HOW SPR STREAMLINES BUSINESS PROCESS BY LEVERAGING SHAREPOINT AND K2

JOHN O’BRIEN - CIO & LEO SELICO - PROCESS ARCHITECT
MS SHAREPOINT AND K2: BUSINESS PROCESS

Overview: Utilizing existing, current investments in office software in the form of MS SharePoint, the .Net framework, InfoPath, and K2 for cross-site workflows and process monitoring, management, and administration.

This combination of technology has reinvigorated Business Process Re-engineering. SPRPMO basically tossed out the “CQI” process and boiled it down to the necessary and essential elements: 1) Process discovery (flowcharting), 2) ID’ing the essential process participants (doers not observers), 3) Rapid ‘software’ developments, 4) quick testing, 5) stop at 80% for 1st phase, 6) fix only fatal errors, everything else Phase 2 in 6 months to a year.
STRUCTURED VERSUS UNSTRUCTURED DATA

WHY SPRPMO is doing this.

**THIS:** Comprehensive Data Management with Integrated BPR with high level tool (K2)

**WHAT SPRPMO Characteristics are:** Mid sized Federal Entity, 1000 personnel, 3 states, Central Project Offices (NOLA), warehouses, four sites, which/do: operate, project construction, operational maintenance, pipeline operations (fluid movements), sales and exchange of product, A&E design and some science lab level investigations. Not a lot of transactions but very wide portfolio of activities.
STRUCTURED VS. UNSTRUCTURED CONTINUED

SPRPMO TECHNOLOGY STACK: Microsoft Centric Office, SharePoint and .Net Framework; SAP (Multi Modules), K2, COVATS (Crude Oil Sales & Inventory)

LEAVING BEHIND: NETWORK DRIVES, EMAIL, MULTIPLE STORES Digital Haystacks where all that unstructured data festers.

ENDSTATE: Create through WorkFlows, new data in organized data framework, with real Records Management

DREAMSTATE: Utilizing tools like K2 Connect and DUET (MS and SAP jointly developed product) to connect and share SP and SAP process flows and data between these Data repositories with relationship and some intelligence.
SOLUTION VECTORS FOR UNSTRUCTURED SIDE

SharePoint

Use SP workflows for smaller organizational units (Non IT Workflows)

K2

Powerful Workflow tool for centralized WF management, across sites and site collections; funnels data and objects to List, Libraries, and Document sets to segregate data in organized groups

Example:

1) “simple” SPR Directives: one document, multiple, people, couple of places
2) ECP/CMCR “complex” processes, multiple documents in multiple places to multiple people and places (libraries etc.)
SOLUTION:

Solves and addresses general issues and Long standing Problems:

1. Data location (SPR Structured SP Portal with massive Data Management Project; SP has excellent Search)
2. Latest copy (authoritativeness)
3. Authentication; DRMS and data pedigree, Metadata [fierce but small]
4. Records Management; SOX and NARA
5. Multiple copies – related to # 2 but different, draft, version, published etc.
6. Data Transport – Reliable and automatic
7. Data characterization (Meta data, SUI, CUI [Controlled Unclassified Information] and SBU [Sensitive but unclassified])
WORKFLOWS FACILITATE DATA CHARACTERIZATION

K2 Workflows DO Data Classification and data characterization via:

1. Setting meta data values associated with: Content data types, managed meta data, term sets, and hub term sets

2. In accord with the data container (site, library, document set, list, and folder) WF routs and sends object in WF to appropriate container

3. BIG
COLLABORATION: WF ANCILLARY BENEFIT

Collaboration within organization is enhanced and reinforced

One of huge benefit of SharePoint environment and WFs

1. Leadership – focus, awareness, visibility into processes and projects
2. Versatile teams
3. Matrix Management – effectively for a change
4. Multiple projects
5. Maslow - keeps work moving, less frustration, sense of accomplishment
WORK PROCESSING

Work Processing on Data Objects

1. Neural Net of how things get done
   - Currently near Chaos multiple signatures (up to 17 in one process, see Institute of Configuration Management recommend)

2. CQI vs. SPR 5/6 step program

3. Visibility
   - Accountability
   - Responsiveness

4. Statistical information K2 provides:
   - Process management
   - Process Reporting
   - Task management
SPR K2 WORKFLOW METHODOLOGY

Techniques

- Minimize Development
  Most process are 100% built with K2 wizards
- Use Accepted User Interfaces - All SPR Users are familiar with:
  - K2
  - SharePoint
  - InfoPath

Design Processes

- Review Requirements Using the 80/20 Rule
  - Ask user for all requirements
  - 80% is lumping together the easy things that can accomplished quickly
  - 20% is the rest that will require custom code and take longer
  - Most users will opt for the 80% and come back later for the rest
Every Process will require two Levels of Administration:

**K2 Developer**
- Handles Workflow Process Errors and bug fixes

**Process Owner Administrator**
- SME (Non IT-type) with detailed knowledge of process
- Handles Day-to-Day End User workflow issues
- Reduces burden on K2 Developer
SUCCESS: FROM HAND CARRIED FOLDERS TO ELECTRONIC WORKFLOW & FORMS
MANUAL DIRECTIVES PROCESS

Process to review and approve Executive Orders signed by SPR Project Mgr.
• Process was in place from 1993 to 2004
• 30-60+ days Review time for Divisional concurrence
• Directive Systems Manager (DSM) closely tracks and monitors all Directives
• Serial review of Printed Directive document to assure all comments are shared
• DSM heavily involved with all Directives
  • Manually walks each Directive to reviewing office
  • Each Office is given a review deadline
MANUAL PROCESS CHALLENGES

- Very Slow to complete process
- DSM is the single point of failure
- Directive initiator pushed document through process
- Poor document control
- Document was often misplaced
- Marked-up printed document made it difficult to review edits
DIRECTIVE SYSTEM USING SHAREPOINT AND K2

• Process in place from 2004 to present
• Parallel review process
• 7-30 days for Divisional concurrence
• Central Directives SharePoint Site
  • Used for Collaboration
    • Directive documents in sub-site for comments
    • Pending Directives Log
• Directives Manager monitors website
  • Can now monitor multiple directives
  • Give attention to workflow items hung up in the process
DIRECTIVES WORKFLOW PROCESS
DIRECTIVES WORKFLOW – K2
### Process Overview

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<th>Folder</th>
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**PROCESS MANAGEMENT**

![K2 Workspace](image-url)

**Activity Instances**

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USER ACCEPTANCE/MANAGEMENT BUY IN

User Acceptance
To Start, Users Resists All Change
  ▪ Extracting Information about the business process is difficult
    ▪ They think they own the process
  ▪ Users use the process (under protest)
  ▪ Acceptance happens when benefits are shown

Management Buy In
  ▪ Top Management fully support WF Results
  ▪ Middle Management sometimes resist effort to implement
  ▪ IT becomes the business process innovator
SUMMERY: END STATE

Desired End State: Save Time, Effort, with a Better Result

1. Can find stuff
   - Correct stuff
   - Quickly – good structure = great search
   - Achieve actual Records Management (New SOX ROI)

2. Work in high functioning teams even on large projects
   - No ‘over the fence’
   - No bring me a rock
   - Radical shortening of review times (e.g. Engineering Design Reviews)
3. Formalizing of Business processes (think ISO and Baldrige)
   - Who does it
   - When and order it is done
   - Responsible parties identified (for good and for bad)
   - Formal ‘Approval’ or acceptance recorded
   - Stored appropriately as a Record and
   - Can appropriately PURGE Records