**Defense Procurement
and Acquisition Policy**

Single Face to Industry Whitepaper:
Overall Findings Report

April 5, 2010

Executive Summary

Over the years, industry partners and the government itself have been required to use multiple systems for the same purpose. This type of decentralized approach to e-commerce has led to numerous inefficiencies for both government and industry partners. As a viable solution to address these growing concerns, the concept of a Single Face to Industry (SFI) has evolved over the years.

An SFI initiative recommends the use of a single central entry point system for the interchange of vendor and intergovernmental transactions. These SFI modeled systems establish a common set of requirements specifications for performing a particular functionality and eliminate the need for the various Federal Civilian and Department of Defense (DoD) agencies to implement different solutions for the same business purpose. As a result, the federal government has realized that an SFI approach for many processes is of mutual benefit to all interested parties and inter-related systems and facilitates the act of doing business with the federal government.

The E-Government Act of 2002 and Federal Acquisition Regulation (FAR) Subpart 4.5 serve as directive to promote future SFI efforts to ensure that internet-based government services relevant to a given citizen activity are made available through a single point and integrated according to common functionality, rather than separated according to boundaries of agency jurisdiction.

Most recently, in a congressional testimony on September 29, 2009, the Federal Chief Information Officer, Administrator for Electronic Government and Information Technology, Vivek Kundra continued to highlight efforts to promote the SFI approach within the acquisition community. In his testimony, Kundra mentioned that the *"…Federal acquisition process is complex and involves many stakeholders with different needs. Through various focused efforts over the last decade, the acquisition community has led policy and system changes to centralize and standardize information collection and reporting."*

Approach

This document presents the results of a study conducted by the Defense Procurement & Acquisition Policy (DPAP) office to review various federal government and DoD-specific SFI initiative systems to assess the key benefits that both industry and government derive from use of these systems. The systems reviewed for the purpose of the study included the Commercial Asset Visibility (CAV) Application, Central Contractor Registration (CCR), Federal Business Opportunities (FedBizOpps), Item Unique Identifier (IUID) Registry, Electronic Document Access (EDA), MyInvoice, and the Wide Area Work Flow (WAWF). It should also be noted that all of these systems play a key role in supporting the acquisition function.

A total of 23 small, medium, and large DoD industry partners with varying product and service offerings voluntarily participated in the study. These companies provided candid feedback on their day to day interactions with some or all of the government systems mentioned above. In addition, feedback was also requested from the Defense Contract Management Agency (DCMA) and the Defense Finance and Accounting Service (DFAS), in relation to the DoD specific SFI system, WAWF. Support for the project, including this analysis, was provided by IBM Global Business Services (IBM).

Industry feedback on all seven surveyed systems was requested to see how industry responds to each of these unique systems, which serve a different purpose, yet follow the same SFI approach. In order to assess the value provided to government and industry from the use of a centralized system, one particular system, WAWF, was looked at in much greater detail than the others to determine how users would react if their current interface with this single system was changed to make them interface with multiple systems to perform the same functionality. In contrast to the SFI approach, study participants were also asked to evaluate and provide their feedback on their daily interactions with the CAV Application, a prime example of a non-SFI system approach.

Overall Findings

The results of the study indicate that the majority of study participants derive a great deal of benefit from the use of an SFI approach. An overwhelming majority of those interviewed also indicated that a very significant increase in cost and complexity would be incurred if they had to move away from an SFI approach of interfacing with one centralized system, and instead interface with multiple government systems for the same business purpose.

The 10 key benefits that industry derives from an SFI approach are highlighted in the table below and will be reviewed in greater detail in the remainder of this study.

Summary of Industry Derived Benefits from an SFI Approach	
Ease of Industry and Government End User Adoption	• The fewer systems there are for the same purpose, the more user expertise and talent is retained
Decrease in Operating Costs	• There are less frequent and more streamlined coding changes to the interfaces when new requirements are released • Less manpower is required to maintain requirements to one system
Decrease in Complexity	• Facilitates electronic commerce and streamlines processes • Eases the burden on businesses (both small and large) and facilitates doing business with the federal government
Established Vendor Base	• Proven history of industry SFI adoption and lessons learned • Industry has incorporated systems into their internal business processes and controls
Requirements Standardizations	• A single pre-defined set of business rules to follow for validation
Transparency Across Enterprise	• Ease of tracking and troubleshooting transactions entered through one system
Centralized Helpdesk Support	• Provides a single go-to place to obtain help for troubleshooting and resolving issues
Industry User Group Meetings	• Establishes a good working relationship with government partners when dealing with a single interface • A mutually beneficial and collaborative way for both government and industry to make improvements to one system
Security & Access Controls	• Fewer passwords to track and manage • Ensures proper security and access for industry, since the internal business controls are already in place for one system
Improved Data Integrity	• Transactions are exposed to less rejections and errors

Study participants indicated that an SFI approach to several government systems, including CCR, FedBizOpps, IUID Registry, EDA and MyInvoice provided them with the key benefits listed in the table above and facilitated doing business with the DoD and the rest of the federal government.

In comparison, industry cited the use of the CAV Application, an example of a non-SFI system approach that the government implemented, has proven to be an inefficient way of performing item reparables tracking. The CAV application requires industry to track reparables items in different instances of the same application for the Army, Air Force and Navy. Instead, industry indicated that eliminating this procedural redundancy would help them reduce reporting time, and the number of passwords they needed to manage and maintain. In turn, it would also help the government users who would only have to track government furnished property through one instance rather than several. More detailed industry feedback on the CAV application is provided later.

A major portion of this study is also dedicated to taking a closer look at one particular SFI system, WAWF. WAWF is looked at in much greater detail to evaluate whether a move away from this SFI approach would be beneficial or detrimental to industry and government. Industry survey participants provided positive feedback and were in agreement that WAWF was a complete solution and effectively serves its purpose for sending invoicing and receipt/acceptance transactions. In some instances, cost metrics were also obtained from large business industry partners, who send a large volume of transactions to show the cost and investment already made to interface with WAWF. Using the cost metrics provided and the candid industry partner feedback, it is inferred that a move away from the WAWF SFI approach would cause a huge cost burden, detriment and inefficiency for vendors. Vendors would need to change their technical infrastructure, and in some cases, increase manpower to accommodate for a decentralized approach of processing their invoice transactions to each military service component's system instead of sending their transactions to one centralized and standardized system, WAWF.

In summary, the study finds WAWF to be a strong case in support of the SFI approach and finds that the federal government could stand to benefit from continued use of this methodology. In similar instances, such as the CCR system, in which a DoD system provided value and gained widespread user adoption amongst the user base, the solution was extended to work as a solution for the entire federal government. As the WAWF solution has proven to be an effective means of sending invoicing and receiving transactions for the DoD, it could also prove to be a viable and working solution for filling the current void amongst some federal government agencies for a centralized invoicing and receipt/acceptance system.

Study Background and Purpose

Historical Background

Single Face to Industry (SFI) initiatives address the growing demand for a centralized approach to doing business with and amongst the federal government. Through the years, the Federal Civilian and Department of Defense (DoD) agencies have made several systematic policy and organizational changes to move towards an SFI methodology.

In the early 1960s, a burst of activity produced a corresponding expansion in the size and sophistication of the contracts DoD had to manage. It soon became clear that there were serious problems with the existing procurement and inspection system, which consisted of several different systems. In response to this situation, the Office of the Secretary of Defense established a knowledgeable team, as part of Project 60, to get a clear picture of DoD's contracting processes and make recommendations for changes with five objectives: improve management of contracts in the field, provide more accurate and timely support for buying activities and program managers, minimize duplication of efforts, decrease operating costs and minimize government controls over industry. Through its' research, Project 60 found that there would be significant savings in consolidating the government infrastructure to decrease operating costs and minimize the duplication of efforts. It estimated that consolidating contract management services into 13 districts would save the DoD approximately $11 million a year. As a result, Project 60 proposed the consolidation of nearly all contract administration services under a new Defense Contract Management Agency (DCMA). Today, the cost savings from this consolidation are projected to be hundreds of millions of dollars. DCMA became one of the first DoD organizations to be modeled after an SFI approach as its major objectives were to: present one face to industry and promote uniform policies.

In 1998, the Under Secretary of Defense issued a memorandum creating the Single Process Initiative (SPI). The purpose of the Single Process Initiative (SPI) is to remove highly-tailored or customer-unique requirements from DoD contracts and adopt instead, a single process proposed by the contractor. Since government agencies each have their own unique set of requirements, a contractor can have several very similar systems or processes set up to accommodate each Agency. It was found that maintaining many similar set-ups required for doing business with the government is inefficient and costly to both the contractor and to the government. The replacement of multiple government-unique management and manufacturing processes with common, facility-wide processes that adopt best practices drawn from both commercial and government experience serves as an example of an SFI approach implemented to reform the acquisition process.

The E-Government Act of 2002 and Federal Acquisition Regulation (FAR) Subpart 4.5 serve as directive to promote future SFI efforts to ensure that internet-based government services relevant to a given citizen activity are made available through a single point and integrated according to common functionality, rather than separated according to boundaries of agency jurisdiction. As a result of the E-Government Act of 2002, the Integrated Acquisition Environment (IAE) initiative was created to support electronic procurement initiatives. The IAE mission follows an SFI methodology, as its key goals include: creating a simpler, common, integrated business process for buyers and sellers that promotes competition, transparency, integrity, increasing data sharing to enable better decisions in procurement, logistics, payment and performance assessment, and taking a unified approach to obtaining modern tools to leverage investment costs for business related processes.

One of the more recent SFI initiatives is the establishment of the Common Supplier Engagement (CSE) in 2004. The CSE serves as a recognized business enterprise priority in DoD's business enterprise architecture (BEA) and its' primary objective is to simplify and standardize the methods that DoD uses to interact with commercial and government suppliers in the acquisition of catalog, stock, as well as made-to-order and engineer-to-order goods and services. The CSE achieves this overarching goal by streamlining and reducing complexities of the process touch points between DoD and suppliers and adopting standard business processes, rules, data, and interoperable systems across DoD to ensure reliable and accurate delivery of acceptable goods and services. In an effort to provide visibility on the

initiative's improvements, the Department has reported to Congress semi-annually on progress made towards goals in this arena, including on federal and DoD-wide systems that support the mission.

Purpose

This document presents the results of a study conducted by the Defense Procurement & Acquisition Policy (DPAP) office to review various federal government and DoD specific SFI systems to assess the key benefits to both industry and government. The systems reviewed in the study included the Commercial Asset Visibility (CAV) Application, Central Contractor Registration (CCR), Federal Business Opportunity (FedBizOpps), Item Unique Identifier (IUID) Registry, Electronic Document Access (EDA), MyInvoice, and the Wide Area Work Flow (WAWF). It should also be noted that all of these systems play a key role in supporting the acquisition function.

Methodology

DPAP conducted a study by interviewing a wide variety of industry partners that frequently use one or more SFI systems that are of interest. A basic study questionnaire was developed and used to facilitate obtaining general industry participant background information, such as company size and revenue. The questionnaire also helped obtain industry feedback on the potential impact of interfacing with a single system verses multiple systems for the same purpose, and also requested general feedback on end user experience with the SFI system. The questionnaire served as a dialogue guide, but the interview discussions were also open-ended, so that vendors could provide additional insight. Additional research was conducted outside of the interviews to obtain relevant material and statistics in relation to some of the systems and best practices in the Federal Civilian and DoD environments. In some cases, participants provided supplemental material, as well.

A total of 23 small, medium, and large DoD industry partners with varying product and service offerings participated in the study. These companies provided candid feedback on their day to day interactions with some or all of the government systems (some FAR and Defense FAR Supplement (DFARS) mandated) mentioned above that also serve as a single entry point to perform a particular electronic commerce functionality, such as vendor registration. In an effort to keep the identity of the industry study participants anonymous, the feedback presented in this document will not make any associations to company names. In addition, feedback was also requested from the Defense Contract Management Agency (DCMA) and the Defense Finance and Accounting Service (DFAS), in relation to the DoD specific SFI system, WAWF. Support for the project, including this analysis, was provided by IBM Global Business Services (IBM).

Industry feedback on all seven surveyed systems was requested to see how industry responds to each of these unique systems, which serve a different purpose, yet follow the same SFI approach. In order to assess the value provided to government and industry from the use of a centralized system, one particular system, WAWF, was looked at in much greater detail than the others to determine how users would react if their current interface with this centralized system was changed to mandate that they interface with multiple systems to perform invoicing and shipping/receiving transactions. The feedback obtained from forcing industry to conform to a different approach than what they are currently using helps to show the benefits and progress industry has made from adopting the WAWF SFI approach. In addition, metrics showing the current benefits from use of WAWF were also obtained to show the cost industry would incur if they moved away from a SFI approach. In contrast to the current SFI approach that WAWF provides, study participants were also asked to evaluate and provide their feedback on their daily interactions with the CAV Application, a prime example of a non-SFI system approach.

The SFI Offering: Key Benefits to Industry and Government

The following section summarizes the consolidated feedback obtained from interviewing 23 DoD industry partners. It is organized by the key elements that study participants highlighted were of benefit and a successful end result of adopting a SFI approach. In some cases, interviewed industry partners also identified reasons why an alternative to a SFI approach would not be beneficial. Additional participant-

unique insights and background information is also provided later in the WAWF-specific section of this study.

Ease of Industry and Government End User Adoption

All interviewed industry participants stressed that having one system to work with to perform a particular e-commerce functionality has helped them become more knowledgeable on the supported business process and system and ensured that solid expertise exists amongst their internal user base. In turn, industry partners have been more easily able to adopt government-mandated systems that use a more centralized approach to facilitating data transmission. Most interviewees expressed that thoroughly understanding how to work with a government system requires years of experience and has often times evolved through a 'trial and error' process. In addition to learning through hands-on system usage, interacting with each government mandated system also requires hours of online or classroom training to know how to use a system's full capabilities. The required training time and costs are considered necessary to do business with the federal government; however, several interviewees expressed a concern that if they were forced to interface with multiple systems to carry out the same e-commerce functionality that the initial training requirements of the many systems would make doing business with the federal government cost prohibitive. Furthermore, industry participants made it very clear that the more systems there are to work with, the greater the learning curve to master the functionality and look and feel of the user interface of the various systems. The likelihood that more systems could come into play poses a huge risk to industry, since normal staff attrition would make it hard for those leaving and those staying to properly do a knowledge transfer when so many systems are involved. If there is a move away from an SFI approach, industry partners highlighted a concern that there would be a huge risk of losing subject matter expertise on the systems and lessons learned over the years from using one centralized system.

Similarly, industry also expressed that centralized system approaches greatly enhance government-wide user adoption, as well. On top of existing duties and responsibilities, government system users also have an enormous burden to learn how to use the same systems that have built-in capabilities for both government and industry users. Often times, the government users serve in the role of both receiver and acceptor of industry transactions and play a very critical role in the business process. As a result, these government users are required to take mandatory training in the form of online and classroom training, in order to know how to use the systems proficiently. These basic system training requirements can often times be challenging for government users when a multitude of systems exists. Industry partners felt the need to express on behalf of the government that the challenge of maintaining government user system expertise would only increase if government users were also expected to know how to use multiple systems for the same business purpose. Industry mentioned that the end result of having multiple systems for the same purpose would translate to an overall loss of efficiency and poor system knowledge amongst the government user base, as well.

The following are direct quotes from industry interviewees that show their concerns:
- Mid-size business quote: "*We spend a lot of time on training, and yet we are finding that the government users themselves are not trained to use the systems that they are mandating that we use. We are having to learn their side of using the same system and train them to keep transaction processing moving. This will be a huge burden on us and the government, if we go away from a single face to industry approach.*"
- Large business quote: *"As you go to multiple points you have less talent, less expertise. We've already built up a lot of experts when we're just working with one system. If we move away, the productivity can go down, response times will go down."*

Decrease in Operating Costs

Many industry partners have absorbed the cost of doing business with the federal government and taken the time and effort to set up the technical infrastructure and necessary manpower required to facilitate sending e-commerce transactions. Industry partners who send a large volume of transactions to a system have made even larger investments in the area of technical infrastructure to both front and back systems to automate data transmission and reduce the burden on their internal staff. Many study participants mentioned that they incurred high initial startup costs to set up their technical infrastructure, but this up front investment has resulted in much smaller maintenance costs, reduced the need for staffing additional personnel, and contributed to overall efficiency. In addition, upfront industry cost investments has

translated to a reduction in overhead rates that are passed back to the federal government because less manual labor is required of the vendor due to improved internal infrastructures.

Several of the interviewees who made the initial investment to adopt the use of a technical interface to automate data transmission expressed that moving away from currently interfacing with one system to multiple would place a huge burden on industry, in terms of changing their existing technical infrastructure to allow for more connections to different systems or rethinking their data transmission approach. They expressed a significant amount of unease at the thought of moving away from a proven and working SFI approach that focuses on efficiency for both industry and government alike.

Some industry partners cited examples in the current SFI approach where changes to a government system required coding changes to the existing interface, so that their internal Enterprise Resource Planning (ERP) systems could continue to exchange data with the one government system. Industry system representatives expressed that although these changes were fairly coordinated, they still required a great deal of time and effort to make the necessary changes. It can be inferred from this that a move to multiple systems would only increase the burden to keep up with the individual system interface code requirement changes and the time required to develop and deploy new code. In a worst case scenario, if the cost to move and maintain interactions with multiple government systems becomes prohibitive, industry partners may be forced to stop the use of existing technical interface capabilities altogether and send transactions manually. This move would likely increase the likelihood of errors, cause numerous delays in processing, and in turn have an indirect effect on the warfighter's cause. Other interview participants expressed that if they were forced to move to a more manual method of sending data transactions to multiple systems, this type of move would only increase the burden on internal manpower resources when many businesses are trying to focus on downsizing in an effort to cut costs.

The following are direct quotes from industry interviewees that show their concerns:
- Mid-size business quote: *"If we go away from a centralized approach, somewhere there has to be an additional cost incurred. Would we go manual instead of electronic? Would we require more staff? It would mean more time to get a transaction out. Our IT staff would have to build interfaces to more systems, which means that other internal projects won't happen."*
- Large business quote: *"If every branch in the military had their own system that the government is going to force us to interface with, it would be an astronomical cost to us. All the coding changes to interface to more than one system would be a huge undertaking for us.*

Decrease in Complexity

Small, medium and large industry partners agree that keeping with a SFI approach has provided a decrease in overall complexity, in terms of less oversight, technology, and data requirements. In maintaining communication with one centralized system, industry can easily comply with FAR and DFARS mandates to use a particular system for a business purpose. In turn, the requirement to use a centralized system for a business purpose enables widespread adoption of e-commerce and streamlines processes for both industry and government. In a government effort to encourage greater participation and enhance the final source selection process when awarding contracts, a decrease in complexity is a welcome change to small businesses that would otherwise not be able to do business with the federal government because of growing concerns over cost and complexity. A more simplified and streamlined SFI approach helps both small and large businesses to continue providing best of breed goods and services to the government quickly and ensures healthy competition in the market place.

The following is a direct quote from an industry interviewee that shows their concern:
- Small business quote – *"In the past six months there has been a proliferation of government systems. I have to enter all my data into a new system. For example, CCR is not good enough anymore. For a GSA solicitation, I need to go to their system and not just go to CCR. The purpose of the Paperwork Reduction Act was to reduce the burden on small business. It seems the focus on this is lost now. There should be one system – CCR. There should be one invoicing system – WAWF. All these new systems should not exist. We on the industry side can't be expected to learn all these new systems. It's a nightmare to do business with government because of the proliferation of so many systems..."*

Established Vendor Base

In time, the use of a SFI approach helps to increase industry system adoption, as expertise and lessons learned are used to enhance the users' overall system experience. Industry partners maintained that having one place to go when doing business with the federal government has helped them to do their jobs efficiently and to eventually incorporate the system requirements into their own internal business processes and controls. Many industry partners mentioned that a 'tried and true' SFI system that deals with more transaction volume and levels of complexity will eventually have very few issues and have a more widespread industry following. As a result, a proven and standardized method of doing business with the federal government has helped vendors to eliminate procedural inefficiencies related to sending data transactions, reduce the need for staff, and focus on making business improvements in other key areas of importance.

Requirements Standardizations

The use of a centralized system helps ensure that the data requirements for sending e-commerce transactions are consistent and strictly enforced. FAR and DFARS compliance is more easily maintained when a single system is responsible for validating that standard requirements are met while sending transactions. Industry partners mentioned that their internal processes and systems, some using a manual feed and others an automated feed, have come to know exactly what data is needed to send for a successful data transaction. As a result, the SFI approach helps reduce data transmission errors because of requirements standardizations. In turn, once the data is received by the government owned SFI system, it is able to parse the information, and if necessary, send it to the appropriate back end receiving system. This type of inherent and intelligent system logic helps ensure that communication between two entities is properly integrated. It also helps reduce processing delays and end user frustration because there is only one requirements standard and procedure to follow.

The following is a direct quote from an industry interviewee that shows their concern:

- Mid-size business quote*: "We would have to train our folks to know all these systems that have different requirements and we would lose all the standardization benefits that come from use of one system. Each new system will have its own unique requirement. The end result is that we will need to know on a case by case basis what information to send to each individual system. The net effect is that we lose all the standardization that we have gained so far. "*

Transparency across Enterprise

Adopting a SFI approach allows for greater transparency across the enterprise for both industry partners and the federal government. Several industry partners cited the transformation that has come about from moving to the current paperless state that is facilitated by SFI systems that enable e-commerce. Industry partners who have a long standing relationship in working with the federal government spoke of times when paper transactions would get lost in the mail en route to a customer and not knowing what the status of a document was at any given point in time. They mentioned that lack of transaction status also affected government customers, as well. In working with SFI systems, industry partners feel like they have more control and visibility into the status of their transactions. SFI systems help them to accurately report and view the real-time status of transactions and records, such as vendor registration, shipping and receiving transactions, contract awards etc. In addition, having a 'start to finish' view of transactions helps industry partners to complete internal audits and provide metrics for reporting purposes.

Centralized Helpdesk Support

Centralized helpdesk support is a key benefit derived from working with a SFI approach. Industry partners mentioned that their jobs are made easy when they can go to one place to get help on troubleshooting their transaction errors. A large number of industry partners mentioned that users would not know where to go, if they were forced to interface with multiple systems for the same business purpose. They mentioned that having a centralized helpdesk for a single system eliminates the need for the federal government to set up numerous helpdesks for the same purpose and helps reduce time delays in troubleshooting and end user frustration.

The following is a direct quote from an industry interviewee that shows their concern:

- Large business quote: *"We have a single entry point to the DoD. So, we have one person to call if it breaks and one person to call if there is an access issue. On the flip side, if there are multiple systems for the same purpose, we will not know where and whom to work with to troubleshoot our issues..."*

Industry User Group Meetings

Industry User Group Meetings are a successful end result of centralized systems that have a huge industry following and provide an important capability. Industry partners mentioned that they liked having a place to voice their concerns and make recommendations for changes to future system releases. If industry had to work with multiple systems for the same purpose, they would no longer be able to identify a single touch point with which to raise concerns and ensure that their complaints and recommendations were addressed. Industry User Group Meetings allow both the government and industry to have a good working relationship and come together in a collaborative environment to adopt the best practice for a system. In addition, the feedback obtained also allows the system to evolve and constantly improve.

Security and Access Controls

Security and access controls are made much easier with a SFI approach. Industry partners mentioned that their system administrators were already burdened with managing and tracking the user accounts of different internal and external systems. Some industry partners mentioned that when users leave the company, it is becoming more difficult to track and ensure that user accounts have been terminated for security reasons. These burdens would only increase if access to more systems for the same business purpose were required. In addition, most government systems require users to change their passwords every 90 days to ensure that proper identity and access controls are maintained. Industry partners voiced concerns that if there was a move to work with more systems, there would only be more password issues, such as user account lockouts. This in turn would only increase the call volume to internal system administrators and to the various help desk support centers.

The following is a direct quote from an industry interviewee that shows their concern:
- Mid-size business quote: *"Multiple systems have password and access issues that can make manageability difficult. With one government system, it links back internally to our company and we know who within our company is using the system – the internal controls are already in place to ensure proper security and access."*

Improved Data Integrity

Industry partners mentioned that a move away from a SFI approach would mean different requirements and in turn expose them to more error by having to add more customized detail, as it relates to each new system. Individuals participating in this study were content that a high level of data integrity is maintained with an SFI approach because they are aware of the system requirements for data transactions and know exactly what to send to meet those system validations for successfully transmitting data. The end result is a reduction in processing errors, end user frustration and time delays. In addition, the SFI benefit of having more accurate and complete data transmissions is a huge advantage to the government, in terms of downstream processing and eventual reporting.

Proof of Concept: Single Face to Industry (SFI) Approach

This section provides detailed information on the key single face to industry (SFI) systems that are of interest in this study and presents the feedback obtained from interviews with various industry partners on their use of one or more SFI systems. The first system, the CAVS application is presented as an example of a non-SFI approach that was implemented for industry and government use by the DoD. Industry feedback was obtained to seek the pros and cons of industry users' experience with CAVS. In direct contrast, the CCR system, FedBizOpps, IUID Registry, EDA and MyInvoice are looked at as prime examples of SFI systems.

Commercial Asset Visibility (CAV) Application

System Overview

The Commercial Asset Visibility (CAV) application is a web-based system that provides an automated method of tracking Government owned reparable assets as they flow through the repair cycle at each contractor's repair facility. The main purpose of CAV is to provide an inventory management system for repairable assets while they are at commercial repair vendor's sites. However, CAV also provides the U.S. Army, Air Force, and Navy Item Managers (IMs) with visibility of their reparable items throughout the various stages of the repair cycle, and provides the various branches of the DoD with the current status of the assets being repaired. CAV has been designed to support a wide range of transaction reporting to achieve timely resolutions of financial or inventory imbalances, and to provide specific asset tracking and accountability while material is at a commercial repair facility. CAV also provides the means to track material in transit to and from each contractor's facility and allows daily transaction reporting while minimizing workload impacts on contractor personnel. IMs, who are directly responsible for maintaining adequate reparable stock levels, depend on timely and accurate CAV reporting information. The data entry that the contractor provides allows the IM to make sound decisions regarding the induction of assets for repair, purchase new assets, or reallocate reparables to satisfy priorities. Contractors must report transactions accurately and promptly for CAV to be effective.

Program History

The CAV application is the first system of its kind that the government implemented to meet the growing demand for tracking reparable assets.

Industry Partner Feedback

Interviewed industry partners cited the following feedback from use of the CAV application:

- Three different web instances of the CAV (Army, Airforce, Navy) application make it difficult for industry to perform reporting on reparables. Reporting to different instances creates a duplication of effort and means industry is spending most of the time updating databases, as opposed to repairing and moving parts.
- Each military instance of the CAV application requires industry users to sign in with a DODAAC and password. Each DODAAC requires a separate password. This translates to numerous DODAAC and password combinations for industry to track and maintain.
- Only a small population of the government user base knows how to use CAV and multiple instances makes it difficult for them to track items.
- Most companies already have internal reparables tracking tools and only use the CAV application to meet the government contract requirements; however, in many instances, the government is not checking the CAV application and instead will call on the company for status updates on reparables.

Interviewed industry partners cited the following recommendations from use of CAV:

- The CAV application should follow a more SFI approach with a single instance for both industry and government to access instead of numerous instances of the same application.
- They support any initiative to move CAVS into the IUID registry for more consolidated and centralized item and reparables tracking.

Central Contractor Registration (CCR)

System Overview

Central Contractor Registration (CCR) is the primary contractor and grant recipient database for the U.S. Federal Government. CCR collects, validates, stores, and disseminates data in support of agency acquisition missions, including Federal agency contract and assistance awards.

Both current and potential federal government contractors are required to register in CCR, in order to be awarded contracts by the federal government. Registrants are required to complete a one-time registration to provide basic information relevant to procurement and financial transactions. Registrants must update or renew their registration at least once per year to maintain an active status. In addition, entities (private non-profits, educational organizations, state and regional agencies, etc.) that apply for assistance awards from the federal government through Grants.gov must now register with CCR, as well. However, registration in no way guarantees that a contract or assistance award will be awarded.

CCR validates the registrant information and electronically shares the data with the federal agencies' finance offices to facilitate paperless payments through electronic funds transfer (EFT). Additionally, CCR shares the data with federal government procurement and electronic business systems.

Program History

In 1997, CCR use was made mandatory in DoD, in order to support the electronic centralized collection of EFT data from vendors in support of the Debt Collection Improvement Act of 1996. Prior to use of CCR, potential vendors mailed forms called the Standard Form 129, *Solicitation Mailing List Application,* to individual contracting offices to tell agencies about their capabilities and express interest in doing business with them. Agencies used this information to conduct market research. For example, if an agency needed graphics services, the contract specialist would manually review the forms received by the office.

In 2003, the FAR was modified to support the expansion of CCR to support the entire federal government's procurement community. This allowed federal agencies to also remove the SF129 requirement, as well as the requirement for vendors to mail individual electronic funds transfer forms to many government payment offices in order to be paid in accordance with the Debt Collection Improvement Act.

Today, every vendor who wants to contract with the federal government is required to register in CCR. It contains information on their principal industry areas, the socio-economic attributes of the company, and other information related to their ability to contract with the government. Over time, CCR has implemented several data validation routines to ensure that taxpayer identification and socio-economic data provided is validated with the Internal Revenue Service and Small Business Administration, respectively. Nearly 600,000 vendors are registered and the government uses this information to pay vendors accurately and on time, to search for businesses in specific socio-economic categories or industries, and to conduct general research. Instead of separately contacting multiple government offices, potential and existing vendors can register once and their information is made available to all agencies.

Industry Partner Feedback

Interviewed industry partners and the federal government cited the following SFI benefits from use of CCR:

- Provides a single point of registration online for conducting business with the Government. Eliminates the expense associated with completing and maintaining data with hundreds of Federal procurement and finance systems.
- Eliminates the need for duplicate registration sites. Allows the vendor to only have to register once and renew their registration and do this at only one place.
- Opens up access for vendors into a variety of e-business programs and efforts across the Government that use CCR as a single source of information.
- Provides the vendors/contractors a high level of confidence that the contracting community has one stop access to their information when the contracting officer's are conducting market research.
- Gives vendors control over the data being used on their behalf.
- Provides a single standard automated shareable source of vendor/contractor data that can be integrated into an agency automated business process.
- Provides a common source for the Tax Identification Number for vendors. Reduces time and cost of tracking down and storing TIN numbers.
- Eliminates the need for each agency to pay individually for data validation sources (like Dun and Bradstreet, Inc.) on the same data. Instead of paying for redundant data, agencies are getting more improved validations.
- Eliminates the need for Procurement Systems to have a System Administrator add vendors to the database at each location. Cost reduction in not having to use a DBAs or System Administrator to maintain and update vendor data at each location.
- Creates a standard source of data for payment systems.
- Ensures that data from contracting systems matches data from payment systems. Daily updates ensure these databases stay synchronized.
- Assists in meeting the Government's long-term goal of on-line invoicing/billings, since redundant record keeping would be significantly reduced by the automated shareable data provided.
- Provides a more controlled process for payment systems to view EFT information and has saved millions of dollars from fraud by validating against CCR.
- Assists the IRS with collecting standardized and up to date information to be used in debt collection.
- Allows the SBA to eliminate their site and use CCR as a front end for SBA registrations. The Veterans Administration system (vetBiz.gov) now requires the user to be registered in CCR for any business they own and pre-populates the CCR data into the VA website.
- Pre-populates CCR data into the Online Representations and Certifications Application (ORCA).
- Provides a centralized help desk available during business hours.

Interviewed industry partners cited the following improvements could be made to CCR:

- Vendor novations process needs to change to allow for integrating the CCR registration record as it changes from the old company name to a new company name.
- Taxpayer Identification Number (TIN) matching is not real time and therefore the vendors TIN does not validate immediately. However, it should be noted that this is a recognized issue with IRS' technical capabilities. GSA is working with the IRS, in order to provide a real-time or near real-time validation capability.
- The Grants community would like additional business rule logic to meet their needs and simplify the CCR registration process, since CCR is currently more aligned to meet the needs of the acquisitions community.
- The complete CCR registration can sometimes take too long due to system validations.

Federal Business Opportunity (FedBizOpps)

System Overview

FedBizOpps (FBO) is the official listing of all federal government contracting opportunities and awards over $25,000 known as the Government Point of Entry (GPE), and is mandated by the Federal Acquisition Regulation (FAR Part 5). FedBizOpps (FBO) lists notices of proposed government procurement actions, contract awards, sales of government property, and other procurement information

over $25,000 - all updated daily. Within a period of 90 days, approximately 26,000 active federal opportunities are listed on the FedBizOpps website for vendor viewing.

As of October 1, 2001 all Federal procurement offices have been required to use FedBizOpps to announce proposed procurement actions and contract awards if they are over $25,000 and are likely to result in the award of any subcontracts. Any contractor interesting in seeking federal business opportunities is encouraged to search on the FedBizOpps website (www.fedbizopps.gov). Since all vendors have the same information available on FedBizOpps, the site ensures that vendors are kept aware of all federal business opportunities. In addition, provided that vendors meet the criteria for the federal business opportunity, they can then respond to solicitations.

Program History

When efforts to improve electronic contracting information began in the early 1990's, vendors who wanted to learn about federal contracting opportunities had to subscribe to the Commerce Business Daily, a daily print publication and very early SFI means to get information in one place. Vendors manually scoured hundreds of listings daily to identify potential opportunities and slowly communicated this information throughout their companies. There was no way to easily search for relevant opportunities, identify teaming partners, or target scarce marketing resources. This was very inefficient for vendors and the government. Every contractor had to contact the contracting officer for each opportunity they were interested in, a significant effort given the thousands of contracting offices government wide - averaging over 9,000 open on a daily basis currently. Only a synopsis of the procurement was provided, not the entire document. The contractor had to write to the contracting officer to show their intention to participate. The government spent hours assembling packages for mailing and was never sure of adequate competition until the proposals were received.

The acquisition community identified better access to Federal procurement opportunities as a critical business need. With leadership from the Office of Federal Procurement Policy (OFPP), support from the then-Procurement Executives Council, and input from industry, the Commerce Business Daily was retired in 2002 and FedBizOpps became the central, government-wide point of entry. Today, over 100,000 vendors have subscribed to FedBizOpps to receive targeted procurement opportunity announcements. About 2,000 opportunities are posted daily on FedBizOpps. In contrast to its predecessor, the FedBizOpps is a huge improvement for vendors and the federal government and helps to ensure improved access and knowledge of federal procurement opportunities.

Industry Partner Feedback

Interviewed industry partners cited the following SFI benefits from use of FedBizOpps:
- Centralized access to FedBizOpps to access all federal procurement opportunities instead of having to manually search the old CBD daily publication
- Enhanced search capabilities including fields such as classification, type of contract, date, agency, keyword, and institution previously receiving contract
- Customized daily FedBizOpps alert service
- Query track, a feature that saves your searches and allows you to download them, so you can run them again later
- A download feature that lets you select what information to download from as many announcements as desired

Interviewed industry partners cited the following improvements could be made to FedBizOpps:

- Search capabilities and more standardized data entry requirements could be enhanced to help improve information retrieval

Item Unique Identifier (IUID) Registry

System Overview

The Item Unique Identification (IUID) Registry is a centralized repository system used to distinguish one object from another, allowing the DoD to track identical items individually throughout their lifecycles. With IUID, the DoD can consistently capture the value of items it buys, control these items during their use, and combat counterfeiting of parts. IUID is a business imperative for the DoD, which has previously been without a universal method for parts identification.

The IUID Registry mission is to capture, retain and provide current and historical data regarding uniquely identified tangible items enabling net-centric data discovery, correlation and collaboration in order to facilitate effective and efficient accountability and control of DoD assets and resources in support of DoD business transformation and warfighter mission fulfillment.

Every IUID delivery includes the required data elements describing the end item and the "pedigree" of embedded items. This data is captured during the acceptance process via the Wide Area Workflow (WAWF) application, or after acceptance via direct data submission. Items marked with IUIDs accelerate the receipt and acceptance process, allowing the DoD to submit payment to its vendors in a timely fashion.

Program History

The IUID Registry is the first system of its kind that the government implemented to meet the growing demand for parts identification.

Industry Partner Feedback

Interviewed industry partners cited the following SFI benefits from use of the IUID Registry:

- Item visibility and transparency regardless of platform or "owner"
- Lower item management costs
- Provide item data necessary for top-level logistics and engineering analysis
- Accurate centralized source for property and equipment valuation and accountability
- Improved access to historical data for use during systems design and throughout the life of an item
- Better warfighter related item intelligence for operational planning
- Reduced workforce burden through increased productivity and efficiency
- Improved inventory accuracy and visibility

Interviewed industry partners cited the following improvements could be made to IUID Registry:

- Subcontractors would like to be able to efficiently update assets they maintain that were initially entered into the Registry by another prime contractor.
- A few of the data elements are unclear to first-time users (e.g., Set, Mark Value, Mark Contents, Medium Code) and could be explained further.
- Direct XML and flat file users would definitely like an automatic error-description response sent to them when their file(s) fails to reach the Registry.
- Users want to be able to perform batch corrections via XML or flat file.

Electronic Document Access (EDA)

System Overview

EDA is an on-line document repository system that supports the informational needs of the Defense Finance and Accounting Service (DFAS) and the Services/Agencies of the DoD. The primary function of EDA is to allow authorized users to access official DoD documents via a web browser. EDA combines

Internet and Web technologies with electronic document management to eliminate paper files. EDA facilitates information sharing among DoD communities and provides secure access to a single-source of official DoD documents. EDA is a reference archive that provides the user a "read-only" view of various government documents. The EDA system provides users with an efficient method for retrieving, sharing and storing documents from a centralized repository.

Program History

EDA is the first system of its kind that the DoD implemented to meet the growing demand for Defense and industry partner retrieval of official documents.

Industry Partner Feedback

Interviewed industry partners cited the following SFI benefits from use of EDA:

- Single source of information and solution that supports multiple communities
- Documents/indices are posted to EDA in a timely manner
- 24/7 electronic search and retrieval capability of documents using a variety of query capabilities
- Increased visibility of all procurement and payment actions for authorized users
- Reduced workforce burden through increased productivity and efficiency
- Improved access to historical data for use during systems design and throughout the life of an item
- Reductions in data entry/human error
- Lower postage, handling, retention, and document management costs

Interviewed industry partners cited the following improvements could be made to EDA:

- EDA contract data that is currently viewable in PDF format should be made available for export to vendor's internal systems, so that the data can be used for other purposes.
- Ensure that more data from the various contract writing systems flows to EDA, so that the WAWF data pre-population increases, and in turn helps to reduce the amount of new information entered when industry partners use WAWF. It should be noted that there are on-going efforts to increase the WAWF pre-population by improving the amount of data that EDA receives.

MyInvoice

System Overview

MyInvoice is a web-based application developed specifically for contractors/vendors and Government/Military employees to obtain invoice status. It is an interactive web-based system, accessible 24/7.

MyInvoice provides information on invoices submitted and processed against DoD contracts paid by Defense Finance and Accounting Service (DFAS). MyInvoice consolidates invoice data obtained from numerous DFAS payment systems into one central repository. Currently, there are 10 DoD entitlement systems that have automated data feeds to the MyInvoice system.

Paid invoice data can be obtained for up to 120 days after payment: except for Standard Automated Material Management System (SAMMS) and Business Systems Modernization (BSM) contracts. The information related to these two particular systems stays for only 30 days after payment.

In addition to querying data on the screen, users can download myInvoice information for further analysis.

Program History

MyInvoice is the first system of its kind that the DoD implemented to meet the growing demand for Defense and industry partner access to invoice status.

Industry Partner Feedback

Interviewed industry partners cited the following SFI benefits from use of MyInvoice:

- Single system resource for obtaining specific payment information from all of the DoD entitlement systems
- Ability to research the status of recently submitted and processed invoices
- Ability to know when payment is scheduled
- Aids reconciliation efforts by determining if something is lacking for payment processing
- Facilitates reducing rejection of invoices by DFAS and thereby reduces payment delays and improves cash flow to vendors
- Obtains information associated with an Electronic Funds Transfer (EFT) or check received
- Determines the applicable payment office/processing site
- Identifies contract number; invoices covered; interest or freight included in the payment; or tax or discount withheld
- Eliminates the need for rework and frees up valuable resources for other efforts

Interviewed industry partners cited the following improvements could be made to MyInvoice:

- MyInvoice provides basic payment status information and additional system reporting capabilities would be helpful.

WAWF: A Win-Win SFI Approach

In order to assess the value add provided to government and industry from the use of a centralized system, one particular system, WAWF, was reviewed in much greater detail to determine how users would feel if their current interface with this SFI system was changed to make them interface with multiple systems to perform invoicing and shipping/receiving transactions. The feedback obtained from forcing industry to conform to a different approach than what they are currently using helped to show whether there were tangible benefits and progress that industry and government have made from adopting a SFI approach. In addition, metrics were also obtained to show the cost industry would incur if they moved away from a SFI approach. Due to its widespread use and robustness, WAWF is also discussed as a viable solution to meet the void of a federal government-wide solution for electronic invoicing and shipping/receiving transactions.

Wide Area Work Flow (WAWF)

System Overview

Wide Area Work Flow (WAWF) is a centralized DoD-wide application designed to eliminate paper from the receipts and acceptance process of the DoD contracting lifecycle. The goal is to enable authorized Defense contractors and DoD personnel the ability to create invoices and receiving reports and access contract related documents.

In the traditional DoD business method, three documents are required to make a contract payment - the contract, the receiving report and the invoice. Each of these may arrive at the payment office separately - if they are paper. They are processed individually as they arrive. Information is then manually keyed in to the payment system. Using WAWF, electronic documents are shared, eliminating paper and redundant data entry. Data accuracy is increased and the risk of losing a document is greatly reduced.

The contract is also viewable in WAWF through a link from Electronic Document Access (EDA). The contract index values are brought across upon entry of contract number, and a limited number of CLIN data fields that are available in EDA may be retrieved and pre-populated in WAWF as vendors enter their invoices in WAWF.

Contractors have electronic options for submitting invoices and receiving documents. They can submit documents manually through the Web, using a flat file, or through standards based Electronic Data Interchange (EDI).

Program History

Prior to WAWF, the web based Web Invoicing System (WInS) was used to allow paper-based vendors to send invoices electronically. Vendors entered their invoices into templates on a DFAS-owned web server that processed and routed the invoices to the appropriate payment system.

Although initially used in conjunction with WAWF, WInS was eventually replaced by WAWF because WAWF also allows the Government to perform inspection and acceptance electronically. WInS did not offer a receiving report functionality, so WAWF eventually became the centralized solution to handle both invoicing and shipping and receiving transactions mandated by DFARS. On March 3, 2008, DFARS clause 252.232-7003 was updated to mandate that contractors utilize the WAWF system as the only acceptable system for submission and processing of payment requests. The clause now clearly states that *"…the Contractor shall submit payment requests and receiving reports using WAWF, in one of the following electronic formats that WAWF accepts: Electronic Data Interchange, Secure File Transfer Protocol, or World Wide Web input."*

Breakdown of Industry Study Participants

The table in Appendix A provides a listing of the 23 industry study participants classified as small, medium and large business. In order to show their level of involvement in relation to WAWF usage, additional monthly transaction volume estimates and method of WAWF transmission are included, as well.

In summary, a random sampling of 4 small, 6 mid, and 13 large businesses participated in the SFI study. They provided valuable feedback on the SFI systems that are of interest and were able to also provide in depth feedback on their experience using WAWF for invoicing and receipt/acceptance.

Industry Partner Feedback

WAWF supports DoD's efforts to reduce unmatched disbursements in the DoD receipt, acceptance, entitlement and payment process through data sharing and electronic processing. The benefits to DoD are global accessibility of documents, reduced need for re-keying, improved data accuracy, real-time processing, and secure transactions with audit capability. WAWF employs front-end validation edits that greatly reduce rejected transactions, increases the likelihood that invoice and receiving report data will match, and reduces cycle time for delivery of invoice data, which minimizes delays and rework in the front-end process, making it more likely that timely payment will occur. For vendors, WAWF benefits include the capability to electronically submit invoices, reduction of lost or misplaced documents, and online access to contract payment records. All of these benefits translate to improved cash flow for vendors doing business with the DoD.

The following presents the in depth feedback obtained from interviews with various industry partners on their daily use of WAWF and its SFI specific benefits. In addition, where applicable, it also incorporates WAWF metrics to substantiate their feedback.

Ease of Industry and Government End User Adoption

All interviewed industry participants stressed that having one system to work with to perform invoicing and receipt/acceptance has helped them become more knowledgeable on WAWF's full range of capabilities and ensured that solid expertise exists amongst their internal user base.

Several interviewees expressed a concern that if they were forced to interface with multiple systems to perform invoicing, instead of just using WAWF, that the initial training costs to learn the many variations of systems and the technical infrastructure costs to make these new interface connections would make doing business with the federal government cost prohibitive. Industry participants made it very clear that the more invoicing systems there are to work with, the greater the learning curve to master the functionality, new requirements and look and feel of the various user interfaces. The likelihood that more systems could come into play poses a huge risk to industry, since normal staff attrition would make it hard for those leaving and those staying to properly do a knowledge transfer when so many invoicing systems are involved. If there is a move away from an SFI approach, industry partners highlighted a concern that there would be a huge risk of losing critical subject matter expertise on WAWF and lessons learned over the years from using this centralized system.

Similarly, industry also expressed that the WAWF centralized approach greatly enhances government-wide user adoption, as well. On top of existing duties and responsibilities, government system users also have an enormous burden to learn how to use WAWF for acceptance. Industry partners felt the need to express on behalf of the government that the existing challenge of maintaining government user system expertise, as evidenced by current usage of WAWF, would only increase if government users were also expected to know how to use multiple invoicing systems. Industry feels that the government-wide user adoption of WAWF has improved greatly over the years and that any move away would be detrimental to the progress made to date.

The WAWF Helpdesk metrics show that in August 2009, a total of 17,835 tickets were received by the WAWF Enterprise Business Helpdesk managed by the Defense Information Systems Agency (DISA). The top recurring helpdesk issue was related to user accounts. Helpdesk metrics show that 6,961 helpdesk tickets (41.37% of the overall tickets cited above) related to problems involving a user's account. The second highest recurring issue was noted to be a training related issue. Helpdesk metrics show that 5,048 tickets (30% of overall tickets cited above) related to lack of user training or understanding.

Unfortunately, these types of user account and training related issues would only multiply if today's WAWF users (both industry and government) were forced to interface with multiple DoD entities for invoicing purposes. It can be inferred that if user account and training related helpdesk issues are already high with the use of one system that they would only increase if more systems were involved.

The following is a direct quote from an industry interviewee showing their concern:
- Small business quote: *"There would be a manpower increase if we have to talk to multiple systems, which is a lot of wasted time and money. You're wasting my time to make me learn these new systems. If you use these systems infrequently, it's impossible to know them well. But, it's another thing to know a centralized, one-stop system, like WAWF or CCR. Initially, you don't get how to use it and then you get to know it really well and have a familiarity. If you're going to ask us to go to 10 different places for the same purpose, then we start to lose the standardizations."*

Decrease in Operating Costs

WAWF has been a part of the DoD's drive to fulfill the promise in the August 2001 President's Management Agenda to *"…secure greater services at lower cost through electronic government (E-government), and meet the high public demand for e-government services. This administration's goal is to champion citizen-centered electronic government that will result in a major improvement in the federal government's value to the citizen."*

WAWF has significantly improved the receipt and acceptance process for DoD contractors, both small and large business alike. The 2006 Business Transformation Agency Enterprise Transition Plan cites the following two examples of small and large business that were struggling prior to using WAWF to sustain doing business with the DoD:

- The Honeycomb Company of America—a small Florida business that manufactures panels for a variety of aircrafts - began using WAWF in August 2004. Prior to that time, they experienced significant delays in payment, which led them to borrow money against the invoices due from the Government. Since adopting WAWF, the Honeycomb Company of America has experienced perfect payment from their DoD customers. This improvement has enabled them to cancel their arrangement with their lender, and saves Honeycomb Company of America over a quarter million dollars in interest payments a year.

- Similarly, Parker Hannifin Corporation—a large manufacturer of motion and control technologies—has seen great improvements in their receivables, since they began utilizing WAWF. On average, Parker is receiving payment within 10-15 days of invoice submission. Invoice rejections have been reduced and resolution of errors is now achieved in a more efficient manner. In addition, WAWF has enabled Parker to streamline their process by eliminating the need for DD250 (Material Inspection and Receiving Report) paper distribution.

In addition, industry study participants currently sending transactions using an interface or FTP mechanism mentioned that interfacing with a single system for invoicing and receiving has translated to a reduction in overall operating costs, in terms of reducing the need for manpower and technical infrastructure costs. Industry mentioned that with WAWF, they can rely on only having to make initial upfront technology investments and then only have to pay marginal maintenance costs to perform continued business with the DoD.

The following are direct quotes from industry interviewees that show their concerns:
- Mid-size business quote: *"We're using SAP and already have the programming set up and we now have less than a 3 person staff. If we had to go through new programming, new systems, then we would be forced to have to hire someone else. Because of the way we invoice directly through WAWF, it has helped us reduce our personnel. The SAP to WAWF communication has standardized our process."*
- Large business quote: *"If I was going application to application then every time the government system has requirements or code changes, I would have to make in house changes with every system. Instead, having an SFI architecture helps because only the one gateway interface needs to be changed. WAWF is a single point of entry and the GEX gateway and our internal gateway exchange can absorb all the changes with no issues…"*

Decrease in Complexity

Small, medium and large industry partners agree that WAWF's SFI approach has provided a decrease in overall complexity by facilitating e-commerce and streamlining processes. In maintaining communication with one centralized system for invoicing and receipt/acceptance, industry can easily comply with the DFARs mandate to use WAWF for invoicing and receipt/acceptance purposes.

WAWF contains the inherent logic to route invoicing transactions to the 7 entitlement systems that are associated to a total of 143 payment office Department of Defense Activity Address Codes (DoDAAC). WAWF serves as the central entry point, with standard logon/password, data requirements, and business rules, and is able to route invoicing documents to the appropriate pay office. This behind the scenes internal routing capability helps reduce the burden on industry to know which system they have to log into to send their invoices to and reduces the likelihood of errors. The table below provides a summary of the 7 different DoD entitlement systems and the number of associated payment DoDAACs that WAWF is capable of routing to.

Entitlement System	Number of Pay DoDAACS
CAPS-C	89
CAPS-W	19
EBS	1
IAPS-E	3
MOCAS	6
NAVY_ERP	14
One-Pay	11
Grand Total	143

If the WAWF SFI approach was replaced, then given a particular DoDAAC on a contract, users would first need to identify which military entity's invoicing system they needed to access and may also need to identify which of the 7 entitlement systems to transmit their invoice to. In addition, for each of the separate invoicing systems, users would need to maintain separate user IDs, manage different requirements to record the invoice, and adhere to different business and validation rules to process the invoice.

The following are direct quotes from industry interviewees that show their concerns:
- Mid-size business quote: *"In order to manually transmit transactions, our billers have to know our contracts well. Training would become more important for my billers because they have to know contracts etc. In my organization, they are learning more and more on WAWF and things have gotten easier over years for them because of WAWF – I can't imagine the cost and complexity if we move away."*
- Large business quote: *"We are manually sending transactions to WAWF now – but, if we move away and have to send to multiple systems manually, it's going to take a longer amount of time. My billers are going to have to go through contracts and try to figure out which system to send invoices to. We will have to maintain all these different passwords. If we have issues and we want to look at rejections, we will have to figure out which system you have to use. Instead, with WAWF, we can look at one system to look at historical information instead of having to go to 15 different systems. Moving away just wouldn't make any sense."*

Established Vendor Base

Since its inception in 2002, WAWF has developed a widespread following as more and more users are using the system on the government and industry side. Industry partners maintained that having one place to go when doing business with the federal government has helped them to do their jobs efficiently and to eventually incorporate the system requirements into their own internal business processes and controls. Many industry partners mentioned that WAWF deals with more transaction volume and levels of complexity and has evolved over the years to incorporate more functionality and have very little issues. As a result, a proven and standardized method of doing business with the federal government has helped vendors to eliminate procedural inefficiencies related to sending data transactions, reduce the need for staff, and focus on making business improvements in other key areas of importance.

In the table below, detailed WAWF metrics from the month of September 2009 show the total number of WAWF users to date and the number of vendors associated with sending transactions through the three types of mechanisms (EDI, FTP, or manual transmission). It should be noted that an extremely high volume of transactions and total DoD expenditure is estimated to be passed through WAWF to the

various entitlement systems. WAWF is able to efficiently handle this level of volume and complexity. In FY09, the DoD is officially reported to have made disbursements totalling $430 billion, excluding invoicing based on other acceptable electronic means (i.e. purchase cards, Powertrack etc.). Of this total expenditure amount, an estimated $296 billion was invoiced through WAWF, which means that approximately 69% of total FY09 DoD disbursements was efficiently processed through WAWF.

WAWF Industry Usage Metrics*	
Total Number of WAWF users (Gov't and Industry)	329,056
Total Number of Active Cage Codes (Vendors)	28,107
Number of Cage Codes Using EDI	553
Number of Cage Codes Using FTP	466
Number Using Only Web	27,088

* WAWF usage metrics obtained for the month of September 2009

The following is a direct quote from an industry interviewee that shows their concern:

- Large business quote: *"We had to move our shipping operation from CT (based here) to GA (shipping operation moved there because it's more economical due to lower labor rates). The primary concern focused on the high volume of DD250s that would require manual signoff and then subsequent input to the MOCAS database. The acceptance process was easier due to the online acceptance process for WAWF. This process alleviated the concerns of Government personnel who would have had to review DD250 detail and then input this manually to the finance office. In addition, we programmed our SAP system to take the acceptance information and convert this into sales information, while the invoice was also created. The latter is then automatically released in WAWF to MOCAS. Without WAWF, we would have had to get overnight delivery of hardcopy DD250s from the Georgia operation. WAWF provided the critical efficiency that enabled the transition to work. We have spent enough on SAP upgrades and the expense to replace WAWF with another system is not cost effective. WAWF was the single biggest item that helped make this critical operational move to Georgia work for us."*

Requirements Standardizations

Industry partners were quick to highlight that WAWF provides standardized requirements for transactions that all parties interested in doing business with the DoD must adhere to and in turn ensures that industry partners are compliant with DFARS regulations. The WAWF centralized approach provides a means to standardize the data received on invoices and shipping/receiving transactions, even though it is sent by different vendors. This data is eventually parsed by WAWF to be sent to the 7 different entitlement systems.

In addition, industry partners liked that an automated feed between EDA and WAWF exists, so that most of their contract information from EDA is pre-populated into WAWF to make the amount of new information entered into invoicing and shipping/receiving transactions very minimal. Several study participants mentioned that having the EDA contract information readily available reduced the burden on their billers to locate contract information manually and thereby reduced the risk of data entry errors. Many small and medium businesses send transactions to WAWF manually through the web. It has been noted that for manual entry into WAWF the contract data pre-population is not always working due to issues with the feed between the various contract writing systems and EDA. However, this issue has often times been misdiagnosed as a WAWF issue. In the near term, there are efforts to make fixes to the feed between the various contract writing systems and EDA and increase the amount of pre-populated data that flows into WAWF for manual transactions, as well.

The use of WAWF as a centralized system helps ensure that the data requirements for sending transactions are consistent and strictly enforced. It also reduces processing delays and end user frustration because there is only one requirements standard and procedure to follow.

The following are direct quotes from industry interviewees that show their concerns:

- Small business quote: *"WAWF allows us to put the contract number in and it will pre-populate data if the contract is available in EDA. Whereas, if you have to go to each of the military entities systems, you will be more prone to error because data retrieval will be more manual."*

- Mid-size business quote: "*Our cash flow/days receivable would jump dramatically, there would be training issues, and we would require more manpower and folks would need to know contracts better. We would need to train folks to know all these systems that have different requirements and we would lose all the standardizations gained from use of one system. Each new system can put it in their own unique requirement. For example, right now, the Coast Guard Finance Center says the TIN (this alone meets the prompt pay requirement) and DUNS need to be on invoice, so they rejected our invoices because their interpretation of prompt payment is different. This is an example of a burden to us because we set up our system so we just need to transmit the TINS. The end result is that we will need to know on a case by case basis what information to send to each individual system. The contracts knowledge would need to increase on our end and the overall benefits gained from standardization will be lost.*"
- Large business quote: "*The reason we went to WAWF is it acts as a single source system. If we moved away from this approach, do we have the same rules and regulations for each system? WAWF gives standardization that we must have the line items a certain way, gets the correct DoDAAC information, etc. WAWF forces vendor to think about these things and assists customer and vendor to make cash flow smart decisions. It ensures that we construct information in the same way so that apples and apples match on both sides. It forces government to inspect contracts closely and WAWF forces vendor and customer into the same standard, so that inventory, billing and payment is made much easier.*

Transparency across Enterprise

In the 2006 Business Transformation Agency Enterprise Transition Plan, WAWF is credited for *"…streamlining the whole receipt and acceptance process from weeks to days or minutes. In addition, WAWF reduces the cost associated with reconciliation through online access and full spectrum view of document status, minimizes re-keying and improves data accuracy, eliminates unmatched disbursements and makes all documentation required for payment easily accessible."*

The WAWF SFI approach allows for greater transparency across the enterprise for both industry partners and the federal government in the invoicing and receipt and acceptance process. In working with WAWF, industry partners feel like they have more control, insight and visibility into the status of their transactions and it helps them to accurately report and view the real-time status of transactions. In addition, industry feels that they can troubleshoot transaction issues because the system provides an end to end transaction status.

The following is a direct quote from an industry interviewee that shows their concern:
- Mid-size business quote: "*We use WAWF on a daily basis to research and review invoices of past due receivables. I troubleshoot and figure out how to get things turned around and paid using WAWF. WAWF has been huge in providing visibility of transactions and letting other people view the status of things…its one place…you can even view contracts and modifications because it has direct access to EDA.*"

Centralized Helpdesk Support

Industry partners mentioned that they derive a huge benefit from having a centralized WAWF Enterprise Business helpdesk to go to for help with troubleshooting issues with their transactions. A large number of industry partners mentioned that their users would not know where to go if they were forced to interface with multiple systems for the same business purpose.

A look at helpdesk statistics in the month of August 2009 helps show the potential impact and value add that industry derives from having a centralized WAWF helpdesk:

- The WAWF Enterprise Business Helpdesk received a total of 17,835 helpdesk tickets via email or phone. The WAWF Helpdesk has an average 2 day issue resolution goal for all tickets and yet it was able to achieve an overall average of 0.05 days to resolve all open tickets.

- Of the 17,835 helpdesk tickets in the month of August, a total of 51 helpdesk tickets remained open and of these some were resolved within a period of 30 days or less, and a few took more than 30 days. The high volume of helpdesk tickets submitted and the subsequent low of volume of open tickets helps to show that the WAWF Enterprise Business Helpdesk is efficiently handling all types of user issues, both easy and complex, relatively quickly.

It can be inferred that a move away from the WAWF centralized approach would only increase the overall number of tickets to various helpdesks and increase the time to troubleshoot common issues. The centralized WAWF helpdesk has been around since system inception and has handled large ticket

volumes and acquired years of experience with all types of user and system issues. This level of expertise would only be diminished, if there was a decision to move to a more decentralized approach.

The following is a direct quote from an industry interviewee that shows their concern:
- Large business quote: "*I derive an enormous benefit from talking to the WAWF helpdesk….they help my team troubleshoot a number of problems and are very responsive to us.*"

Industry User Group Meetings

Industry participants mentioned that they derived a huge benefit from the Aerospace Industry Association (AIA) sponsored WAWF e-business industry group meeting that occurs twice a year in May and November. This group was started in July 2002 and has helped shape the WAWF system design and improvements over the years. Industry partners expressed that the meeting provides them a place to go to voice their concerns and feel as though they are part of a collaborative environment, as they work together with the government to enhance the WAWF user experience. In addition, the bi-annual meeting is also a way for the government to disseminate important communication on upcoming releases and system capabilities, so that end users are aware of changes that will be implemented and directly impact them.

The following is a direct quote from an industry interviewee that shows their concern:
- Mid-size business quote: *"The WAWF Industry Group Meeting helps ensure a good working relationship with our government partners. Dealing with a single interface has made it easier and now we collaborate on improvements to the WAWF system. We look forward to the WAWF Industry Group Meeting in the Spring and Fall because it is a chance for our voice to be heard."*

Security and Access Controls

Industry partners mentioned that their system administrators were already burdened with managing and tracking the user accounts of different systems. These burdens would only increase if access to more invoicing systems outside of WAWF were required. In addition, most government systems require users to change their passwords every 90 days to ensure proper identity and access controls. Industry partners voiced concerns that if there was a move to work with more invoicing systems, there would only be more password issues, such as user account lockouts. In turn, this would only increase the call volume to internal system administrators and to the various help desk call centers.

The WAWF Helpdesk metrics show that in August 2009, a total of 17,835 tickets were received by the WAWF Enterprise Business Helpdesk managed by the Defense Information Systems Agency (DISA). The third top recurring helpdesk issue related to passwords. Helpdesk metrics show that 2,322 helpdesk tickets (13.80% of the overall tickets cited above) related to problems involving a user's password. It can be inferred that if there was a move away from WAWF to interface with multiple systems, the password issues would only rise as each user would have multiple passwords to manage and change every 90 days.

The following is a direct quote from an industry interviewee that shows their concern:
- Mid-size business quote: *"We have about 600 users across two divisions that interface with WAWF. That's 600 passwords. Now if we needed to interface with 15 different applications that would mean controlling 9,000 passwords. In addition, every 90 days you have to change your password. Users will get locked up and we will have to rely on multiple resources to solve password issues. WAWF is doing its job. It's not in the tax payer's interest to move away from a centralized approach that already works."*

Improving Data Integrity

Industry partners were clear that WAWF has reduced the amount of processing errors, in terms of both invoicing and shipping/receiving transactions. All study participants reported that transaction errors for both types of transactions were less than 2% and added that this type of low error rate was significant, since some large business companies have very high WAWF transaction volumes.

A move away from a SFI approach would mean different requirement specifications for the various systems. As a direct result, it would expose industry to more error because each new system would have unique transaction and technical interface design requirements. Individuals participating in this study were happy that a high level of data integrity is maintained with the WAWF SFI approach because they are aware of the system requirements for data transactions and know exactly what to send to meet those

system validations for successfully transmitting data. The end result is a reduction in processing errors, payment delays and end user frustration.

The following is a direct quote from an industry interviewee that shows their concern:

- Large business quote: *"If we moved away from an SFI approach using WAWF, you have to teach your own staff 100 different ways to do the same process. You have to ask yourself which system you should be using and there will be a massive amount of transactions being submitted incorrectly. We are pleased with WAWF and the ability to view invoice status, view acceptance and see who accepted or rejected, and there is even a place to go to view notes. It's relatively user friendly."*
- Large business quote: *"If we had to use different systems for the same purpose, we would be more prone to error and payment delay would significantly increase. If our biller puts the invoice into the wrong system and issues it to the wrong location, we might leave thinking everything is okay, until we get a rejection notification later. We already have to wait another 30 days (based on Prompt Payment Act) to get it reprocessed because you're reissuing the invoice to the correct location. These types of errors will only increase if we have to go to multiple systems outside of WAWF."*

WAWF Industry Approval Ratings – Study Participant Feedback

The 23 industry study participants were asked to rate a series of WAWF performance related statements, in relation to both invoicing and shipping and receiving transactions. The rating scale they were asked to use ranged from 1 (poor) to 10 (exceeds expectations).

The results are broken down in the table below by percentage of the 23 total study participants that rated their WAWF experience as exceeding expectations (scale of 8-10), average (scale of 5-7) and poor (scale of 1-4).

Industry Experience using WAWF for Invoicing	Exceeds Expectations (8-10)	Average (5-7)	Poor (1-4)
WAWF has improved our invoicing process with Defense customers	92%	4%	4%
WAWF has standardized our invoicing process with Defense customers	96%	4%	0%
WAWF has reduced invoice submission errors	83%	17%	0%
WAWF has accelerated invoice approvals	87%	13%	0%
WAWF has accelerated invoice payments	91%	9%	0%

The industry WAWF feedback for invoicing shows that there is an extremely high satisfaction among the random sampling of small, medium, and large businesses that do business with the DoD. It should be noted that in those instances where the rating was average for WAWF, the users cited that the look and feel of the system could be improved. In the one instance where a user rated their WAWF experience as poor, the user cited that the system was slow and needed to have more browser compatibility. To address some of these concerns, there are current WAWF redesign efforts to enhance the front-end look and feel of WAWF and make back-end improvements to the application design and coding that will allow for improvements in response times.

Industry Experience using WAWF for Shipping/Receiving	Exceeds Expectations (8-10)	Average (5-7)	Poor (1-4)
WAWF has streamlined our shipping document distribution with Defense customers	100%	0%	0%
WAWF has standardized our shipping process with Defense customers	94%	6%	0%
WAWF has reduced shipping submission errors	94%	6%	0%
WAWF has accelerated shipping approvals	94%	6%	0%

Only 18 of the 23 study participants use WAWF for shipping/receiving based on the nature of their business (the rest are only involved in providing services). Therefore, the percentages above reflect feedback from these 18 participants. The overall industry WAWF feedback for shipping/receiving shows that the majority of the random sampling of small, medium and large businesses that do business with the DoD feels that WAWF exceeds expectations. In the few cases where the feedback was noted as average, it should be noted that these companies mentioned that they were using WAWF's shipping/receiving capabilities for the first time, and therefore had no prior history to accurately gauge whether there was a process improvement.

WAWF – Investment and Cost to Industry

This study demonstrates that industry uses a wide variety of electronic solutions to embrace SFI capablities. Industry participants have invested a great deal of money, manpower and even restructured their own internal business processes to adapt to using a centralized approach to invoicing and receipt/acceptance using WAWF. To accurately gauge whether a move away from WAWF would be beneficial or detrimental to industry, 6 industry study participants who were able to obtain cost metrics were asked to provide estimates, where possible, to show how much money has been spent to interface with WAWF. In other cases, companies were asked to show costs to make changes to their current EDI interface to WAWF, which would be beneficial to show the impact if similar changes were needed and they were required to work with multiple DoD invoicing systems. The company cost estimates and general feedback are summarized below. Using these cost estimates, it is evident that the more the government diverges from an SFI approach, the greater costs are passed onto industry. Due to the difficulty of obtaining standardized cost metrics on prior year estimates, these company cost estimates cannot be compared against each other and yet are very useful in showing the impact to industry if there was a move away from a WAWF centralized approach.

First large business (technical infrastructure) cost estimate –
"I'm looking at our business case for WAWF and our single gateway to WAWF and the total non-recurring costs for implementation were $2.6 million. The justification for setting up a corporate-wide program office within our company was reflected in a $4.3 million savings over the period of 2002-2006. We were able to obtain these cost savings by asking each of our 25 business units what it would cost them on their own to interface with WAWF and this translates to the $4.3 million savings by using a single gateway approach instead. This also means that rather than hooking up to individual DoD agencies from each site, we were able to achieve those savings by connecting to a single DoD entity."

Second large business (technical infrastructure) cost estimate –
Implementation costs to interface with WAWF for all of our systems totals around $800,000. Our annual operational cost to support this infrastructure is approximately $70,000. We would expect implementation costs to handle new systems would be cost and time prohibitive. We are currently trying to get our smaller business units that are still using paper DD250's to interface automatically with WAWF. The cost for this smaller entity to interface with WAWF is a fixed cost of about $20,000 per business unit. There is a monthly charge for EDI use by transaction volume, as well. Notionally, if you have to implement five more systems we're talking 5 times the cost we've already incurred. So, assuming the infrastructure cost is $800,000 then multiply that by 5 and the cost to our company would be $4 million. The EDI cost would potentially stay same because transaction volume would likely stay the same.

Third large business (on-going maintenance and technical infrastructure) cost estimate –
 "We have 6 business sectors plus a common enterprise area. We were unable to obtain the exact technical startup costs, but were able to obtain ROM maintenance costs from 2 of the 6 sectors and the enterprise area.

Sector 1 - $200,000 to support the WAWF interfaces from our SAP system, train people in how to support the WAWF requirement, and manage day to day operations

Sector 2 - $75,000 to support interfaces to multiple internal MRP and billing systems

Enterprise Support - $125,000 to support shared applications to support the WAWF requirements and handle the data exchange of data between our company and the WAWF SFTP server.

Some of these sectors are currently building interface to the WAWF requirements for recently available functionality.

We estimate that taking into account what the other sectors are doing that we are easily running between $500,000 and $600,000 annually in recurring WAWF support and this is just to one DoD centralized system.

The non-recurring cost to setup these interfaces likely ran over a couple million dollars spread over 7 years."

Fourth large business (technical infrastructure) cost estimate –
"Our company has three major internal billing systems supporting $12 billion of annual DoD/prime sales that map to an internal eHub that transmits to WAWF. $750,000 is the infrastructure cost to set up one of its three major ERP systems to one external system, such as WAWF. If the cost of one of these three internal billing systems, $750,000 is multiplied by the 3 internal billing systems, $2.25 million dollars would be the total cost for our company to interface entirely with WAWF. This cost would increase exponentially if our company had to interface with multiple DoD entity systems for invoicing."

Fifth large business (application mapping code change) cost estimate –
 "We have multiple in house sources. So we have 5 individual maps. So anytime the WAWF to 5 business applications map changes, I have to change each of the 5 mappings. You can treat these internal systems, as if they are 5 different companies. Recently, WAWF changed transportation information, (simple change – just had to place a hard coded value to make the change) but it still required 15 hours per business application, which translated to 75 hours total (15 hours times 5 applications) to make the change, test it out and make sure that it worked. If I had to go to 5 different military systems for invoicing, that's 25 separate changes. With each new government application on the government side, it exponentially multiplies the level of complexity for our interface mappings. My labor rate is $100/hour. Today, with WAWF, there are two releases a year. So, if we have other businesses with varying timeframes for their release, then it gets even more expensive and confusing to coordinate and do business with the DoD."

Sixth large business (new document type) cost estimate –
 "Based on the real implementation of a new internal business application to feed data electronically to WAWF, I can estimate a cost of $3 – 4K to design each new type of WAWF document. This implementation involved one input application layout creating two different invoice types. Our internal business system created invoices that WAWF seamlessly transmits to four different DoD services (four different pay offices). Behind the scenes, WAWF currently allows me to create one standard transmission layout, and it takes care of creating the separate feeds to send to each of those four DoD services.
 Instead, if each service used its own interface, you would need to multiply the average set up cost of $3.5K by four. Each time the government released new payment rules (for example, the recent changes to progress payments), the cost to implement that would be the cost of changing one document times the number of government interfaces that accepted that document, times the number of business applications used by the vendor. It must be understood that there is a significant time and resource cost to handle that many changes with a move away from the WAWF centralized approach."

WAWF – A Potential Federal Government-Wide Solution

As a result of the March 2008 mandate that made WAWF the sole enterprise solution, DoD has significantly improved the overall receipt, acceptance, and payment process, resulting in:

- Significant cost avoidance in Prompt Payment Act (PPA) interest penalties of $105 million (sum of Q3 FY07 through Q3 FY08). By reducing the cycle time to process invoices and receiving reports, WAWF decreased the interest penalties paid to vendors when payments were not made on-time in accordance with contract terms.

- Elimination of approximately 50,000 lost documents per year
- Approximately 60% reduction in progress payment rejects
- Approximately 50-80% reduction in invoice cycle time
- Elimination of the manual entry of approximately one million documents per year
- Approximately 70% reduction in cost for DFAS Contract Pay to process invoices per year

Although WAWF sends invoicing transactions to 7 different entitlement systems, it is worth taking a closer look at the transactions WAWF sends to the MOCAS entitlement system, since these transactions account for approximately 60% of the total dollar value of all DoD annual spending. The following metrics show the interdependency between these two systems and how together they efficiently handle the processing of a significant total dollar value of DoD invoicing transactions:

- During the month of October 2009, 90,255 invoices were transmitted to MOCAS for payment. This amounted to $19.9 billion in total DoD spending, of which 98.5% was sent through WAWF to MOCAS.
- For the entire Fiscal Year 2009, 1,018,694 invoices were transmitted to MOCAS for payment. This amounted to $228.8 billion in total DoD spending, of which 97.7% was sent through WAWF to MOCAS.

The business improvements highlighted above and the high volume of transactions that WAWF is able to efficiently handle further substantiate the value add that WAWF provides as a beneficial SFI solution for invoicing and receipt/acceptance. As WAWF has made a positive impact on both industry and the DoD over the years, it is also proving to be a potentially viable and working solution for filling the current void amongst some federal government agencies for a centralized invoicing and receipt/acceptance system.

A closer look in the Federal Procurement Data System (FPDS) at the 23 industry partners who participated in this SFI study reveals that in Fiscal Year 2008, most all of the industry partners did a significant amount of business with the majority of the 24 Chief Financial Officer (CFO) Act federal government agencies. The table below shows a breakdown of the extent of business conducted between the various federal government agencies and these industry partners, who also use WAWF to efficiently transmit invoicing and shipping/receiving transactions to the DoD.

Company Name*	Number of the 24 Total Federal Government Departments in Agreements With	Percent of Total Federal Government Company Does Business With	Total FY08 Actions	Approx. Total FY08 Dollar Amount against the Total Actions
SMALL BUSINESS:				
Company A	0	0%	0	$0*
Company B	1	4%	25	< $500,000
Company C	1	4%	17	$5,000,000-$20,000,000
Company D	3	13%	80	$5,000,000-$20,000,000
MID-SIZE BUSINESS:				
Company E	13	54%	665	$500,000,000-$1,000,000,000
Company F	18	75%	11,383	$1,000,000,000-$20,000,000,000
Company G	2	8%	292	$20,000,000-$100,000,000
Company H	5	21%	42	< $500,000
Company I	14	58%	527	$500,000,000-$1,000,000,000
Company J	7	29%	1,932	$500,000,000-$1,000,000,000
LARGE BUSINESS:				
Company K	18	75%	21,024	$20,000,000,000-$50,000,000,000
Company L	13	54%	5,456	$1,000,000,000-$20,000,000,000
Company M	15	63%	10,334	$1,000,000,000-$20,000,000,000
Company N	19	79%	16,460	$1,000,000,000-$20,000,000,000
Company O	23	96%	6,266	$1,000,000,000-$20,000,000,000
Company P	9	38%	7,791	$1,000,000,000-$20,000,000,000
Company Q	17	71%	8,380	$1,000,000,000-$20,000,000,000

Company R	17	71%	10,043	$1,000,000,000-$20,000,000,000
Company S	23	96%	1,276	$500,000,000-$1,000,000,00
Company T	5	21%	318	$500,000,000-$1,000,000,000
Company U	9	38%	132	$500,000,000-$1,000,000,000
Company V	8	33%	2,167	< $500,000,000
Company W	4	17%	7,149	$1,000,000,000-$20,000,000,000

The actual company names of participants in this study are undisclosed to maintain the nondisclosure agreement
Company A is a small business and has done business with the DoD in prior fiscal years.

More than half of the random sampling of SFI study industry participants performed business with 5 or more CFO Act federal government agencies and use different means to transmit their invoicing and receipt/transactions to the various federal government customers. Instead, industry and the federal government could stand to benefit from a common requirements standard and mechanism to transmit their e-commerce invoicing and receipt/acceptance data using one proven system to enable ease of tracking, reduced technical infrastructure costs, manual labor, training etc. Due to the large volume and range of business this small subset of 23 industry partners does with the federal government, it can be inferred that these study participants, along with other businesses, would greatly benefit from using WAWF as a potential enterprise solution to meet the growing need for a centralized invoicing and receipt/acceptance system for not only doing business with the DoD, but also with the entire US federal government.

To date, 3 CFO Act federal government agencies have a few users that use WAWF to facilitate sending intergovernmental transactions to the DoD. These CFO Act federal government agencies are the Department of Homeland Security (DHS), United States Department of Agriculture (USDA), and the Department of Justice (DOJ). In comparison to the high levels of DoD transaction volume, these departments show low WAWF transaction volumes, but can serve to show that given the impetus and direction to move towards an SFI federal government-wide approach for invoicing and receipt/acceptance there is room for wider agency adoption and usage of WAWF.

The table below provides a historical view of another key indicator of value, the total Prompt Payment Act (PPA) interest paid per million in DoD total spending.

Total PPA, Interest Total Interest per Million - Accounts Payable			
FY	PPAs	PPA Interest Paid	$$$/Per Million
FY01	$105,716,283,198	$36,258,945	$343
FY02	$145,491,406,245	$32,655,032	$224
FY03	$181,974,932,119	$29,160,016	$160
FY04	$205,718,165,977	$28,297,924	$138
FY05	$227,719,077,507	$31,200,571	$137
FY06	$246,769,383,736	$30,523,168	$124
FY07	$262,974,314,858	$36,857,888	$140
FY08	$305,482,471,129	$43,620,000	$143
FY09	$322,731,809,073	$40,864,357	*$127

*$127 interest/million is the combined total for manual invoices and electronic invoices sent through WAWF.
Of this combined amount, the projections below use the amount of $32.73 interest/million for invoices sent using WAWF only.

In FY01, WAWF had yet to be introduced as a receipt and acceptance system, but as it made its debut in 2002, the PPA interest paid out per million by the DoD has noticeably reduced over the years. In FY09, of the $322 billion in spending that required PPA interest be paid out, a total of $260 billion was invoiced thru WAWF and amounted to a total interest paid of approximately $8 million, or $32.73 in interest paid per million. In sharp contrast, in early FY01, where paper invoices were the norm, a much higher amount of $343 in interest was paid per million.

In order to find out the potential savings if WAWF use was extended to the entire federal government, projections were made using the data available in the table above. Since the FY01 interest of $343 per

million is a good indicator of interest collected primarily through manual invoicing, it was used to project the interest paid today, if manual methods of sending invoices were the only mechanism used today. To make the amount of FY01 interest paid more meaningful, the $343 per million was adjusted for inflation over time and represents $415 per million in interest paid today, if paper was the predominant method of transmitting invoices. The difference between the interest collected on transactions sent without WAWF in FY09 ($415 per million adjusted for inflation) and interest collected on transactions sent through WAWF ($33 per million) is $382 per million. In general, this interest amount of $382 per million represents the amount of potential interest savings per million if WAWF had been used in place of other acceptable invoicing means. This savings in interest payments is made possible primarily because WAWF is an automated system that is able to reduce the cycle time needed to process invoices and receiving reports. In FY09, the US federal government reported spending a total of $534 billion, which amounted to $369 billion in DoD agency spending and $165 billion in civilian agency spending. If the FY09 estimate of $382 in potential savings per million for WAWF only utilization is applied against FY09 civilian spending, it would amount to a significant potential interest savings of $63 million across the federal civilian agencies.

Since its inception, WAWF has helped the DoD achieve significant improvements. WAWF has the proven ability to handle large volumes of transactions and produced tangible PPA interest savings to the DoD. In turn, it has also improved the cash flow made available to its industry partners. In similar cases, such as the CCR system used for vendor registration, where a DoD solution provided enormous benefit to the DoD and its industry partners, the solution was easily extended for broader use across the US federal government. As a proven and cost effective SFI solution for the DoD and its industry partners, WAWF should also be considered a practical SFI solution worth extending across the entire US federal government.

Appendix A: Breakdown of Study Participants

The table below provides a listing of the 23 industry study participants classified as small, medium and large business. In order to show their level of involvement in relation to WAWF usage, additional monthly transaction volume estimates and method of WAWF transmission are included, as well. It can be inferred that the larger the business, the higher the transaction volume and the more money the company invests in setting up an EDI technical interface to automatically transmit data to WAWF.

Company Name*	Size of Business (Employees)	Estimated Annual Revenue	WAWF Transaction Volume	Method of Data Transmission to WAWF
SMALL BUSINESS:				
Company A	< 1,000	$500,000 - $5,000,000	< 10 / month	All keyed thru web.
Company B	< 1,000	$500,000 - $5,000,000	< 10 / month	All keyed thru web.
Company C	< 1,000	$5,000,000 - $20,000,000	< 10 / month	All keyed thru web.
Company D	< 1,000	$500,000 - $5,000,000	10-100 / month	All keyed thru web.
MID-SIZE BUSINESS:				
Company E	1,000 – 10,000	> $100,000,000	10-100 / month	All using FTP.
Company F	1,000 – 10,000	$20,000,000 - $100,000,000	> 1000 / month	Mainly EDI and few keyed manually thru web
Company G	1,000 – 10,000	> $100,000,000	100 – 1000 / month	Mainly keyed thru web.
Company H	1,000 – 10,000	> $100,000,000	100 – 1000 / month	Mainly FTP and few keyed manually thru web
Company I	10,000 – 25,000	> $100,000,000	100 – 1000 / month	All keyed thru web.
Company J	10,000 – 25,000	$500,000 - $5,000,000	> 1000 / month	Mainly FTP and few keyed manually thru web
LARGE BUSINESS:				
Company K	> 25,000	> $100,000,000	> 1000 / month	Mainly EDI and few keyed manually thru web
Company L	> 25,000	> $100,000,000	> 1000 / month	Mainly EDI and few keyed manually thru web
Company M	> 25,000	> $100,000,000	> 1000 / month	Mainly EDI and few keyed manually thru web
Company N	> 25,000	> $100,000,000	> 1000 / month	Mainly FTP

				and few keyed manually thru web
Company O	> 25,000	> $100,000,000	> 1000 / month	Mainly EDI and keyed manually thru web
Company P	> 25,000	> $100,000,000	> 1000 / month	Mainly EDI and FTP, and few keyed manually thru web.
Company Q	> 25,000	> $100,000,000	> 1000 / month	Mainly EDI and few keyed manually thru web
Company R	> 25,000	> $100,000,000	> 1000 / month	Mainly FTP and few keyed manually thru web
Company S	> 25,000	> $100,000,000	> 1000 / month	Mainly keyed thru web.
Company T	> 25,000	> $100,000,000	> 1000 / month	Mainly EDI and few keyed manually thru web
Company U	> 25,000	$20,000,000 - $100,000,000	> 1000 / month	Mainly EDI and FTP and also a few keyed manually thru web.
Company V	> 25,000	> $100,000,000	> 1000 / month	Mainly EDI and keyed manually thru web
Company W	> 25,000	> $100,000,000	> 1000 / month	Mainly EDI and few keyed manually thru web

* The actual company names of participants in this study are undisclosed to maintain the nondisclosure agreement