Re-Engineering Business Processes through Enterprise Software

The US Department of Energy

Strategic Petroleum Reserve

Project Management Office (SPRPMO)

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Does Everyone Know What BPR Is? Or Why it is Done?

- ☐ Not just to Lower Costs by Reducing Headcount!
  - ■ Create Efficiencies
  - ■ Increase the velocity of doing business
  - ■ Do more with less resources, people or $
- ☐ To stay in business by being able to compete in the Global Market Place
- ☐ This includes the Government too!

SPRPMO is not your Fathers' Bureaucracy

- ☐ Factoids:
  - ■ DOE is ~93% Contracted Out!
    - ☐ With some outstandingly good and some notoriously bad results (good bombs/bad clean up sites)
  - ■ SPRPMO is well run:
    - ☐ SPRPMO won DOE Gold Medal Award 2005
    - ☐ ISO 14001 and 9001 compliant
    - ☐ Dyn-McDermott (DM), the M&O Contractor in 2005 won the Malcom Baldride National Quality Award and in 2006 the National Safety Council awarded the Robert Campbell Award to DM

Not your Fathers' Government:

- ☐ The Gartner Group just found in a national survey that the SPRPMO set a new benchmark in the delivery of Best in Class of IT services for both Public and Private entities.

- ☐ The SPRPMO actuated its Continuity of Operations Plan during Katrina with complete success: coming on line and actually delivering crude oil to refineries within 72 and 96 hours of hurricane landfall.

Not your Fathers' Government:

- With 1st Enterprise S/W BRP (SAP) SPR:
  - Reduced IT Maintenance Cost
    - Eliminated 11 positions dedicated to keeping 22 systems and their interfaces operating
  - Eliminated $31.8 million in labor required to perform the mission processes (by end of 2nd yr)
    - Over time 285 positions reduced (mainly thru attrition), most attributable to efficiencies and re-engineering enabled by SAP
  - Reduced cost to account for property by 70%
  - Reduce cost to process a requisition by 60%
- System ROI? Better than 100% Annually!

So How did the SPR do this?

- Partnership between the DOE federal staff and the DM contractor to have:
  - Progressive contract terms awarding fee on the basis of: 1) performance and 2) cost savings
  - Enlightened (for the most part) Senior Management
  - Progressive and aggressive utilization of Enterprise Software

How did the SPR do this? Cont.

- ☐ Enterprise Software was used to re-engineer many of the SPRPMO business processes. Tools – next slide

- ☐ Senior Management, particularly Mr. Gibson, the Manager of the SPRPMO supported the re-engineering efforts and the change management needed to bring the enterprise level changes to fruition.
  - ■ This is a "Key success factor" in every presentation, article, and book I've seen on BPR

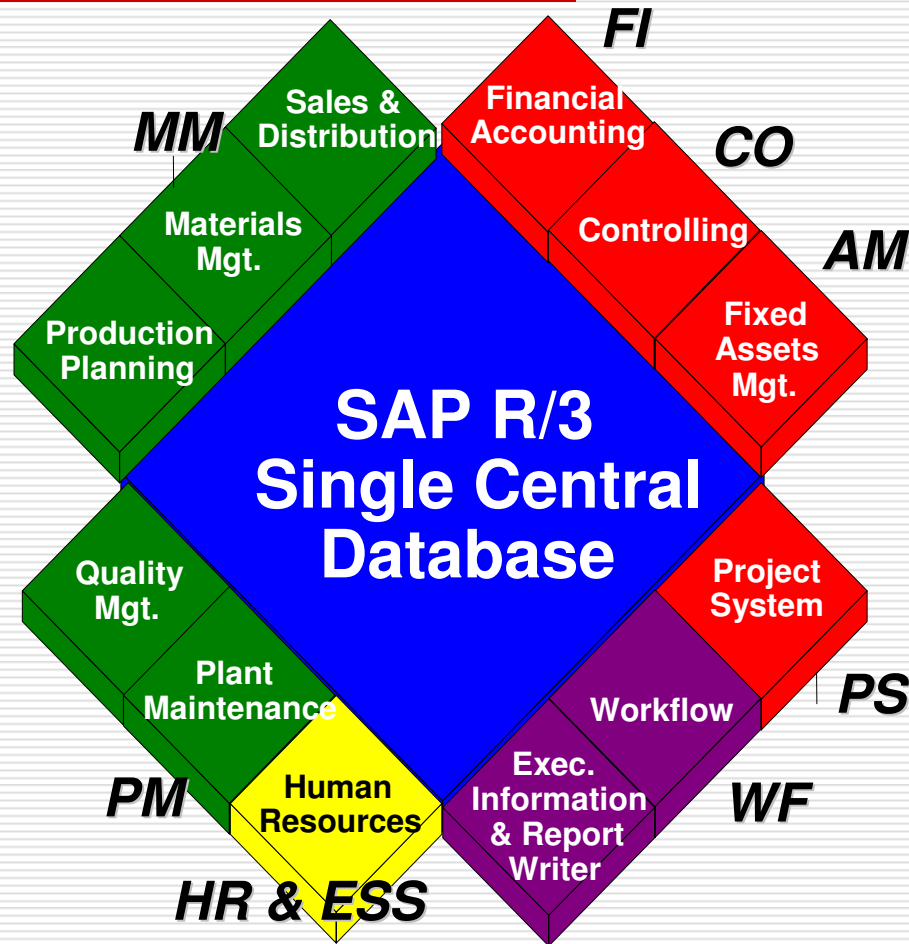# Having a good set of Software (S/W) Tools is very Helpful:

- ☐ SAP was installed 9 years ago as our Service Enterprise Resource Planning (SERP) system. Briefly, it's extremely successful implementation allowed for:
  - ■ The retirement of 22 mainframe systems
  - ■ The streamlining of most major maintenance and operations process
    - ☐ Resulting in MEASUREABLY improved work process (12 of 13 key metrics, some radically)
    - ☐ Ballpark ROI, better than 100% annually

Having a good set of Software (S/W) Tools is very Helpful:

SAP R/3 modules diagram centered on **SAP R/3 Single Central Database**:

- **FI** – Financial Accounting
- **CO** – Controlling
- **AM** – Fixed Assets Mgt.
- **PS** – Project System
- **WF** – Workflow, Exec. Information & Report Writer
- **HR & ESS** – Human Resources
- **PM** – Plant Maintenance, Quality Mgt.
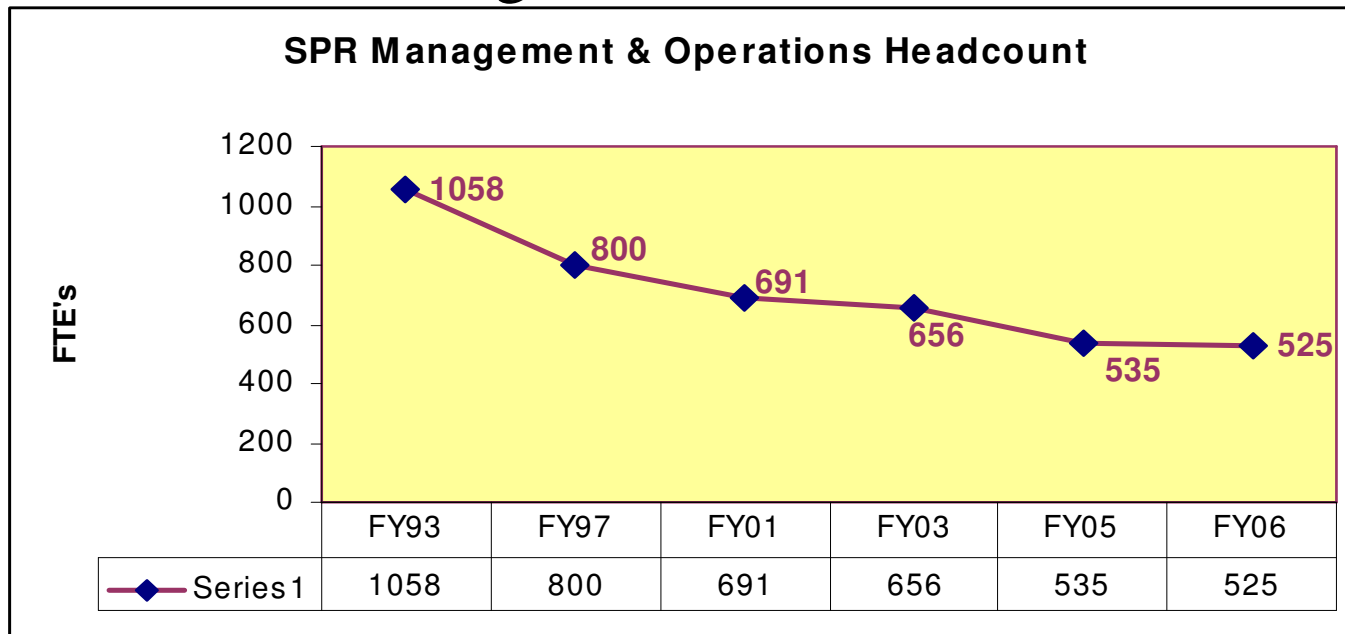- **MM** – Materials Mgt., Production Planning, Sales & Distribution

Slide from "SERP" Presentation

SPR Reengineering Objectives

Provide better services on a reduced budget
(50% reduction in staffing, now DM at 525

DOE-SPR staffing reduced from about 130 to 90)

SPR Management & Operations Headcount

	FY93	FY97	FY01	FY03	FY05	FY06
Series1	1058	800	691	656	535	525

Having a good set of Software (S/W) Tools is very Helpful:

☐ SAP is the Fortune 1000's Choice of ERP BUT the Other Big S/W components' leveraged for business process improvement is:

Having a user centric, user friendly, user accessible (flexible and mobile), resource and information sharing, collaborative and empowering environment; allows your workers to substantially increase their productivity by increasing the velocity at which work gets done!

Having a good set of Software (S/W) Tools is very Helpful:

☐ Knowing how you are going is too:

"Our efforts will concentrate on streamlining and simplifying the information infrastructure by using open Internet standards and a services architecture. The focus will be on enhanced cyber security, end-user productivity, cost effectiveness, and return on investment. We will support telecommuting by providing secure telecommunication infrastructure access, and will ensure the confidentiality, integrity and availability of SPR data and information systems"   SPRPMO IT Long Range Plan (5 yr)

Having a good set of Software (S/W) Tools is very Helpful:

☐ Knowing where you are going is too:

> "The objectives of this long range plan are to simplify user access to SPR information, to promote user efficiency, to make the access more cost effective, to increase the overall SPR mission effectiveness while continually improving data security, and to position the SPR information technology infrastructure so it can better adapt to changing technology and business needs." SPRPMO IT Long Range Plan

Other S/W Tool: Toolset using Web Services Centric Technologies in a:

- ☐ Microsoft (MS) Centric Environment interfaced with critical legacy applications performing data management jobs
  - ■ SPR fully embraces Configuration Management (CM)
  - ■ SPR does world class Product Data Management Structure (PDMS) currently in a legacy app.
  - ■ Currently Implementing a comprehensive Content/Data Management System which will (hopefully next year) perform true electronic Records Management easy enough for normal users to use

Application of MS Technologies in an Enterprise Environment

- ☐ History // visualize the effort for:
  - ◼ Setting up a meeting before Outlook?
  - ◼ Writing letters/memos before email?
  - ◼ Remember communicating with email before IM?
- ☐ Not that MS invented all this 'Office Productivity S/W' they just became the biggest- and for reasons similar to that of SAP: Integration of individual tools in the tool set AND the continuous addition to and enhancement of tools
- ☐ Who's seen MS SharePoint Server?
- ☐ Used it?

The Next Big Jump in Productivity: SharePoint Server to the User

- ☐ History: Remember when web sites were just electronic shops and libraries on line?
- ☐ Where SAP integrated together the traditional stovepipe functionalities with one massive backoffice DB;
- ☐ SharePoint Server empowers users by giving them access to tools and web features (display of objects and data) to manipulate content and integrate this with other systems. (No HTML writing, Front Page Authors, or Webmaster needed to publish).
- ☐ XML to the masses
  - ■ See Demo

SharePoint (SP) Tool is Key to Re-Engineering all The Other Processes

- ☐ BPR: basically define an existing process (we found 142 in an afternoon)
- ☐ Start defining it in a flow chart
- ☐ Put the existing forms into InfoPath making them interactive with users
- ☐ Utilize SP as a Data Base
  - ■ And Collaborate
  - ■ And use MS Office features (Calendar, Word, Excel, Web sites [display HTML]) because they are Integrated with SP
  - ■ APIs not required !

Using SP and Friends

- Display: Internet AND Intranet information to outside and inside the enterprise
- Collaborate inside and outside the enterprise –
  - See cool Demo (except [Extranet] not turned on yet)
- Create forms and documents and:
  - Store (Content/Document Management),
  - Route (workflow a business process),
  - Exchange and Manipulate data;
- Doing All This, while eliminating whole classes of email !
  - Really, see Demo!