If we can reduce the cost of processing an invoice from more than $15 to less than $1 – imagine what we could do for your processes.

Veterans Affairs Mission Statement

The five Core Values define "who we are," our culture and how we care for Veterans, their families and other beneficiaries. The Values are Integrity, Commitment, Advocacy, Respect and Excellence ("I CARE"). The Core Characteristics define "what we stand for," and help guide how we will perform our core mission; they shape our strategy, and will influence resource allocation and other important decisions made within VA.

The Characteristics are Trustworthy, Accessible, Quality, Agile, Innovative, and Integrated.

Taming the Paper Beast at VA
How Your Chosen Capture Technology Can Propel a 21st Century VA

The Core Values and Core Characteristics of the U.S. Department of Veterans Affairs demand highly efficient and accurate business processes that can serve Veterans quickly and adjust to the resources and communication capabilities with which each Veteran is most comfortable. Document capture driven business process automation enables this level of efficiency in processing Veterans' claims, enabling VA to better service the needs of Veterans and adhere to its Core Values ("I CARE").

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This white paper describes industry best practices and processes to achieve these desired results.

Paper: The Inescapable Beast

Paper based processes have been demonized over the past two decades and rightfully so. The continued use of paper is costly on many fronts. Paper consumes what can be considered a less than sustainable natural resource, requires expensive climate controlled physical storage to maintain archival quality, must be physically

Photo by VA CTO, Peter Levin, at a VA Regional Office to demonstrate the magnitude of the paper problem.

transported in conditions similar to those required of its storage, and is subject to loss, destruction and degradation.

The pitfalls of paper have been well documented and steps have been taken over the past two decades to rectify the situation. Many organizations have undertaken massive projects to convert paper documents into digital images and have undertaken "sea change" paperless office initiatives with varying degrees of success.

These paper conversion efforts have uncovered additional pain points that have caused many organizations to reconsider the complete elimination of paper. Traditional paper conversion efforts require many manual touch points, including but not limited to:

• Document transportation to a centralized location for conversion

Why hasn't paper gone away?

For one thing, paper is universal: It's human-readable, and it requires no computer programming. More importantly, organizations don't fully control their externally facing business processes. Insisting that customers, suppliers, and partners spend the money to integrate their internal (behind the firewall) business processes with our business processes is a nonstarter: It would severely restrict the number of entities with which we (and they) could transact.

Governments, too, must make it easy for citizens of all ages (and with different levels of computer savvy) to "transact" — whether it's to renew a driver's license, pay taxes, or obtain benefits. Inside the organization, it's often not cost-effective to buy (or train employees on) new applications that could automate all of the internally facing document-intensive business processes that managing a large, distributed workforce entails. Finally, although we are slowly moving toward digital signatures, many business processes still require physical signatures and thus a paper original.

In fact, eliminating paper would only partially address the challenges around the exchange of document-based information with our customers, partners, suppliers, employees, citizens, and others with whom we need to transact. Organizations also need to process documents that arrive in electronic format — whether email, PDF, Microsoft Word, or some other format. Getting the information off paper and into a digital format is just part of the solution: **Making sense of this less structured information is the key. By "making sense," we mean extracting the information in these documents — whether paper or electronic — in a way that it can be leveraged by automated business processes.**

Automating our document-based business processes requires sophisticated technologies that can convert paper to digital format (and deal with diverse legibility issues in the paper original and in the digitized copy), recognize and classify the document (whether paper or digital) and extract critical metadata, extract and validate data from the document in a usable format, and deliver that data to the business processes that consume it.

Source: Melissa Webster, IDC, *The Case for an Enterprise Capture Platform*, December 2010.

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- Manual preparation prior to feeding documents into the conversion hardware
- Extensive process analysis to understand how the information contained on the paper is used within the organization
- Extensive process training to teach the document conversion staff the expected document types and how they fit within the organization's long term storage taxonomy
- Extensive manual keying and indexing or metadata tagging to ensure each item is usable after conversion
- Extensive quality control processes to ensure that all artifacts and metadata associated with each original paper document are correctly reflected in the converted digital record

In some instances, the cost to convert to digital media far exceeds the value of the information on the paper, but unfortunately this is not realized until well after the fact.

Another challenge to the complete elimination of paper until very recently was the lack of an effective lightweight and portable digital alternative to paper. Even some of the more forward thinking organizations that implemented complete data conversion and paperless office initiatives found themselves inundated with more paper than before, as people's preferred method of information digestion

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Wells Fargo

WELLS FARGO

Challenge: Integrate multiple acquisitions while at the same time create massive process efficiencies. .

- Over 1 billion pages processed per year
- Over 500 document types being automatically categorized and seperated
- Reduced document handling staff from 1200 FTE's to 200 FTE's by using automatic document classification technology
- Completely eliminated the need for separator sheets which alone saved $2m per year in consumables

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remained the printed page. Access to additional content only compounded the issue: Items once filed away in the storage room were now available and printable at the click of a mouse.

So, despite being considered an archaic holdover from the analog age and a transitional media in the current digital age, paper continues to remain relevant, In fact, its use has even increased in some cases due to two main factors: cost and preference.

VA's mission is unique in that it upholds a contractual obligation made to every U.S. service-person since the early 20th century. Technology has moved at a rapid pace since then, as have the related capabilities and expectations of Veterans.

The critical nature of VA's services and its duty to go "above and beyond" expectations require a tremendous amount of efficiency and flexibility in how it interacts with Veterans. VA must adapt to the unique situations and capabilities of each Veteran and work within those constraints to provide its services. One size can't fit all when it comes to communication, submission and interaction with VA.

This requirement for communication flexibility limits VA's ability to create hard and fast rules restricting the use of paper. VA must remain agile and support the Veteran who is most comfortable or able to submit information via paper. Additionally, critical pieces of information that establish identity (such as birth and marriage records) and eligibility (such as the Certificate of Release or Discharge from Active Duty– DD 214) remain paper based, with no foreseeable transition to electronic media. Medical records are currently in a state of transition to electronic formats; however, legacy records remain paper based. The reality is that VA will be required to receive and convert paper documents to digital media for the foreseeable future. Ideally, common electronic methods

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of receiving external documents will overtake paper as the preferred medium, but a requirement to handle paper will always exist, and it will always be the most expensive medium to process in terms of time and effort.

Use of Electronic Processes

Electronic data interchange resolves a number of the pain points of dealing with paper documents. Digital formats are lightweight and high quality, and since they are already in an electronic format, there is no need to convert them to a digital format and there is no risk of data degradation in the process (i.e. no OCR interpretation issues). Digital formats no longer need to retain the analog context of a physical paper page, reducing the overall data size of the transmission. However, electronic formats do present some additional challenges to a process in terms of accessibility, cost, and portability.

Web forms have become one of the standards for creating pure digital processes. In a Web form process, a Web based application is developed that allows the selection of the nature of the interaction with the end user as well as all the associated metadata that describe the who, what, where and why of the interaction. This is an effective means of data interchange in a somewhat rigid and inflexible digital environment, but it has some significant drawbacks when process agility is required.

PDF forms offer a transitional medium that has all the advantages of a pure digital format but can be easily interchanged back to an analog format when required. They are already used as part of the current paper based processes at the VA. PDF forms are portable and require no additional hardware or software lifecycle support until form revisions are required. They can also be used to capture all the metadata required to instantiate a process in a digital format while retaining all the context and human digestibility of a paper based form. In addition, PDF forms can be handled through the same process as paper forms,

U.S. Air Force

Challenge: Mailing paper documents between bases was slow, expensive and prone to loss… with limited visibility into status.

- The Air Force is running Kofax across 140 Air Force bases throughout the world.
- Accomplishes remote scanning of financial transactions such as MilPay changes and TDY Travel Vouchers, using Kofax Capture Network Server.
- Operates in accordance with the Air Force's strict security standards.
- Uses advanced network optimization technology to lessen network bandwith and provides fault tolerant batch exchange

normalizing the business rules and data sufficiency support to one environment with one skill set requirement. PDF forms also offer flexibility to transition from paper to digital, to service the appropriate skill sets of Veterans on demand.

The Solution: Capture Driven Business Process Automation

As mentioned above, the traditional process of converting paper to a digital format can be quite costly and tedious. Production level document scanners are large and expensive, so paper documents have to be sent to the scanner's location, incurring transportation costs before the process has even begun.

Today, using the concept of distributed capture, a wide array of scan-capable devices can work in unison to create one unified capture system and effectively "truncate the paper" at its source. A hybrid distributed/ centralized capture approach eliminates a large portion of the physical transportation requirements by sending converted documents over existing network resources in the 57 VA regional offices. Scanning devices can be role based and fit the task that best suits both their inherent capabilities and the case worker using them. Multi-function devices (MFDs)

can support ad hoc scanning tasks, while mid and production level scanning devices perform larger scale batch scanning tasks, thereby integrating existing assets and providing flexibility to accomplish the task at hand. At the same time; some portion of the paper can be sent to a central bulk scanning facility and indexed seamlessly. **The key here is that the capture system works the same way and has the same capabilities and document/form knowledge, regardless of the device size or location.**

All scanning processes require some degree of paper handling prior to scanning. Paper must be removed from envelopes, binders or folders, and staples and paper clips must be removed so the item can be fed into the scanning device. Traditional scanning processes also require additional effort to assure good image quality: Items must be correctly oriented and scanner settings must be adjusted to account for the colors and densities of the items to be scanned.

The manual touch points associated with image quality have been mitigated by the development of integrated image processing algorithms that can automatically orient the image, drop unnecessary blank pages and tune the contrast setting. Added benefits include the ability to create network friendly file sizes, and the ability to trap images that don't fall within established image quality thresholds and route them to a post-scan quality assurance step where they can be fixed manually. The ability to apply these algorithms to scanning devices that do not contain these capabilities at the hardware level, as

well as the ability to centrally manage device settings and device health for even an entire fleet of scanners (for example, to determine when image quality is at risk because a scanner did not receive regular preventive maintenance) can be a huge cost savings and can provide the integrity that VA's mission statement requires.

Document classification is another time consuming manual step in traditional scanning processes. Upon receipt at the physical scanning location, each paper document must be identified and sorted into the process queue in which it belongs. In many cases this step is performed in conjunction with document preparation, which adds an additional burden to an already tedious task. Significant additional training of document preparation staff might be necessary to properly recognize and organize items into their proper scan queues, and there is a high risk of inconsistent quality.

The use of an intelligent recognition (IR) tool is the capture driven answer to this manual processing pain point. An IR tool profiles a representative sample of paper documents and learns the unique characteristics of page length, format and content for each type of document. The IR tool can also learn unique characteristics of the content for a specific business process and route items to the next steps of that process. In essence, the IR tool acts as a virtual mailroom, verifying document types automatically as opposed to physically via manual paper sorting. Given the sheer number of forms and document types that VA handles — by some estimates it is in the thousands — VA must have an automated tool that can automatically categorize documents with such variety and scale.

Once an item is properly sorted in a traditional paper conversion process, metadata (indices) are assigned to identify the unique characteristics of that particular item. Today, this is done by caseworkers entering each bit of data via a keyboard. This can be automated. Metadata are key

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Caremark

CVS CAREMARK

Challenge: Existing homegrown system had limited capacity and was incapable of significant growth.

- Kofax system processes approximately 270,000 orders per month
- Solution saves Caremark 26 cents per order
- Average productivity of the staff increased from processing 33 orders per hour to 47 per hour

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items that describe the document and assist in subsequent workflow processing. The metadata tagging process, depending on format, can be tedious without the use of optical character recognition (OCR) technology. OCR used in conjunction with logical format filters and conjunctive associations finds metadata at varying degrees of confidence and presents it to validation users for confirmation.

Points of Automation

The number one goal of any capture driven business process automation project is to truncate the paper as close to the source as possible. Realistically, a goal of this magnitude for an organization the size of VA, can only be accomplished by means of incremental efficiency gains utilizing an innovative and agile toolset. The paper conversion process must start centrally and then grow to the points where paper is received throughout the organization and beyond.

As detailed above, the VA claims process is currently a paper based process in transition to a digital one. However, even as the process evolves, some artifacts will remain paper based for the foreseeable future. The ability to receive both paper and digital media is a requirement for all points of automation.

Scan-enabling the VA regional offices is the first step toward taming the paper beast at VA. In addition to providing scanning capabilities to address the known pain points in their paper based processes, VA regional offices should also provide kiosk stations with both the required PDF forms for digital claims and paper scanning capabilities for required paper artifacts. These kiosk stations can service Veterans who are technically capable as well as those who may be less technical but willing to try with some VA assistance. Upon submission, the claim will be automatically processed with the same business rules and processing path as a paper claim, but can progress directly into VBMS without validation due to the electronic nature of the form.

GMAC Commercial Mortgage

GMAC

Challenge: GMAC had 60 origination offices servicing 47,000 loans, but needed to consolidate processing at a single location.

- GMAC Commercial Mortgage processes more than 100,000 loan documents daily
- With Kofax, 90 percent of documents received are scanned the same day with less than 24-hour turnaround
- Company centrally administers remote scan locations and schedules data transfer in off-peak hours to better leverage available network bandwidth

VA should also provide email and fax capture capabilities for the same PDF forms to support Veterans who have access to and the ability to use those technologies. Fax is a method of last resort, since it produces a poor quality digitized image with low automation potential, but it is
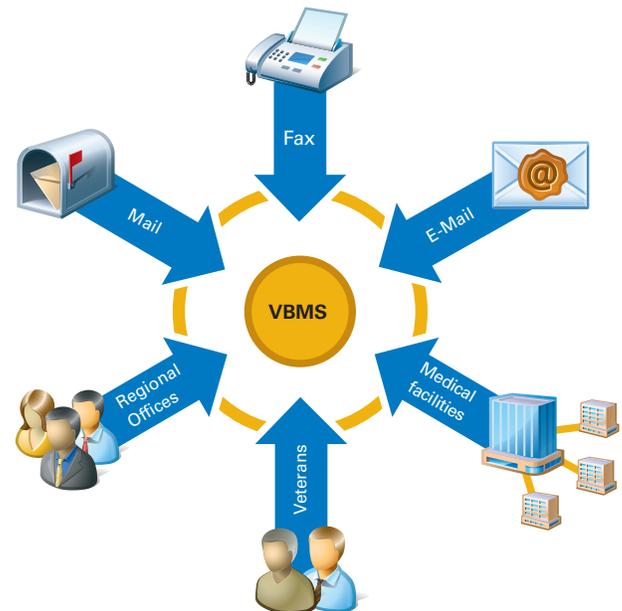
consistent with the Duty to Care values. Email has greater automation potential, since email attachments can remain digital in format and be captured through touch-less processes into VBMS. Email capture adds an additional potential customer service benefit, as email alerts can be sent in real time to notify the Veteran of their intake claim status or to request missing claim data.

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Allstate

Allstate

Challenge: Several disjointed departmental image conversion processes, using various tools and internal processes to perform similar functions of ingesting customer-submitted data and initiating relevant business processes.

Allstate created an internal shared service entity and scan center based on the Kofax platform.

- Allstate normalized its process and reduced the cost to support the capture process across the enterprise
- The solution increased process visibility and provided the ability to manage work conditions and adjust labor accordingly
- Individual claims are now tracked from the scanner to process completion, enhancing customer service and process reliability

With the recent growth of mobile devices such as smartphones, the ability to use some devices as mobile document scanners is now a reality. This essentially moves the paper truncation point even earlier, and allows the Veteran to create high quality images of the paper artifacts necessary for claims adjudication in their living room. Also, a secure web portal can utilize a mobile device or home scanning device to perform the paper conversion process, present the required PDF claim form or form packet to instantiate the claim, and inject the completed packet into the same normalized capture process used throughout VA.

Medical offices or Veterans themselves with existing paper scanning capabilities can scan paper medical records directly to a VA process using a dedicated web portal, utilizing the same classification, separation and extraction capabilities that exist in the regional offices and the bulk scanning facility. The medical offices can be external to the VA organization as a whole but can be notified via email and corresponding web portal link to scan or upload a specific record, which can then be captured

into the same process used to capture all other paper records and eventually loaded into VBMS. The same concept can be applied to other organizations in the process, such as insurance companies, hospitals, Department of Defense entities and other government agencies.

A survey in *The New England Journal of Medicine* found that 31% of every dollar spent on health care is spent on administrative costs. However, in the U.S., only about 8% of the nation's 5,000 hospitals and 17% of its 800,000 physicians currently use automated electronic patient records. Information enters organizations in a number of ways—paper, fax and electronic—so a comprehensive capture system must accommodate documents regardless of their format. When integrating documents into existing business process workflows, a scalable capture platform built on an open architecture ensures compatibility between existing hardware devices, relational databases, content management systems and related network infrastructures.

Capturing the Business Process

With a move toward an integrated enterprise approach to document processing, organizations can reap exponential benefits from their capture investments, significantly improving the efficiency of document-centric operations and reducing costs while improving process quality.

Document intensive business processes are much more efficient in an environment of front and back office symbiosis. An enterprise capture approach offers the following tangible benefits:

- Immediate cost savings
- Fewer redundancies
- More accurate information
- Fewer delays
- Less repetitive manual handling
- Higher productivity
- Better customer service

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- More secure document control
- Ability to react more quickly to inquiries
- Easier regulatory compliance
- Faster exception processing
- Faster, more reliable decision making

There are many ancillary benefits to implementing capture driven business process automation. Actionable information becomes accessible to VA as soon as it enters the organization, opening the door for collaboration opportunities. Both VA and the Veteran can take ownership of the process and contribute to the goal of efficient claims processing. The process can now be tracked from scan to export into VBMS, giving management a true window into the process and insights into where improvements can be made. All of the improvements brought about by implementing such a framework result in faster claims processing and a better overall experience for the Veteran.

A normalized capture driven process provides significant operational benefits as well. A unified process for paper and electronic document capture reduces process complexity by creating a single processing path. Capture business rules can be managed in one environment with one skillset. The paper capture process can continue to evolve and improve as new representative samples are collected over time, and the efficiency of the overall VA claims process will also improve as the point of capture shifts outward to the Veteran and the media transition from paper to digital. Reporting and process tracking information can be obtained from one source, allowing management visibility into the evolution of the process over time and the ability to react to the shift in capture methods and formats.

Conclusion

Capture driven business process automation is in alignment with many of the I CARE values and characteristics.

- Truncate paper at its source within the organization and beyond. Extend the capture of information out to the Veteran with *innovative* applications and concepts. Make certain that the information contained on the paper is of the highest *quality* and is *accessible* to VA as early as possible in the process.

- Respect the capabilities and comfort levels of the Veteran in regard to technology. Give the Veteran flexible options for data interchange and communication with VA, and ensure technology's role in VA's *advocacy* initiative.

- Start the transition from a paper based process to an *agile* and *integrated* paper-digital hybrid process. Normalize the process of capture across media to ease development and support.

- Track the process from instantiation to completion to ensure process *integrity*. Give VA and the Veteran visibility into the capture process to assist in process management internally and improve customer satisfaction externally.

- Continue to evolve and improve the process over time.

Summary of Benefits

- **Faster claims processing** – By extending capture to the field and beyond, claims become actionable much earlier in the process. Transitioning from paper to digital data exchange makes the capture process touch-less, further expediting the process.

- **Lower overall cost per claim** – Distributed capture eliminates transportation costs. Paper process automation reduces the cost to process paper. Digital claims submissions provide touch-less entry into VBMS.

- **Improved process management/customer service** – Internal and external visibility into the process lets VA know exactly how many claims are in each step of the process and lets the Veteran know the status of their claim as well.

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About Kofax

Kofax plc (LSE: KFX) is a leading provider of Capture Enabled BPM™ (Business Process Management) solutions. These award winning solutions capture and streamline the flow of business critical information throughout an organization in a more accurate, timely and cost effective manner, enabling our customers to be more responsive to their constituents and gain competitive advantage. Kofax solutions provide a rapid return on investment to thousands of customers in banking, insurance, government, healthcare, business process outsourcing and other markets. Kofax delivers these solutions through its own sales and service organization, and a global network of more than 800 authorized partners in more than 70 countries throughout the Americas, EMEA and Asia Pacific.

For more information, visit kofax.com.

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