




BUSINESS ANALYSIS MAKES FOR SUCCESSFUL PROJECTS

Project Delivery Summit 2014



“The vendor can come in and automate a business,
it just might not be yours.”

-Russ Nichols, CDCR



ONE – BUSINESS ANALYSTS ACTIVITY THROUGHOUT THE PROJECT

Why the State Must Have its Own Analysts

- To provide continuity from the Budget Change Proposal to the Feasibility Study Report to the RFP to the BAFO, to project kickoff.
- A majority of the procurement occurs AFTER the vendor selection.
- To push back on the vendor's change order requests.
- To make certain that the vendor interprets the requirements as expansively as possible.
- BA skills are different from those of the Subject Matter Expert.

A Majority of Procurement Occurs AFTER Vendor Selection

- The Change Control Process will add dollars to the vendor contract, add more of your staff, add more computing environments, and change both the functionality *and* how that functionality is delivered.
- After the implementation efforts, a PMO may aid in conducting change control meetings and processing change orders.
- BUT the actual analysis that goes into the change control requires that we have expertise to consider alternatives and see how the current contract could get the work done—not let the vendor have the upper hand.
- These changes will have a cumulative cost that exceeds the original contract amount.
- Your business analysts (and your technical staff) will reduce the impacts on business functionality and business process.

Subject Matter Experts and Business Analysts

- The Subject Matter Expert (SME):
 - has specialized knowledge about the business.
 - knows decisions, rules, regulations, forms, handling exceptions.
 - their knowledge is often deep; applies policies in practice.
 - knows how things are really done, not just how it is supposed to be done.
 - their knowledge may or may not include understanding other parts of the business.
- The Business Analyst (BA):
 - complements the SME by learning more about the end to end business processes, how information and responsibilities cross organizational boundaries.
 - learns and assesses how well policy is applied across the end to end business; learns how systems work together.
 - knows the techniques to learn more about the depth and breadth.
 - translates the detailed knowledge into specifications.

Making Effective Use of Subject Matter Experts

- SMEs are not yet Business Analysts
- The BA knows **how to use** the information gained from the SME. The BA can:
 - specify requirements.
 - translate knowledge into business process models.
 - verify that the Vendor's work products are setting the stage to solve the business problem.
 - understand that there is a defined process to follow, that the solution unfolds over time in levels of more detailed specification.
- The Business Analyst understands **where to put** the expertise of the SME. The BA knows:
 - how to extract it, how to document it, how to verify it is used at the right time in the right way in the right place.
 - what is a rule, what is a requirement, what is a fact.

Boot Camp For Subject Matter Experts

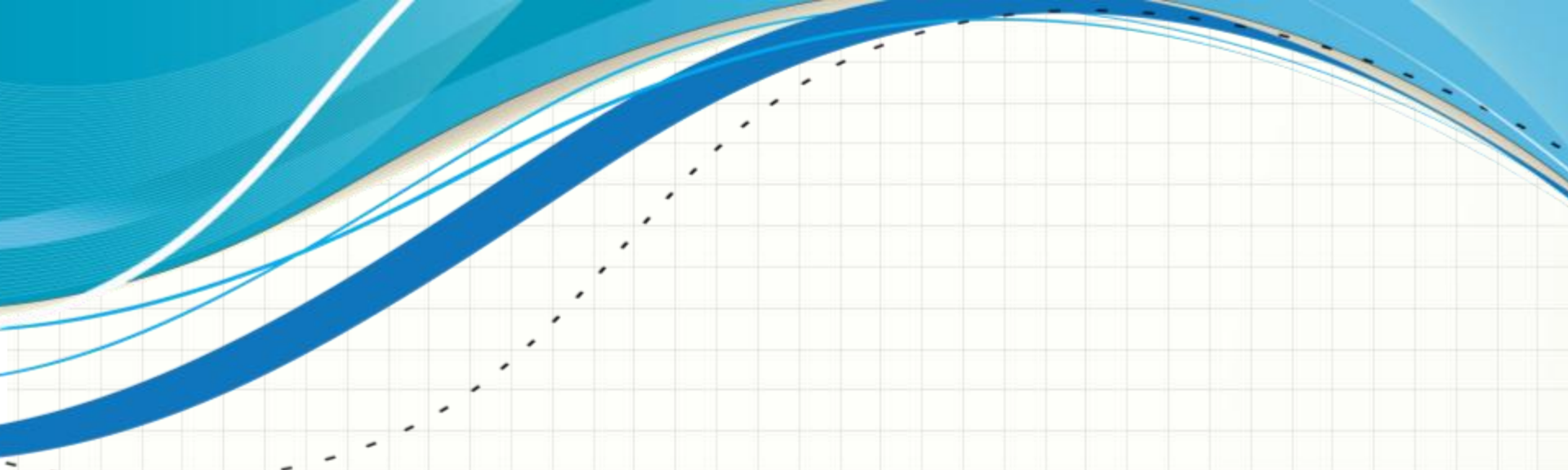
- On larger projects, SMEs may participate on a full-time basis for months or even years.
- Value in taking time up-front to explain to the SME's how their knowledge will need to be translated into specifications.
- Introduce the Enterprise Business Process:
 - Enterprise perspective – each SME will know portions of the business.
 - Process – There is a multi-step process to capture knowledge, transform it into specifications, prepare graphical depictions that reduce ambiguity, verify understanding, and guide the design and build process.
 - The process may be waterfall, agile, or rapid application development.
 - Once trained, the SMEs can join the Project's Core Team of State staff.

Examples of Use of Business Analysts on a Project

- Aiding knowledge transfer to users in the line of business
- Managing the change control process
- Work on Data Modeling Team: Verify Business Needs are addressed, and that Reporting Needs can be met
- Running SQL statements to select test cases, verify test results, plan reports, evaluate data conversion
- Verifying that critical tasks are fully understood in project plan
- Running JAD sessions
- Specifying business rules
- Keeping Use Cases current

Some of the Hands-on Value Added by Your Analysts

- Make certain test conditions are thorough and consider the exceptions
- Make certain the business rules are fully flushed out
- Keep the vendor from snow plowing functionality from one phase to the next, leading to brinksmanship
- Data Conversion – interpret legacy data and provide context for the new data model
- Training manual driven by scenarios, not fields on a screen
- Ensure that change orders are legitimate, level of effort is reasonable, that solutions are thought through
- Verify that the documentation is complete and will be usable in the future
- Provide continuity from the Pre-implementation to the ongoing enhancements and maintenance of the application
- Help users define the reporting needs; ensure that reporting needs can be met by the new data design



HOW TO START YOUR BUSINESS ANALYSIS CENTER OF EXCELLENCE



Overview

- Approaches to Training
 - Boot Camp (described above)
 - Water Resources Case Study
 - UC Davis Business Analysis Training program
 - Trial by Fire
- Career Path
- Organization and Deployment

Case Study: Water Resources SAP

- DWR has assembled a team of subject matter experts and trained them as business analysts to support the acquisition and specification and traceability of requirements for constantly emerging operational needs.
- Water Resources operates the State Water Project, one of the largest engineering infrastructures in the world.
- The Water Project includes pumping stations that make the Project a major energy purchaser.
- Irrigation and water districts throughout central and southern California purchase the water.
- SAP is used for accounting, financial management, tracking assets along the aqueduct and for pumping station facility management.

An Earlier Initiative to Create a Business Analysis Group

- MISO started in late-90's to address automation needs in the CalPERS Retirement Benefits division; IT shop focused on enterprise applications so MISO started in the retirement line of business to address more localized needs
- The staff were drawn from the business area
- They applied best practices to doing analysis combined with a rapid application development approach
- Agile before Agile with small teams, sprints
- Formalized deliverables and approach
- Moved into the ITSD shop as it grew; but in IT was in a separate division that also addressed strategic planning and other business focused responsibilities
- The group became key resources in requirements specification for the Pension System Replacement project
- Tim Garza became CIO of DWR and Resources Agency; Karen Ruiz is Project Director for Covered California's CalHEERS initiative

Trial by Fire: Role on a Major Project

- Before the Vendor is Selected
 - Data Readiness
 - Interface Specification
 - Business Process Analysis for the AS IS system
 - Document business rules
- Once the Vendor is on board
 - Set up and help conduct requirements workshops (JADs)
 - Verify requirements specification completeness, alignment with the process, clarity, level of robustness
 - Maintain repositories for requirements, rules, glossary
 - Report to Project Sponsor on project performance
 - Investigate change requests and validate importance, effort, impacts
 - Embed on teams to ensure project direction and scope compliance

Preparing for Career Path for Business Analysts

- Any educational background that provides critical thinking skills
- Helps to start with some experience in one business or functional domain
 - Business – transportation, health insurance payments
 - Functional – human resources, budget, contracts,
 - Training – Reading, extension, blogs,
 - Certification – IIBA and the BABOK
 - Small projects – Learn end to end business process and end to end system development life cycle in a shorter time frame
 - Preparing the BCP and FSR and RFP
 - Large internal projects – data conversion, interfaces, system maintenance (update documentation)
 - Blended on contracted vendor team

Where to go with Business Analysis Expertise

- Supervisor for business analysis
- Project Manager (with or without certification)
- Business Architecture – internal consultant
- Go to work for a vendor
- Problem solver for the Directorate
- Program manager
 - Understanding how to align business process with automation capability
 - Don't let technologists oversell their capability
 - Insight into the anxiety and needs of your staff in working with automation

Where to Place the Business Analysis Group

- Three major options:

Inside the information technology organization close, perhaps, to the Project Management Office.

Inside the Deputy Director for Administration or Chief Financial Officer to be assigned to projects determined by executive management.

Inside a Line of Business to support projects throughout the divisions of that Deputy director.

Types of Projects: Not just Automation Efforts!!

- Management Studies: define the key performance indicators, workload measures for budget and planning.
- Prepare feasibility study reports and budget change proposals.
- Continuous Improvement: find the bottlenecks in business processes internally and with outside partners; improve the handoff of responsibilities across divisions in the department.
- Application Maintenance and Enhancements: 70 percent of automation project costs occur AFTER implementation – major enhancements are continuous due to legislation and policy. Always discover how to do it better after some experience with the system.
- Prevent systems from becoming irrelevant: know how to keep a large system viable rather than working around it.

Role on Larger Projects

- Embedded on Vendor Team
 - Hands-on assignments
 - Ongoing evaluation of work in progress; offer better critiques of deliverables ... *but focus on substance not just the format*
- Assigned to the Change Orders
 - Lower project cost
 - Validate vendor hour estimates
 - Verify impact of a proposed change across the business process