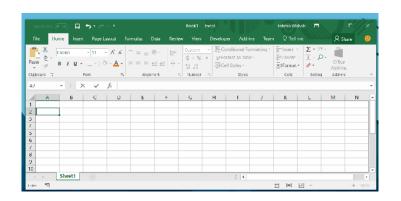




How many systems?

- System Inventory
 - All systems
 - Where is data stored?
 - How many times is it entered?
 - How do you report?



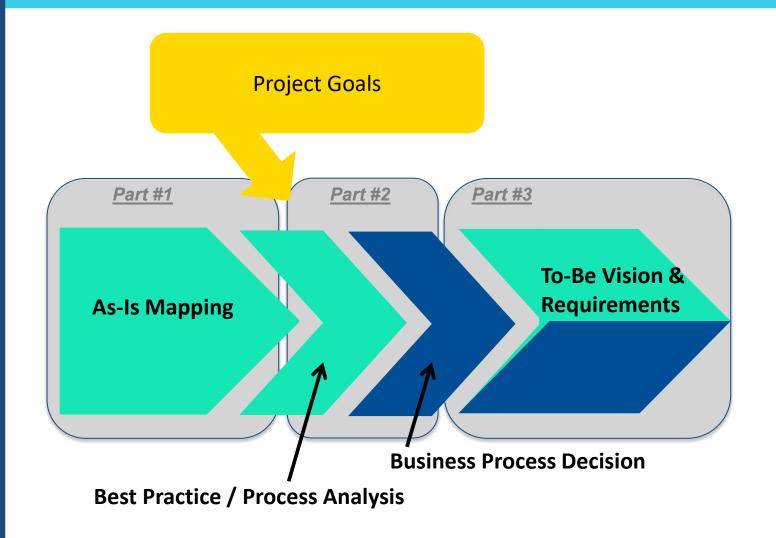








Roadmap for Change in 3 Steps



Process Opportunities

- Approvals
- Shadow systems
- Best practices
- Modern features
 - Electronic payment
- Self service
 - Purchasing
 - HR
- Chart of accounts
- Reporting



Defining Specifications

 A design specification establishes the characteristics a commodity must possess, including details of how the commodity will be manufactured; engineering plans, drawings, or blueprints may be included.

• A **performance specification** describes the desired outcome or intended use of a commodity and how the commodity will perform. Performance metrics are essential to define acceptance testing and successful achievement of outcomes.

What



Process List for Requirements

- Focus on process
- Built out detail
- Prepare to test
- Requirements are acceptance criteria

Process List		
Process	Task / Topics	
Accounting	 Chart of Accounts General Ledger Transactions Activity Costing Grant / Project Tracking Financial Reporting 	
Budget	 Forecasting Operating Budget Capital Improvement Planning (CIP) Capital Budget Budget Adjustments / Amendments 	
Procure – Pay	 Vendors Purchase Requisitions Bid Quote RFP / RFI / RFQ Purchase Orders Contracts Change Order Receiving Inventory Accounts Payable 	
Customer Billing (does not include specialized billing)	 Customer File Billing Accounts Receivable Aging Collections 	



Requirements relate to business process

Purchase Requisition PO, RFP, or Approval Approve, Process Procurement IVTB and Originati Departme Enter Approval Policy Requisition Approval Process rkequitement and reature Not Supported Implementation Approval Reg# 🔻 Function Process Requirement Response Budget control can be set to: Soft (Warn user but 48 PO Requisition 49 PO Budget control can be set to: Hard (Do not allow) Requisition 50 PO Purchase Order System tracks encumbrances (purchase orders) System allows for budgeting at one level and controlling at a different level (Example: budget by account/object butt conduct budget control at Purchase Requisition System allows budget control at summary roll up 52 PO Purchase Requisition of account/object Each department initiates purchasing process 159 PO Purchase Requisition through requisition entry into the system System accommodates discrete purchase orders (purchase order for specific quantity of good or 160 PO Purchase Requisition System accommodates blanket purchase order (purchase order with vendor for specified dollar Purchase Requisition 161 PO

Requestor can attach files to requisition at



Importance of Requirements

- Critical component to the RFP
- Become the standard against which software warranty and implementation services will be compared
- Used to outline the scope of the system and the depth of the functionality desired by government
- To assist the government in assuring that system expectations have been met
- Clearly define the expected capabilities of the application / functions



Example Process for Developing Requirements

- Define scope / process list
- Identify major steps in each process
- Determine functional tasks (the "what") you are looking for the system to do
 - Avoid describing the way (the "how") you want the system to handle it
- Tools to use:
 - Process Maps
 - Surveys
 - Interviews / focus groups
- Hold meetings with key SMEs to review
- Finalize



Requirements Development Meetings

- Meet by process
- Highly interactive
- Participants should represent end-to-end process
- Identify issues
- Identify items in current system that should be preserved in future ERP system
- Focus on identifying optimal functions of a new system rather than on current system work processes
- Identify actual scope of the project
 - Not "wish list" items



Requirement Development Mistakes

- Requirements are too high level
 - "System must have workflow"
- Requirements don't focus on business process
 - Vendor name must be "bold red font"
- Requirements aren't clear
 - System can generate payroll based on user define rules
- Too many requirements that are diluted







ERP Readiness and System Selection

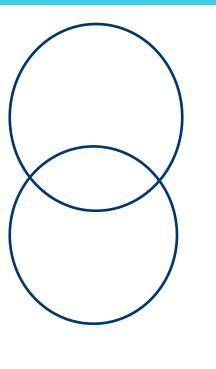
Day 2-4: Procurement

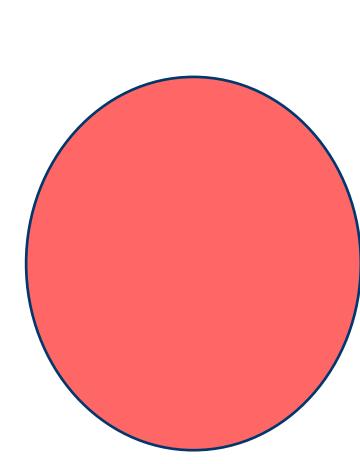


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Cloud Procurement has 2 sides + Implementation!

- Application (software)
 - Functional fit
 - Business process optimization
 - Reporting
 - Role security
- Infrastructure
 - Availability
 - Integration
 - Performance
 - Physical and technical security

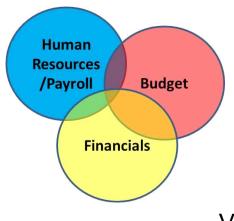






Remember what you are buying

- Software
- Interfaces / reports / data conversion
- Project management
- Consulting services
- Training
- Improved processes
- Better access to financial information
- Accomplishment of project goals
- Organizational transformation









Strategies for Developing Submittal Requirements

- Limit open ended responses
- Require that vendors confirm or modify your scope
- Provide response templates
- Focus on implementation (Risk in project)
- Ask about your project and your project goals/issues





Describe your implementation methodology?



 Prepare a schedule for the project showing key phases, deliverables, and milestones for the project

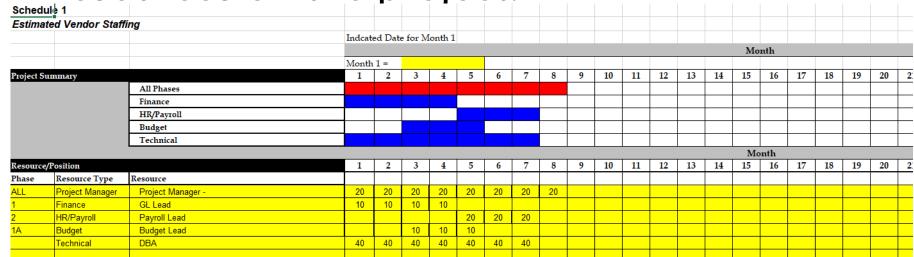




 Describe level of staffing for key project team resources on the project



 Complete Exhibit A – Staffing Schedule showing expected participation levels by month for all resources on the project.







List similar projects and references



- Identify five past projects that are a good example of proposed services on this engagement, for each provide a short case study that includes:
 - Scope of project
 - Business processes that were improved
 - Description of challenges faced
 - Lessons learned
 - Summary of clients current situation





 How will you help us implement improved business processes and best practices?



- Explain your approach for helping the organization improve its procure-to-pay process. Provide the following:
 - Summary of process
 - Agendas for meetings
 - Example deliverables
 - Training documentation
 - User communications / change management documents





List available standard reports in the system



- Show reports developed for other clients to meet X function
 - Budget control
 - Position control
 - Project accounting details
 - Summary of process



Other Questions



Identify proposed project team



- Specific questions about functionality or business process challenges
 - How do you recommend we structure the chart of accounts?
 - What do you consider a best practice for using p-cards?



 Confirm that the following contract terms and conditions are acceptable....



Know the market. Know what you are buying

O What vendors are out there?

- O How attractive is your project?
 - Are vendors competing for your business?
 - Are you competing for the best vendor?



RFP Checklist

- O Does RFP clearly communicate the scope?
- O Do you clearly define response questions?
 - Is response format standardized?
- O Does the RFP set clear expectations?
- Are you clear on preferences?
- O What makes your project attractive?



Competitive Process

- Written Proposals (Many)
- Initial Presentations (Many)
- Demos/Interviews (3-4)
- Discovery (2)
- Contract Negotiations (1)



SaaS vs. Cloud

- Not all "clouds" are the same
 - Every vendor will use a slightly different model for:
 - Licensing software
 - Providing support
 - Deploying upgrades
 - Using third party vendors







Evaluation Plan

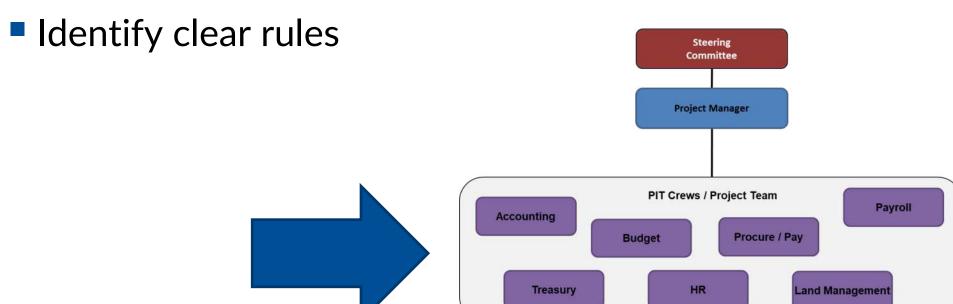
Have an evaluation plan

- Identifies the evaluation process and evaluation criteria for each step of the selection of the ERP
 - Conformance with RFP
 - Evaluation of written proposals
 - Software Demonstrations
 - Discovery / Final Selection



Defining the Evaluation Team

- Separate evaluation team from steering committee
- Involve the PIT Crews
- Make sure major stakeholders are represented
 - Core departments and operating departments





Determining Best Value

- Consider project goals?
 - Who is best positioned to achieve them?
 - Who understands your project?
- People matter
 - Interview consultants
 - Beware of the "A" team vs. "B" team
- Consider Risk
 - What is probability of failure?



Evaluation Process

- Define evaluation criteria
- Select an evaluation team
 - Consider all options
 - Honest and fair
 - Evaluate independently (and avoid challenges of group dynamics)
- Work to overcome bias



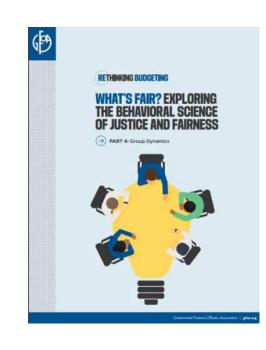
Dealing with biased evaluators (or not becoming one)

- Too knowledgeable on the market...
- Not being open to different ideas from what was in the RFP....
- Immediately dismissing new ideas....
- Too much influence on evaluation committee....



Group Dynamics

- Halo Effect
 - Strong personalities can have undue influence
- Silence
 - Some are quiet in meetings
- Social Loafing
 - "the others in the group will put in the work"
- Anchoring
 - First ideas set an anchor and dominate
- Polarization
 - Final decisions tend to be more extreme





Strategies for reducing harmful group dynamics

- Develop clear agendas
- Set ground rules
- Facilitate the meeting
- Be open and upfront about potential bias
- Provide opportunities for individual thought
- Allow for anonymous input



Evaluation Process / Team Pitfalls

- Poor evaluation criteria
- Evaluators without availability
- Evaluators who are not at peer level
- Unfocused evaluators / Misfocused evaluators
- Bias
- Conflict of interest
- Inability to consider "government" vs. "department"



If it's too good to be true, it probably is

- No software will work out of the box
- ERP is not the answer for everything
- Faster is not always better
- You get what you pay for
 - Lowest price is not always cheaper







Exercise

Analyzing Vendors



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Software Demonstrations

- In-depth review of software AND review of proposed implementation services
- Demos are scripted requires that the vendors show what you want to see rather than what they want you to see
 - Allowing the vendor to control what you see allows them to control what you don't see as well
- Involve as many people as possible in the demos
- The purpose of the vendor demo should be on evaluating if the software will work (not on viewing the bells and whistles)
- You should leave the demos feeling confident it will accommodate all of your requirements



Demo Script

- Step-by-step processes (or features) you require that the vendor demonstrate
 - Organize demos by business process

Purchase Requisition		
	PO/AP	Demonstrate process for department creation of purchase requisition. Make
	3	sure to include:
		 How appropriate account is selected
		 Use of multiple lines on purchase requisition (how to split on multiple
		lines – by percentage or amount)
		 How to apply shipping
		 How sales tax is calculated
		 Attach files to requisition
	PO/AP	Demonstrate workflow approval process for purchase requisition. Make sure
	4	to include:
		 Budget availability check
		 Workflow approval path based on dollar value, fixed asset, type of
		purchase (technology item)



Implementation Interviews

- Demos should focus on both software and implementation
 - Software is worthless if you don't implement it
 - Majority of risks are with implementation
- What to cover
 - Implementation approach
 - Best practice definition
 - Staffing
 - Project management
 - Change management
 - Project culture / (What the project will be like)



Project Team Interviews

- Project team and the sales / demo team are not the same
- Interview the project team, minimum project manager, during software demonstrations
- Interview and meet project team at discovery meeting
 - Make this a requirement



Easy Questions to Ask Your Potential Team

- Please give me a SPECIFIC example of a business process that your client improved as a result of this project
- O What was YOUR ROLE in this SPECIFIC project?
- What were SPECIFIC examples of challenges that you faced in the last project and how was that overcome?
- How would you suggest we handle our current situation of X?
- O How would you interview a job candidate?



What is your budget?

- Are you buying what you need?
- Is the cost the whole cost?
 - How can you be sure?
- O Did you include?
 - Internal costs
 - Third party costs
 - Costs to complete the project
 - Strategy to mitigate risk
 - Strategy to control for quality





What is missing?

- Training materials
- Testing
- Project management
- Documentation
- Appropriate staffing
- Consistent consulting presence
- Accountability



Some vendors get sneaky

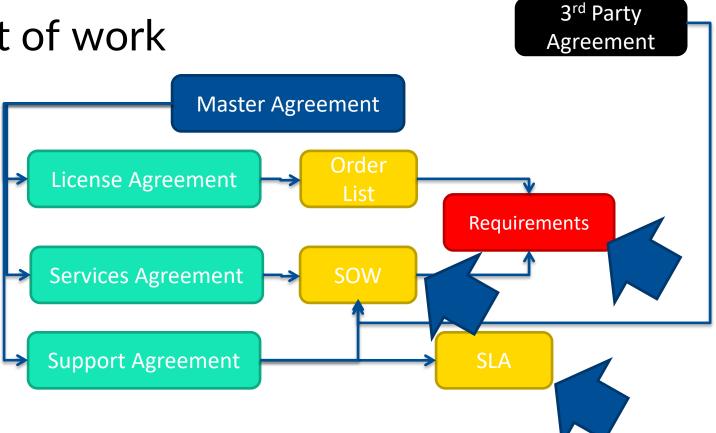
- When scope is not the scope
- When fixed fee is not fixed fee
- When a proposal is not a proposal

- Make sure promises are "real"
 - (and written down)



Finalizing the Contract

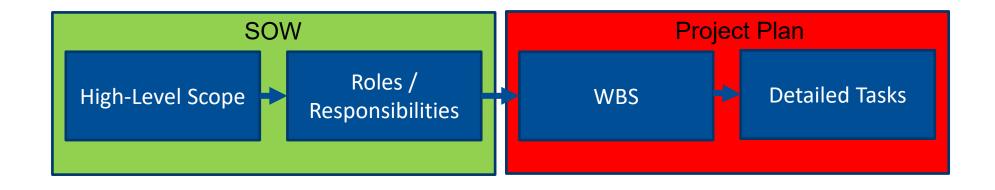
- Master terms and conditions
- Third-party agreements
- Statement of work





Project plans should align with the SOW

 Project plans provide a tool to manage the scope, responsibilities, and resources identified in the SOW.





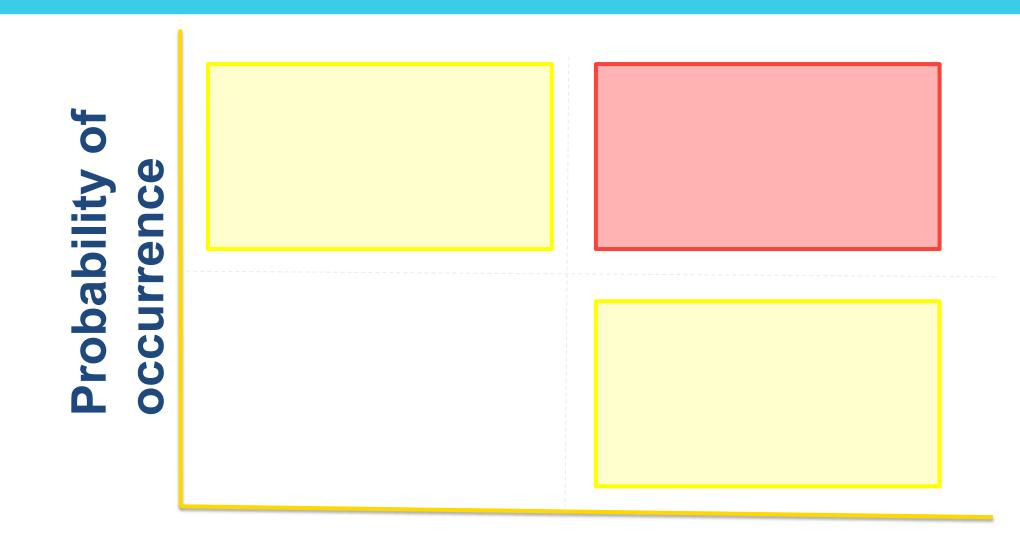
What could go wrong?

O How much will it hurt?

- O How much control do we really have?
 - What is expectation of control?
 - How much interaction / dependency?



Evaluating Factors





Level of Impact

ERP Readiness and System Selection

Day 2-5: Readiness Activities



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Planning. Getting Ready. Enjoy.

Step 1:







Step 2:





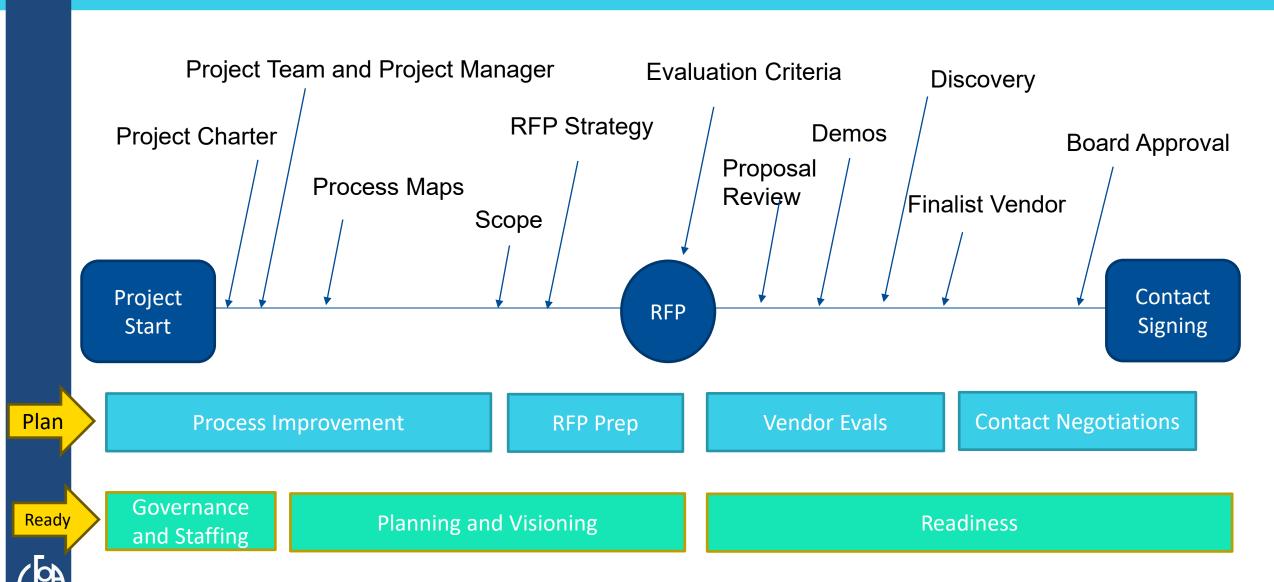
Step 3: Enjoy







Readiness Timeline



Managing the Readiness Effort

- Governance
 - Project Team
 - Goals
 - Decision Making
- Scope
 - Business Process
 - Replacement Decisions
- Procurement
 - RFP
 - Requirements
 - Evaluations Process

- Contracting
 - Statement of Work
 - Vendor coordination
- Project Readiness
 - Data conversion
 - Interfaces
 - Staffing
- Budgeting
 - Project costs
 - Positions (project and support)





Most Common ERP Mistakes

Missing project management





Lack of requirements (or vision)





Inability to make decisions

"It's better to make the wrong decision today, than delay and make the wrong decision tomorrow."



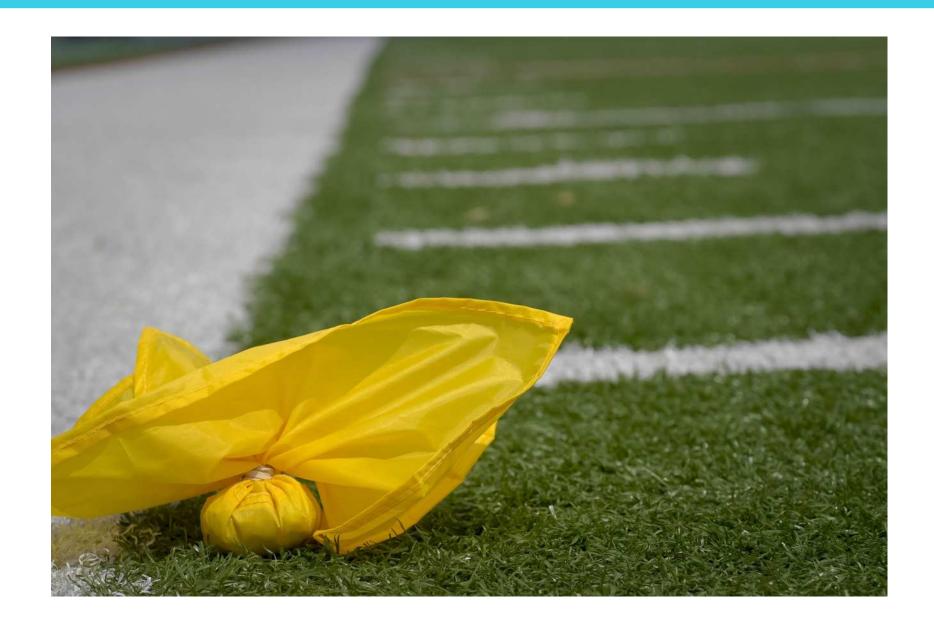


Lack of proper governance





Not holding your vendor accountable







Readiness Tasks

Readiness Tasks

- Project Goals
- Project Scope
 - Data Conversion
 - Interfaces
 - Reports
- Project Governance
- Technology Requirements
- Implementation Approach
- Project Management / Change Management
- Training
- Quality Assurance
- Ongoing Support
- Facility Requirements
- Personnel Requirements
- Schedule
- Project Communications



What is the schedule for your project?

- "Big Bang" vs. Phased Approach
- When do you go live? (year end or not)
- Upgrade phases could be from 3-12 months
 - Depends on scope, staff resources, vendor resources, project priority, external deadlines
- Timing for project:
 - Planning
 - Design / Process Change
 - Configuration
 - Testing
 - Training



How much data to convert?

- Very difficult to move large amounts of history due to remapping
- Open items are typically converted.
- Clearing accounts should be limited and cleaned as soon as possible
- Legacy applications may be kept "live" for a period of time
- Data warehouse with legacy reports may be used

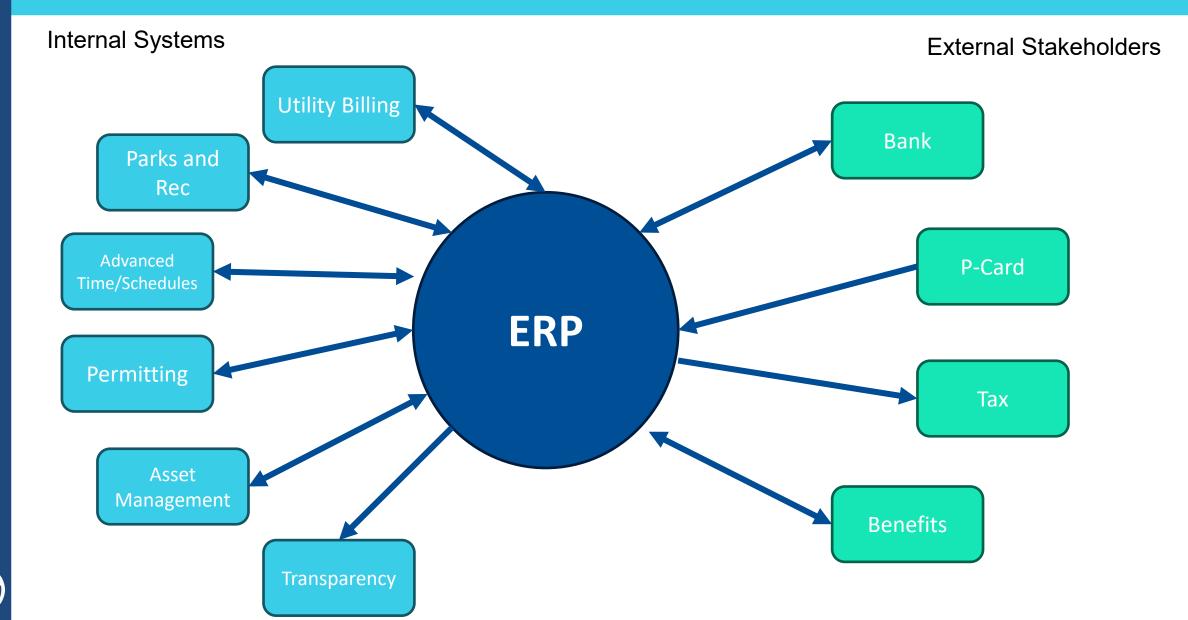


Where will the project take place?

- Traditional model relied on travel and site visits
 - Governments were on-site
 - Zoom / WebEx / Teams was not common
 - System itself was inside of network
- Many vendors rely on remote / hybrid projects
 - Work with more clients
 - Less of a burden on consultants
 - Use of off-shore (hidden consultants)



ERP Environment





Interface Expectations

- ERP systems don't do everything
 - Interfaces will exist
 - Interfaces are necessary to support business process

- Need to define the role of the interface
 - Business process focus
 - Business process requirements first
 - Technical requirements second
- Be prepared to test interfaces



Interface

- Detailed interface specifications
 - Full description
 - Technical details
 - Operating procedures
 - Impact on business process
- Consideration: What is the status of the other system?
 - Vendor status
 - System status
 - Upgrade frequency



Requirements Traceability

- Original requirements should be tracked throughout project
- Original requirements tracked to:
 - Business process improvements
 - Design
 - Build decisions
 - Testing
 - Acceptance
- Vendors may not want to do this



Deliverable Expectations

-

Deliverable Expectation Document Number: DDD - 01

VENDOR Deliverable Name: Detailed Project Plan VENDOR PHASE / STAGE:

Description/Objective:

Detailed plan that will establish tasks and activities (functional, technical, change management, and project management) for the project inclusive of all predecessors and successors for each task. Resources for both VENDOR and the County will be loaded and the project plan will be leveled.

The Project Plan will be reviewed as part of the weekly meeting with approved changes being updated to the Plan. If issues arise the Project Plan will be reviewed and updated as necessary. The structure of the plan will be considered complete once the County has reviewed the final deliverable and has given approval. This detailed plan leverages the preliminary plan noted in DED-XX and is the baseline plan for the project. Updates will be completed as the project progresses and actual and estimate to complete values will be added to track the critical path.

Format:

Microsoft Project

Scope & Outline:

At a minimum the following columns within MS Project will be utilized:

- WBS Number
- Task Name
- Start Date
- End Date
- Duration
- · Work (hours)
- · Actual Hours completed
- · Percent Complete
- Deliverable (Custom Column)
- Predecessor /Successor

Resource name

Acceptance Criteria:

- 1. The deliverable contains all the components specified in the Outline of this DED.
- 2. The respective VENDOR and County Leads assigned to this deliverable have agreed to and

- accepted the content of each outlined component, or have escalated any issues to the project management team.
- The respective VENDOR and County Leads have resolved all material content and/or quality issues.
- 4. The deliverable meets the requirements agreed to in the DED.
- 5. The deliverable meets the agreed upon Project Documentation Standards (if applicable).
- 1. The deliverable does not contain material or substantive formatting and spelling errors

VENDOR Approvers	County Approvers
VENDOR ROLE	County ROLE
l d	
Lead	Assist

- Review the approach and timing of the deliverable with County PM
- Enter and level resources by task with the assistance of the County PM
- Create predecessor and successor relationships for each task
- Once leveled appropriately, baseline the plan review plan with County PM
- Make necessary adjustments with County PM
- Submit baseline plan to County PM for Final Acceptance
- Gather and enter resource percent complete values weekly in conjunction with the County PM
- Report weekly plan progress via status reporting
- Actively update tasks, dates and resources as the project progresses.

- Attend and actively participate in the review and approach meeting
- County PM participates in resource loading and leveling by task for County resources and provides to VENDOR PM
- County PM actively participates in the finalization of the detailed plan providing inputs as requested
- County PM participates in the gathering and entry of County personnel percent complete and associated tracking of milestone progress weekly
- County PM reviews draft deliverable and provides feedback and edits
- County reviews final deliverable and accepts
- PM participates in the updating of tasks, dates and resources to the baseline as necessary in conjunction with VENDOR PM





Exercise



Open Discussion

Top 10 Steps to Prepare for Your Next ERP Project

Set Clear Goals Identify Leaders

Additional Resource

- Create Staffing Plan
- Build System Inventory
- Review Business Process
- Evaluate Vendor Risks
- Identify Requirements
- Create Project Plan
- Fixed Fee Contract
- O Communicate!





It's Up to You to Lead the Project

- The goal is not to "survive"
- Take control from the beginning
 - Set the vision. Establish the culture
 - Determine desired outcomes
 - Hold all stakeholders accountable





Questions / Comments

Mike Mucha
 Deputy Executive Director
 Director, Research and Consulting
 GFOA, Research and Consulting Center

- www.gfoa.org
- mmucha@gfoa.org
- **312.578.2282**



