



***The Value of Business Process Management in
E-government Initiatives***

A HandySoft Corporation White Paper

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Challenges in Aligning Resources with Citizen Expectations and E-government Mandates

How will agencies meet the challenges of automating processes and integrating people and systems seamlessly and securely with other agencies, the private sector, other governments, and the citizens they serve?

All levels of government are facing significant challenges. The federal government faces its largest reorganization in 50 years. State and local government budgets are dwindling. Public servants worldwide have to make difficult choices about cutting costs while at the same time trying to increase services.

Government directives such as the President's Management Agenda for e-Government and legislative mandates such as the U.S. Government Paperwork Elimination Act (GPEA) are providing guidance that encourages government agencies to foster collaboration and to automate and streamline business processes. Public awareness of government spending has created mandates for cost controls, forcing government agencies to meet these ambitious goals with limited resources.

Government is, in the end, all about the citizens that it serves. Whether e-government initiatives are as personal as providing social services or tax information to citizens on the Web or as universal as homeland security, integrating and sharing critical business processes and information are equally important.

Citizens and legislators alike expect the same kind of around-the-clock services and personalized experience the private sector provides. The Office of Management and Budget cites polling data from the Pew Foundation, for example, showing that over 40 million

Government Agency Challenges

- Create a process-centric foundation and infrastructure for mandated e-government initiatives
- Bridge existing "Islands of Automation" by allowing the sharing of information among agencies
- Ease the cultural adoption of the sharing of information and the integrating of workflows across agencies
- Automate commonly performed tasks
- Gain visibility and control over internal and external processes
- Eliminate redundancies in systems requested and built by various agencies
- Integrate internal processes with existing disparate back-end systems and data sources
- Improve overall efficiency and effectiveness
- Ensure privacy and security at all levels of interaction

Americans went online to look at Federal, State and local government policies, and over 20 million used the Internet to send their views to governments about those policies. “This and similar data show that if the U.S. government can harness the power of technology, it will be meeting expectations of an increasingly wired citizenry.”¹

As the “customers” of government information and services continue to embrace online operations, the pressure to move forward with e-government has brought technology issues to the forefront of public policy. Initiatives to provide consistent, trans-governmental services are forming across the public sector.

Government agencies need a business process management solution that securely and reliably ties together all internal and external processes. They need an e-government architecture that leverages the millions invested in existing infrastructures and legacy systems.

BPM: Making the Connection Between Governments and the Citizens They Serve

E-government is more than just putting government forms on the Web. Government agencies are already doing just that. It’s about going beyond these first steps in citizen-government Internet interaction and making a true connection among all involved parties, with a focus on providing citizens with the best possible value for their tax dollars and citizen-centric services.

E-government is more than just putting government forms on the Web. It’s about making a true connection among all involved parties.

Government agencies need solutions that will provide for automation and collaboration among agencies, other governments, the private sector, and citizens while at the same time leveraging taxpayer investments in existing technology.

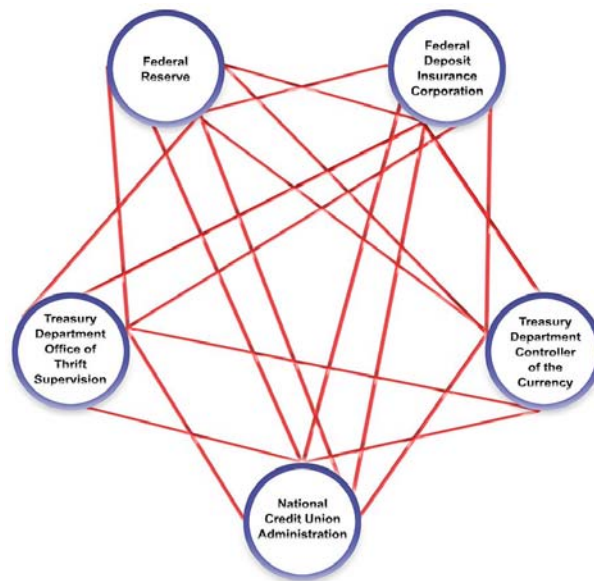


Figure 1 shows an example of just a few of the many complex interactions involved in a single government initiative — Financial Institution Regulation.¹

The various agencies and state governments involved in financial institution management all have different back-end systems, processes, and documents. The result is an environment in which all parties are divided from one another. In spite of efforts at automating work and integrating applications, government agencies often labor with islands of technology that work in isolation from one another, defeating collaboration and keeping interested parties from readily accessing the information they need and the work they're supposed to do.

Compounding this problem is the fact that so much new technology has been applied to problems without fully assessing the problems themselves. Mark Foreman, associate director for information technology and e-government at the Office of Management and Budget, recently testified before congress that “government agencies traditionally used IT to automate existing processes rather than create more efficient and effective solutions now possible because of IT.” Citing this as a cause of failure in major IT investments, Forman concluded that “systems are often evaluated by the

“Government agencies traditionally used IT to automate existing processes rather than create more efficient and effective solutions now possible because of IT. This approach, commonly referred to as paving the cowpath, has been documented as a cause of failure in major IT investments.”

*Mark Forman
Associate Director for Information
Technology and E-Government
Office of Management and Budget*

percentage of time they are working rather than the results delivered to the programs and citizen they support.”² Even today, technology vendors continue to promote solutions that are proprietary or in other ways fail to accommodate the needs of government agencies in transforming the way they work.

Executive and legislative mandates are clear about the need for agencies to collaborate. In his “Presidential Memo on the Importance of E-Government,” President Bush comments, “Our success depends on agencies working as a team across traditional boundaries to better serve the American people, focusing on citizens rather than individual agency needs. I thank agencies who have actively engaged in cross-agency teamwork, using e-government to create more cost-effective and efficient ways to serve citizens, and I urge others to follow their lead.”³

The solution for connecting all parties in government processes into a single, unified machine that supports productivity and collaboration in government is *business process management*, or BPM.



Figure 2: E-government using business process management to integrate and automate complex processes.

BPM addresses the challenges that government agencies face by enabling them to organize and manage people, activities, and resources such as capital assets and information technology to more effectively reach their goals and meet legislative and executive mandates. BPM acts as a catalyst for transforming government agencies and the way they work by *automating and simplifying processes, enforcing best practices, improving quality and productivity, and fostering collaboration* internally and externally with other agencies, local governments, the private sector, and citizens.

According to the Architecture & Infrastructure Committee of the FEA Working Group:

E-Gov Initiatives require a flexible, comprehensive architectural model that supports development of complete requirements when planning, designing, and building major systems. This is essential if the Federal Government is to 1) leverage information technology investments and avoid unnecessary duplication of infrastructure and major components, 2) link business processes through shared, yet sufficiently protected information systems, and 3) leverage disparate business processes, services and activities that are located outside Agency boundaries.⁴

“One of the challenges with understanding how far we’ve actually gone is that integration is in the eye of the beholder,” said Theresa Pardo, project director at the Center for Technology in Government. “Integration is one of those things that some people define as ‘we have co-located a number of applications in a portal’ vs. ‘we have in fact integrated business processes in information systems across government agencies to ensure one-stop shopping.’ Integration is a very, very subjective term.”⁵ Indeed, among the 24 e-government initiatives currently underway, several are falling behind schedule and are on an at-risk list developed by the OMB. Nearly all have put some kind of application or portal online; where they are falling short is in back-end process integration and fully deployed, cross-agency solutions.⁶

A Gartner Consulting analysis of the effectiveness of legislation such as GPEA found that many agencies were focusing on data extraction from legacy systems and data presentation, typically involving the development of a Web portal, some back-end integration, and document management capabilities.

“These efforts certainly will make strides to accomplish the goals set forth in GPEA,” Gartner concluded. “But they neglect to incorporate something powerful, namely a business process management component.” Gartner’s research went on to identify key three benefits of deploying BPM (improved responsiveness, cost containment, and process standardization) and concluded, “*If you manage core agency business processes, BPM could be one of your most critical IT initiatives.*”⁷

“If you manage core agency business processes, BPM could be one of your most critical IT initiatives.”

Gartner Inc.

BizFlow Solutions for E-government

Improving the Way Government Works

BizFlow Solutions for E-government, based on HandySoft's BizFlow BPM platform, address the fundamental process challenges of e-government, allowing agencies to automate and integrate real and disparate business processes and safely and securely extend those processes to a wide variety of users via the Web.

BizFlow Solutions for E-government rapidly accelerate time-to-value with configure-to-fit process templates and HandySoft's best-in-class business services, designed to address the unique challenges that government agencies face. Whether an agency's goal is government-to-government (G2G), government-to-business (G2B), government-to-citizen (G2C), or intra-agency collaboration, BizFlow Solutions for E-government help automate agency processes and integrate with legacy databases and applications to maximize current IT investments and achieve a rapid return on new IT investments.

BizFlow Solutions for E-government give government agencies at all levels the ability to automate, streamline, integrate, and simplify costly manual processes. They allow agencies to easily and securely bring together information from disparate systems. And, because BizFlow's architecture is portal-ready, agencies can extend business processes reliably and securely to users inside and outside their organization.

BizFlow E-government Solutions span horizontal functions, giving agencies the ability to automate and streamline a wide variety of administration, financial, and other business processes. This is key, because agencies can no longer afford the standalone, stovepipe applications of the past. "Now the challenge is...to harness this enormous potential into the acquisition, logistics, human resources, health care, financial management and other functional areas, creating a seamless flow of enterprise information," says Scottie Knott, director of the Defense eBusiness Program Office. "This expansion from electronic commerce to electronic business is a natural and necessary progression in support of the revolution in business affairs."⁸

From serving the individual citizen to participating in the global economy, BizFlow can make government agencies more efficient and effective by automating processes such as e-procurement, HR, finance, e-travel, and more.

BizFlow E-government Solutions for E-administration

Manual documents and processes are inefficient and expensive. BizFlow, with its award-winning business process management capabilities, enables any document or image that is exchanged through e-mail, postal mail, or fax to be automated and managed throughout its lifecycle to reduce cycle times. BizFlow E-government solutions allow any government administrative agency or department to increase efficiency and reduce agency operating costs. BizFlow's library of government forms speeds the deployment of electronic form submission and process automation. BizFlow provides

reporting on how efficiently processes are being executed, as well as tools to redefine and refine processes as needed to support ensures continuous process improvement.

Whether an agency is faced with automating approvals, human resources requests, task and correspondence tracking, application processing, engineering document management, logistics management, or any other administrative process, BizFlow E-government Solutions for E-administration can provide the pre-built process functions necessary for efficiency gains and immediate ROI.

BizFlow E-government Solutions for Finance

Government agencies face unprecedented pressure to manage operational costs. Managing each and every financial transaction within government agencies is no longer a matter of choice. The agencies are expected to make the most of limited IT resources. Expectations of stakeholders, legislators, and citizens are high.

BizFlow E-government Solutions for Finance allow agencies to streamline, automate, and integrate financial processes, including AP/AR, procurement, grant management, taxation management, child support payments, loan processing, contract management, e-travel, and other financial processes.

From submission to fulfillment, BizFlow E-government Solutions for Finance have the features that help agencies meet the challenges they face, allowing them to enhance ERP, CRM, and financial systems with dynamic business process and workflow and extend those processes and workflows securely to other agencies, the private sector, or citizens.

BizFlow E-government Solutions for Finance allow agencies to achieve operational efficiencies, reduce errors and processing costs, improve financial planning and forecasting, optimize performance management cycles, reduce costs, and streamline supply chain operations. Government agencies can enhance the value of government financial project management and tracking through the complete automation of project tasks, resources, and budgets. BizFlow allows agencies to gain visibility and control of financial processes with an audit trail that tracks processes historically and in real-time.

BizFlow E-government Process Portals

BizFlow offers the seamless flexibility needed for introducing a process layer to enterprise portals. The combination of BizFlow E-government Solutions with a new or existing portal implementation delivers on the second evolution of the portal vision — the process portal.

“By giving someone a single interface that not only aggregates information and lets you interact with the application but also lets those applications talk to each other within that interface [is] really

introducing a whole new value proposition,” analyst Stephen O’Grady observed in a recent InfoWorld article. “This is getting into offering business process management and advanced workflow-like capabilities through the portal framework.””

HandySoft’s business process management and workflow solutions are engineered to seamlessly integrate with any portal’s interface. BizFlow for E-government Portals accelerates the process-management functionality of government portals to support complex actions and exception handling through the portal, resulting in a more effective government workforce.

The integration of BizFlow with a portal allows government agencies to simplify how the user interacts with multiple back-end systems. By bringing multiple systems and human-based processes to the portal dashboard in a single, unified view, process portal delivers the ROI that management, legislators and citizens are looking for.

BizFlow Government Solutions enable a wide variety of government portal implementations:

- **Government-to-Citizen (G2C).** Provide improved services to citizens, including static document content and transactional systems such as tax payments, information inquiries, vehicle registration, permit processing, healthcare claims and services, and social services delivery.
- **Government-to-Employee (G2E).** Provide streamlined services to government employees, including e-travel, e-training, and expense reporting and reimbursement.
- **Government-to-Government (G2G).** Share data and transactions with other government organizations to increase operational efficiencies, including grant management, loan processing, tax payment and processing, and grant management.
- **Government-to-Business (G2B).** Provide portal access to interoperate with businesses outside the agency, including purchasing portals, loan processing, and tax collection and processing.

A Closer Look at the BizFlow Platform

HandySoft understands the challenges of creating the right business and technical environment for improving government processes. HandySoft has worked with government agencies for more than 12 years to streamline tasks, reduce paperwork and errors, boost employee productivity, and increase constituent satisfaction.

The foundation for HandySoft’s E-government Solutions is BizFlow®, the award-winning platform for business process management, automated workflow, and real-time collaboration. BizFlow offers complete capabilities for building and managing automated business processes, including tools for

designing and monitoring the processes, managing exceptions, presenting and accessing work, integrating complex IT systems, and administering mission-critical business processes.

Figure 3 shows a conceptual diagram of the BizFlow platform for e-government solutions. The foundation of a BPM solution is an organization’s existing business systems. Most enterprises have invested a great deal of time and money in their IT infrastructure; they may also have begun deploying Web Services and other systems that use Web standards like LDAP. The purpose of those standards is to enable organizations to leverage and re-purpose their existing business systems.

With that in mind, the BizFlow platform integrates easily and gracefully with current IT environments, providing a complete suite of all the tools needed to build, configure, and deploy a solution for business process management, collaboration, and automated workflow. While most BPM and EAI platforms are proprietary or in some other way restrict options and flexibility, BizFlow is “technology-agnostic” and can thus rapidly blend in with an organization’s current business and IT environment, as well as with those of its partners.

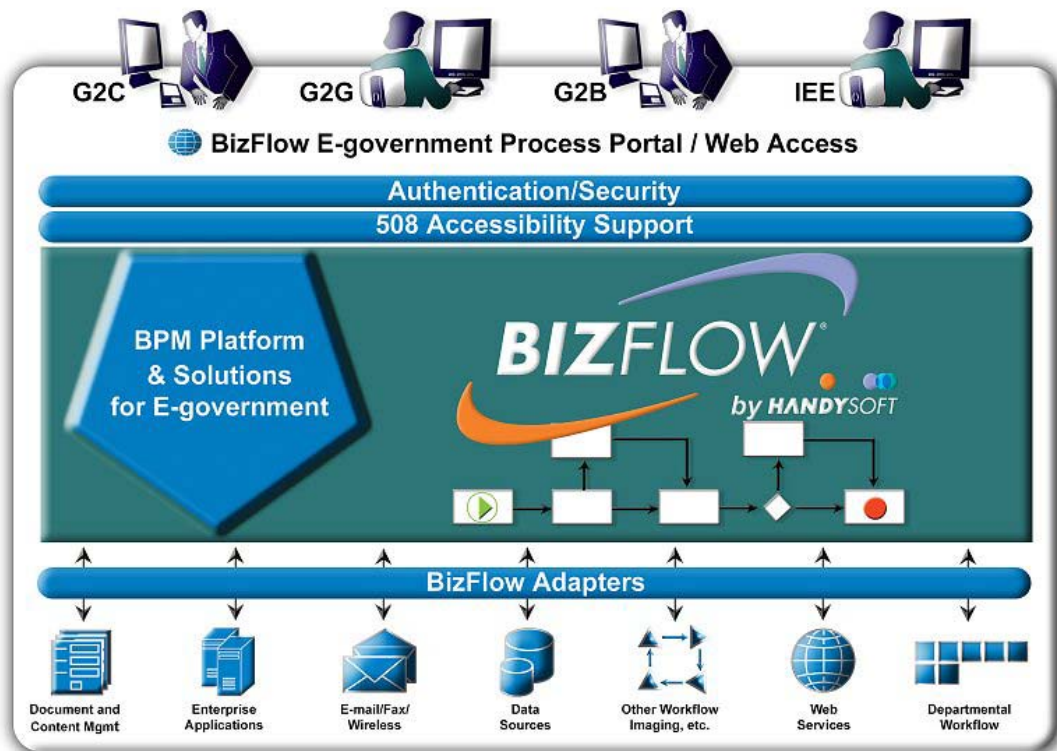


Figure 3: The BizFlow E-government Platform

The core of BizFlow is a world-class *process engine* that routes, monitors, escalates, and audits the flow of work and information that are part of the automated process, according to business rules that the organization establishes. Complementing the engine are five components that create the complete BPM solution:

- A *configurable user interface* that lets each process participant organize their workspace according to their requirements;
- A *process design module* that lets managers create and modify complex processes using point-and-click icons, without having to do any programming;
- A *forms design module* to create intelligent electronic forms that are used in automated business processes;
- *Reporting and monitoring capabilities* that let executives keep track of the performance of their processes in real time.
- *Administration tools* that make tasks like adding users or data sources easier, even for non-technical personnel.

BizFlow also includes *adaptors* that connect business processes directly to existing enterprise applications, document management systems, legacy databases, and other existing IT systems.

Features of the BizFlow Platform

BizFlow offers unique capabilities that make it a truly complete environment for enabling comprehensive, government-focused process solutions. Features include user-friendly process design, ad hoc routing and exception handling, reporting and auditing, a configurable user interface, and forms design. In addition to those features, BizFlow provides government agencies with the specific capabilities that e-government leaders are looking for and which are outlined in the FEA Working Group's E-government Conceptual Process Model:

Section 508 Accessibility Support. BizFlow ensures Section 508 compliance on all internal- and external-facing systems.

Security and Authentication. BizFlow fully supports the latest state-of-the-art security technologies. 128-bit SSL encryption protects data from unauthorized access. Support for Public Key Infrastructures, such as Entrust, include digital signatures and certificates, allowing an agency to extend collaboration beyond agency firewalls at minimal risk.

Portal Access. BizFlow goes beyond simple transactional portals, allowing government agencies to introduce a business process manager layer to agency portals. (See “BizFlow E-government Process Portals,” p. 7.)

Web Services. As a Web Services-ready platform, enterprises can use BizFlow to request, broker, and deliver Web Services, using Web-based tools and portal-ready solutions for employees, partners, and customers. As a Web Services consumer, BizFlow can request Web Services in the context of business processes. As a Web Service broker, BizFlow may coordinate the interaction of several Web Services. BizFlow processes themselves can be invoked as Web Services, extending the benefits of collaboration and interoperability to include end-to-end service fulfillment. BizFlow provides a SOAP API, process data is XML, and BizFlow supports WSDL and UDDI standards.

Six Sigma. BizFlow enables government agencies to implement and manage Six Sigma processes as well as design and continuously improve business processes. BizFlow delivers powerful process design, automation, analysis, and management capabilities that support Six Sigma adaptation and implementation by simplifying process engineering, streamlining the Six Sigma methodology, and eliminating barriers to achieving Six Sigma.

Benefits of BizFlow for E-government Initiatives

The unique capabilities of BizFlow yield benefits for government agencies that want to deploy business process management at the agency level, across agencies, or between the agency and outside parties.

Leverage Existing Systems. Resources are limited, and e-government mandates are clear on the need to leverage the millions spent on existing infrastructures and legacy systems. BizFlow allows government agencies to leverage these investments to support citizen-centered e-government. BizFlow adaptors connect business processes directly to existing enterprise applications, legacy databases, and other existing IT systems so they can support the business processes built and managed with BizFlow.

Improve Efficiency. It has been estimated that 90 percent of the time it takes to complete a typical business process is dead time — time waiting for a form to move from one desk to the next, time waiting for a manager’s approval, time waiting for a form with a problem to get routed back to the right person and fixed. BizFlow extracts dead time from the process by automatically routing work, alerting participants when they receive the next work item, alerting them that they need to take an action, and by automatically accessing the databases and applications needed in order to complete a task. And BizFlow offers ad-hoc routing of work to give workers flexibility in handling tasks, and exception-handling to ensure that work continues even when a problem transaction arises.

Improve Quality. BizFlow’s intelligent electronic forms enforce data-entry rules and pre-populate data from various systems to reduce errors and re-keying. Also, BizFlow delivers visibility and

reporting straight to the desktops of decision makers so they can gain rapid insight into where processes are working and where they need improving. In formal quality initiatives such as Six Sigma, BizFlow gives detailed monitoring and control of activities such as deadlines, audit trails, escalation, and exceptions.

Increase Citizen and Partner Satisfaction.

BizFlow makes it easier for businesses, other governments, and citizens to work with a government agency, and easier for employees and managers to work *for* an agency. With BizFlow, there are fewer errors in transactions, faster responses to G2G, G2B, and G2C transactions with straight-through processing, back-end systems that support the process at each step, monitoring and archived processes that allow personnel to track the status of a transaction in an instant, and exception-handling that keeps processes moving. And BizFlow improves satisfaction among process participants with easy-to-use interfaces that users can customize for their needs, guidance through work items so that internal and external participants aren't guessing at what they're supposed to do.

Lower Operating Costs. A primary concern among government agencies about BPM is, "What's the ROI? Can I be sure this investment will pay for itself as well as yield measurable financial benefits for my agency and the taxpayers that support it?" BizFlow can reduce operating costs by easily automating processes that reduce the cost of creating and managing paper documents and forms. BizFlow also enables agencies to utilize their existing headcount more efficiently, so they don't need to hire more personnel as work expands, and they can re-assign current personnel to other tasks.

Lower IT Costs. One of the most powerful advantages of BizFlow is that it enables non-technical personnel such as MPAs, Six Sigma black belts, and process experts to model, maintain, and monitor business processes without drawing on IT resources for coding and programming. But when IT staff does need to get involved, BizFlow lets them make modifications to the existing environment a lot more easily. For example, BizFlow's out-of-the-box adaptors lets IT integrate their enterprise applications, document management systems, databases, and other legacy systems without a huge expense. And by supporting the most common operating systems and development environments, BizFlow reduces the cost of training and maintenance.

"Government will save taxpayers a significant amount of money, while adding value to citizens' experience with government and better serving their needs."

*E-Government Strategy – Simplified
Delivery of Services to Citizens,
February 7, 2002*

Conclusion

From serving the individual citizen to participating in the global economy, HandySoft's BizFlow Government Solutions can make every process more efficient.

Government business and IT executives are discovering that BPM offers the promise of improved performance, greater efficiency, lower costs, and greater competitiveness. Because, unlike workflow and EAI solutions, today's BPM solutions are *business*-centric, supporting the needs of the government agency in achieving organizational goals rather than hindering the achievement of goals due to limitations of the technology.

"Business process management is itself a process that ensures continued improvement in an organization's performance," observes BPM expert Roger Burlton, but "as with any process, business process management requires leadership and guidance."¹⁰

For successful results, BPM requires the commitment of government executives whose vision for process excellence is matched by a willingness to take on that leadership role; fortunately for them, feature-rich BPM solutions such as BizFlow make that effort more rewarding for program managers and IT decision-makers alike.

"Business process management is itself a process that ensures continued improvement in an organization's performance."

Roger T. Burlton

Government agencies that embrace business process management solutions face unprecedented opportunities to achieve higher levels of efficiency, build collaborative processes, and share mission-critical information in real time. They gain control and proactively drive internal and external processes, and are able to respond rapidly to government mandates and public needs. BizFlow Solutions for E-government provide a unified environment to manage the flow of critical information among government business systems and beyond agency boundaries to other agencies, business partners, and citizens.

Notes

- ¹ Office of Management and Budget, *About e-Gov – Background*, http://www.whitehouse.gov/omb/egov/about_backgrnd.htm, accessed 03/24/03.
- ² U.S. Congress. House. Committee on Government Reform, Subcommittee on Technology, Information Policy, Intergovernmental Relations, and the Census. Testimony by Mark A. Forman, Associate Director for E-government and Information Technology, *Administration's Views on E-Government*, 13 March 2003. <http://www.whitehouse.gov/omb/legislative/testimony/forman031303.html>, accessed 04/09/03.
- ³ President George W. Bush, Presidential Memo on the Importance of E-Government, July 2002, <http://www.whitehouse.gov/news/releases/2002/07/20020710-6.html>, accessed 04/01/03.
- ⁴ Federal CIO Council, FEA Working Group, Architecture & Infrastructure Committee, *E-Gov Enterprise Architecture Guidance*, July 25, 2002.
- ⁵ Dibya Sarkar, “Study delves into info sharing,” *Federal Computer Week*, March 11, 2003
- ⁶ U.S. Congress, *Administration's Views on E-Government*
- ⁷ Neal Bonner, “Business process management can boost e-gov,” *Government Computer News*, October 8, 2001 [emphasis added]
- ⁸ The Defense Logistics Agency, *Joint Electronic Commerce Program Office Renamed*, DLA 01-23, June 14, 2001
- ⁹ Cathleen Moore, “Portal players forge processes,” *InfoWorld*, November 22, 2002
- ¹⁰ Roger T Burlton, *Business Process Management: Profiting from Process* (Indianapolis: SAMS Publishing, 2001), 73.

About HandySoft

Founded in 1992, HandySoft Corp. is an international provider of software solutions for managing people, processes, and technology in support of achieving agency initiatives for efficiency and service. There are more than 350 customer installations of HandySoft solutions worldwide, including the U.S. Department of Transportation (DOT), the U.S. Department of Justice (DOJ), the Internal Revenue Service, the State of Illinois, Santa Cruz (Calif.) County, and others.

HandySoft is the developer of BizFlow, the award-winning platform for business process management, automated workflow, and collaboration enablement. BizFlow offers complete capabilities for developing and managing automated business processes, including tools for designing processes, creating intelligent e-forms, presenting and accessing work, and administering the platform itself. You can quickly integrate your existing IT systems with BizFlow, and BizFlow is also easily extensible among departments, across an agency, and to constituents and partners thanks to Web Services and web-based standards such as LDAP.



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