



E:Documents Management: Centralized Administration

Time-Consuming Paper Work

Imagine keeping track of over 300 forms and over 5,000 correspondences at any given activity. Sound familiar? It should, because it's the picture of many Navy installations these days. The time spent tracking and managing this paper traffic is time consuming and inefficient. Smart Base applied an alternative to cope with this mess: the Paperless Administration Initiative

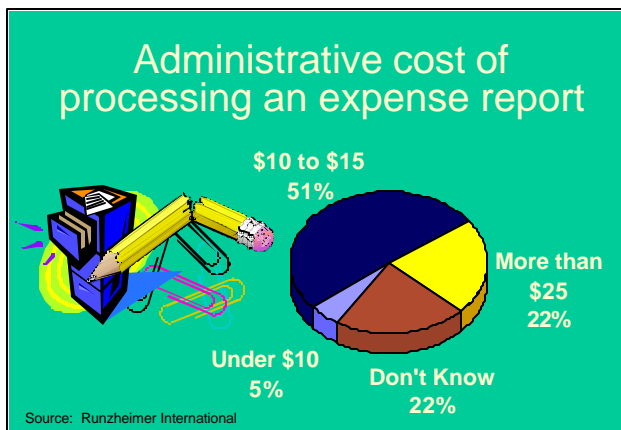
Many installation commanders wonder: How efficiently is each department working? Is the installation utilizing its resources effectively and efficiently? These are common questions when forms need approval or documents need forwarding for comment.

Smart Base invested in three types of commercial-off-the-shelf (COTS) products for the paperless administration initiative: DocuShare, a web-enabled record management software from Xerox; JetForm, a forms automation and workflow enabler; and a high performance duplex scanner from Fujitsu. Combined, these products convert hard copies to e:documents, offer document visibility on all desktops connected to the local infrastructure, and improve document tracking and manageability.

Off-the-Shelf Technology

Smart Base found combining these two applications on existing information technology (IT) networks streamlines manual business processes and minimizes redundant administrative functions by consolidating duties and responsibility.

The Smart Base project team analyzed the current administrative functions and actual costs at Naval Air Station Brunswick (NASB), Naval Station Pascagoula (NSP), and Portsmouth Naval Shipyard (PNS) to provide a baseline to assess the return on investment of a paperless environment.



The Initiative

Paperless administration uses COTS technology to maximize cost efficiencies through paper reduction, electronic document storage, automated correspondence workflow, and records management in daily Navy business practices.

Within a paperless administration environment, all pieces of paperwork that are typically used are drafted, completed, routed, approved, and/or filed electronically using the existing local IT infrastructure.

Significant savings can be realized by consolidating administrative functions, reducing the number of paper-based forms, and cutting reproduction costs. Attractive additional features include usage safeguards and tracing and accountability of documents.

Paperless Administration Products

Smart Base established a set of rigorous criteria as a guideline for evaluating several business COTS products, some of which included

- LAN and Web capable or adaptable and enterprise scalable
- Interoperable and open-architecture format (not developmental and not configured to operate in isolation of other systems)
- Automatic routing of forms through a pre-established process with predetermined logic and instructions
- Automatic storage of completed forms and correspondence in a pre-determined file upon completion
- Adaptable to and capable of running on designated Department of the Navy (DON) IT standard operating systems; compatible with DON standard software
- Capable to route correspondence in a structured or unstructured process or a combination of the two

The result of the criteria evaluation was the selection of DocuShare, JetForm, and a high-end scanner as the COTS products to carry on and meet the goals of the Paperless Administration Initiative.



DocuShare™ was chosen as the document management software (DMS) tool to best manage the business administration activities found at the demonstration sites. DocuShare allows users to store, access and manage information and files in a community-maintained repository using a standard web browser. DocuShare uses the existing corporate intranet to set up a virtual information-sharing environment that will allow users to post, retrieve, and search for text (documents and manuals), graphics, and video.

DocuShare creates user accounts and permission groups that allow the activity to adhere to Department of Navy (DON), Department of Defense (DOD), and local security requirements. To avoid redundant work, DocuShare features the ability to track revisions and lock documents to prevent simultaneous updates. Only authorized registered personnel can maintain information, but non-registered users with access to the corporate intranet will have the ability to “read-only” all information via the web browser. These electronic features and tasks allow more efficient administrative support services by way of electronic innovation through DMS. Smart Base validated flexibility and scalability conveniences in this application at all three demonstration sites.

JetForm™ agents Intempo, FormFlo, and Filler enable users to design and automate the workflow of forms. JetForm’s applications route electronically designed and pre-populated forms through an individually established approval process for each form from originator to final approver. This allows the form to be traced throughout the approval process.

JetForm was chosen for the demonstration sites because of the flexibility it provides and the diverse range of business processes it can handle, such as

- Administrative processes; e.g. leave request forms
- Collaborative processes; e.g. the Technical Assessment Routing Form used at PNS where a group of people coordinate activities across several departments
- Ad hoc processes, which handle either a “one-time-only” task or have the flexibility to change the next participant in the workflow

All of the advantages provided by DocuShare and JetForm prompted Smart Base to purchase a workflow server for each demonstration site to house the applications and to act as a repository of information and files. Electronic documentation conversions are made possible by a high-speed scanner and are maintained and stored on the ‘library’ server.

Demonstrations Sites

The initiative is unique, applied to three diverse DON activities. The user population varies from 200 at NSP to 3,300 at PNS. Due to variance in information systems capability, user population, and availability of personnel with information systems expertise, in-depth site evaluations were conducted to establish each activity’s specific requirements prior to the start of the project. The site surveys consisted of (1) performing workflow analysis and process reengineering for each paperless form selected for demonstration; and (2) determining software installation, form creation and training requirements. Training provided the test sites the tools and knowledge required to continue conversion of forms and to begin automation of other (non-form) correspondence routing.

Two demonstration sites chose to automate a multi-functional form (Special Request/Authorization Form) used by active duty military personnel. The form is used for approximately 25 request types, with as many as twelve distinct participants in the workflow process. Some of the request types require additional forms that have been designed into the process. Some request types can be approved internally while others require the request and/or an associated form to be sent to a remote (external) site for action.

The third demonstration site chose to automate a form that accompanies all incoming technical correspondence, directives, instructions and publications. Participants affix comments to this form, rather than on the original correspondence. Incoming correspondence and documents are scanned into a file and attached to the routing form. Upon completion of the routing process, the electronic routing form and attached documents are stored in a directory on the workflow server.

Implementation

For the Paperless Administration initiative, the Smart Base project team provided oversight support in

- Providing project management assistance by establishing, monitoring, and adjusting timelines
- Coordinating the efforts between Smart Base, JetForm Corp. and the demonstration sites
- Reviewing and documenting existing processes, forms, and supporting documents
- Recommending process improvements by utilizing capabilities of new software applications
- Defining data entry, data storage, notification, and interface requirements
- Documenting existing system architecture and infrastructure
- Drafting the requirements analysis document (report) for the process design



Implementation, design and installation for the first demonstration site began in May 1998 and was completed in July 1998. The second demonstration site's process began in June 1998 and was completed in September 1998. The third demonstration site's process began in July 1998 and was completed in October 1998. A three-month test period provided the data to validate the initiative and determine the overall value for Navy.

Significant timesavings were experienced and validated during the test period. Forms that manually took an average of 24 hours to completely process (filed at Personnel Support Detachment) now take an average of 16 hours to complete. As the process matures and innately streamlines itself, additional timesavings are expected. The test period also confirmed timesavings for individuals involved in the process. While productivity gains through time saved are quantitatively difficult to measure, a realized qualitative benefit was self-evident. In essence, effective utilization of the paperless administration vehicle will allow individuals to be implicitly more productive thus providing a higher level of service.

Savings. Immediate costs savings include the elimination of (1) purchasing both local and DOD forms from private printing vendors and/or form suppliers, the (2) reduction of reproduction, and (3) paper costs. It is estimated that over a two-year period, the three demonstration sites will achieve approximately 90% cost savings over current forms reproduction and acquisition costs. Currently the total costs for such services at NASB, NSP, and PNS combined are approximately \$48,000 annually.

Although not quantifiable, savings from reducing forms inventory, manual file maintenance and processing, forms obsolesce, and eliminating duplication of effort can be expected.

Start-up Costs. The combined paperless administration initiative at NASB, NSP, and PNS cost a total of \$221,000. This cost figure includes the software, servers and 'library' servers, professional scanners, consultant labor, and training dollars for all three sites. Annual administrative training dollars are assumed.

Rate of Return. Assuming administrative staff is paid at a GS-5 step 5 composite rate of \$49,000, Navy could recoup the entire start-up costs in one year by reducing current staffing levels across the three demonstration sites by five administrative service employees. This yields an annual rate of return of 114% over this five year period. As a rule of thumb, a technology investment that generates a return above 25% is considered an economically advantageous investment.

Future Potential Savings. In addition to direct material savings, productivity gains can be realized in two distinct ways, brought about consecutively.

The technology insertion of the hardware and software that comprise the paperless administration environment conclusively reduce the number of administrative tasks that are done manually. CINCLANTFLT provides Performance Work Statements (PWS) that outline supervisory, management, administrative support, and clerical support services requirements. OPNAV 1000.16J and NAVMAC approved manpower standards obligate yeomen, GS-301 through GS-340 administrative staff, librarians, and postal clerks to carry out these administrative support services.

Of those administrative support services listed in the July 1998 PWS, over 50% (63 out of 123) of the administrative support services can now be automated in a paperless environment, and 24% (29 out of 123) of the administrative tasks could be done away with entirely. Assuming the percent of tasks eliminated directly correlates to the percent of staffing requirements potentially reduced, the demonstration sites could reduce requirements by 24 (24% of 103 staff¹) administrative support staff. Reducing the staffing level by twenty-four employees will yield \$4.6M net savings over a five year period. Additional staffing savings could be realized by automating the 50% of the tasks identified that are currently done manually. Overall, the rates of return indicate that the investment is worthwhile and economically justifiable.

Not only does paperless administration result in intradepartmental productivity gains; administrative tasks can be automated interdepartmentally. Paperless administration technology enables multiple departments to eliminate duplicative storing, recording and tracking, maintenance, and processing of files and correspondence tasks.

A web-based paperless environment allows operatives on the existing IT infrastructure to share current and archived files, give permission rights to new correspondence for review, index folders, and edit properties to better utilize labor and capital and reduce redundancies across various cross-functional administrative departments. Not only does this impact onshore activities, the web-based environment affords deployed operational units to access documents and forward time sensitive approvals and forms without physically be close.

¹ Number of staff was calculated by taking a weighted average of administrative support staff to personnel served at NASB and NSP (2.3% of personnel at the NASB and NSP are administrative support) and multiplied to the personnel served at PNS and added together. NAVSEA does not require PNS to maintain current activity manpower documents.



Best Business Practices – Business Process Reengineering Possibility

Additional efficiencies and cost savings can be achieved in a paperless environment by integrating functions and processes across administrative departments on an installation to a centralized consolidated full-service administrative department.

A centralized administrative department could provide most administrative services to the other departments on base. A complete geographical migration would be somewhat impractical due to the specific nature of various mission operations. Smart Base suggests mission sensitive support staff remain in designated departments to ensure adequate administrative services during contingencies, deployment commitments, and offshore exercises.

There are many benefits to maintaining a consolidated administrative department. These include

- Better utilization of labor by reducing duplicative cross-functional administrative tasks which promote shared responsibility and accountability
- Consolidating equipment which decreases recurring capital expenditures and reduces material requirements
- Synergy by way of standardizing procedures allowing customers the benefit of predictable and common expectations

- Manageability of tasks by accommodating peak load levels
- Improving traceability of files and correspondence

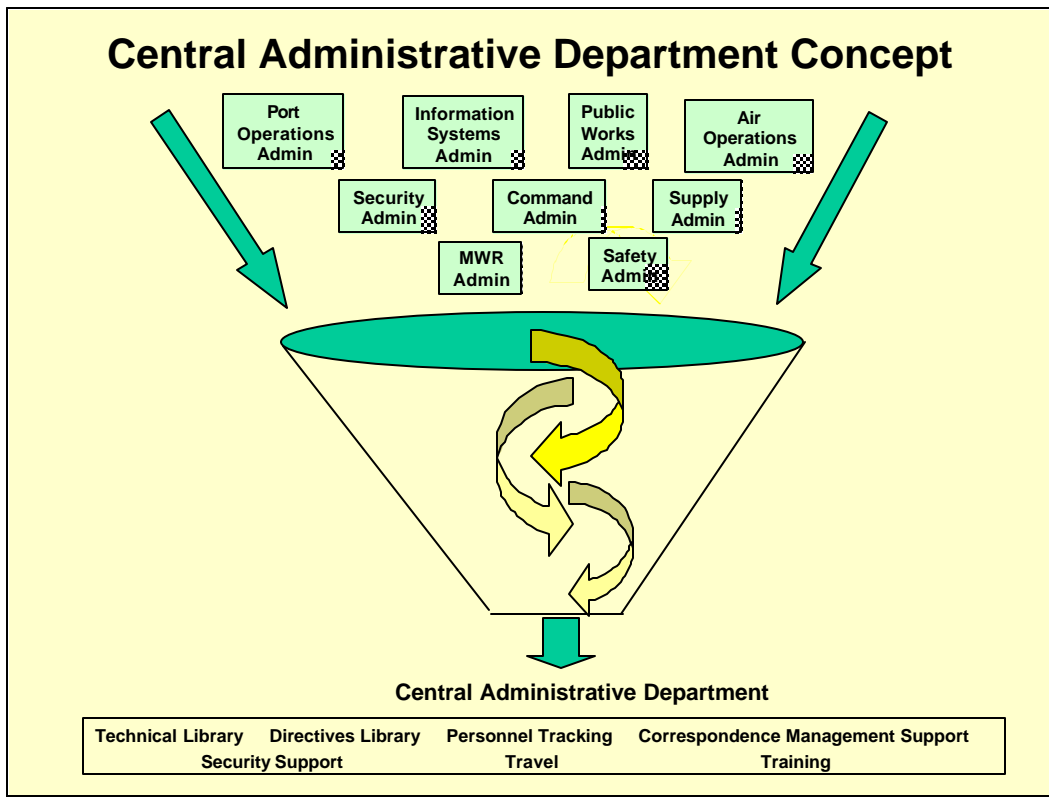
Centralizing administrative tasks that service all departments will eliminate the duplicative tasks performed, pare administrative staffing requirements, and provide streamlined administrative support services.

This concept can be scaled to include servicing geographical tenets the installation serves in order to realize additional productivity gains and potential staffing reductions. While scalable, this concept is exportable as well. If the DON were to promote and implement this concept at other facilities, varied levels of savings would undoubtedly be achieved by providing dependable administrative services via a central administrative department.

End Result

Employing lessons learned is crucial to operating successfully in a paperless environment. Time and capital savings are proven on several sites, and should be realized across the Department of the Navy.

Operating within a consolidated paperless environment will cut costs and increase productivity without jeopardizing mission critical issues and operation



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