

How Document Processing CAN STREAMLINE GOVERNMENT EFFICIENCY

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The United States government is different from any other business that needs automated document processing solutions to increase efficiency and accuracy because it doesn't just serve a customer base - **it serves a population of more than 329 million people¹**. Just because the government has constituencies rather than shareholders, however, doesn't decrease the need for federal, state, and local entities to innovate and automate in order to continue to thrive and serve its population.

To date, the way the government has adopted software and other cutting-edge tech has been inefficient and piecemeal. There is a better way forward, and government agencies at all levels have the opportunity to lead in the adoption of automation tech to create a streamlined path forward for civilians and government employees alike.

What are some of the factors that cause government agencies to lag behind in automation adoption, and what are some specific solutions that can help? Let's take a closer look at what a more automated future might look like and how government agencies can move forward.

Legacy Pitfalls: Where Document Processing Solutions Can Help the Government Do More

While private businesses have spent the last 20 years going through comprehensive digital transformation initiatives, government entities have lagged behind.

* Modern is not exactly the word you think of when standing in the line at the DMV.

What the commercial space does today in terms of automating back-office work is hard for the government to do because of bureaucratic processes, legacy tech, and complicated administrative channels. As a result, the technology government agencies need to support faster processing, less manual errors, and quicker responses has not been adopted.

Some of the hurdles stem from policies that regulate correspondence between the government and its citizens, requiring, for example, that agencies respond to every citizen request and log and store a record of that interaction. As you can imagine, this creates mountains of paperwork and documentation without the capability for automation or digitization.

What's more, while private businesses can control how they receive information [e.g. form versioning, submission channels], most government agencies cannot legally require the population to go online and fill out forms digitally because not all citizens have Internet access.

20%

of the **116 million Americans** over 50 do not use the internet

Source: [CMS Wire](#)

These paper-heavy processes are further complicated by legacy tech, which struggles to handle the variability and ambiguity inherent in real-world, hand-filled documents. Because [many of these outdated tech solutions are rules-based](#), following “if this, then that” logic and requiring structured data inputs, they struggle to extract reliable data efficiently. When someone fills out a form and maybe drops a “g” below the line or writes outside of the [metaphorical and literal] box, legacy [Optical Character Recognition \[OCR\]](#) software can't process the information.

Legacy OCR tech stumbles when faced with real world document conditions, including handwritten text, low resolution images, and text dropped below a line or written outside the box.

With the ability to automate highly repetitive tasks and enforce process, [Robotic Process Automation \[RPA\]](#) has also gained popularity in recent years. And while RPA can automate existing, well-defined tasks and processes, for it to be effective, it requires structured, machine-readable data that can be easily manipulated. However, it cannot process and extract unstructured data inputs, such as documents, PDFs, emails, images and more. **This makes RPA a partial solution that needs to be supplemented with intelligent, AI technologies.**

Legacy tools are simply not equipped to process the diverse, real world documents government agencies receive at the high volumes they receive.

However, while some organizations may think they're at the beginning stages of automating manual processes, in reality they're left with 4-, 5-, or even 10-point software solutions that require unnecessary manual oversight or intervention. This stunts the overall return on investment.



For example, if a government agency receives a form that is filled out in red ink, it's put into **system A**; and if a form is filled out with blue ink, it's put into **system B**; and if one has blue-ink cursive on it, it's put into **system F**.

The good news is that ever-evolving advances in Artificial Intelligence – and Machine Learning, specifically – are bridging the gap between human understanding and machine processing, transforming the first mile of data processing. This enables government agencies and leaders to **reduce manual work** and **unlock efficiency gains**, rather than unknowingly continuing to contribute to the data processing backlog.

There are challenges to digitizing and automating government processes across the board.

But that doesn't mean we can't do better.

What's Next for the Government

Many government agencies are setting up internal technology advancement arms. These programs to help government agencies adopt technology faster and with better understanding. For example:

13.2%

of employee time is spent on work employees consider low-value. Across the government, this represents approximately **500 million hours** spent each year performing low-value work.

Source: [Performance.gov](https://www.performance.gov)

- * **The Presidential Innovation Fellows²** Program recruits and places workers from Deloitte, Lockheed, IBM and other innovative, forward-leaning, technical organizations inside government agencies.
- * **The General Services Administration created a [Center of Excellence \[CoE\]](#)³** where they train both government and public sector employees on how to think about high-level automation and where ML is going.

Similarly, some technical government teams who don't own the actual budget or efficiencies of a department are tasked with helping an agency grow by aiding in the search, evaluation, and advancement of new tech initiatives.

There's great momentum building as governmental entities continue improving by continuing to learn what technology to adopt that will lead to using taxpayer money more effectively.

With more pressure from the top, and more boots on the ground willing to adopt and integrate new technologies, the government can catch up with the demand. And, taking cues from other private CoEs could add thought leadership to the growing need for automation in government.

Where and how can automated solutions add value? And which automation tools and technologies are right for the job?

3 Keys for Intelligent Document Processing in Government

[According to Everest Group](#), Intelligent Document Processing [IDP] solutions capture data from documents [e.g., email, text, PDF, and scanned documents], categorizes, and extracts relevant data for further processing, leveraging AI technologies such as computer vision, OCR, Natural Language Processing [NLP], and Machine/Deep Learning.

[Leading IDP solutions](#) read documents efficiently and extract relevant data accurately, involving humans only when necessary. This solves the critical, “step zero” problem of getting data off a page so it can be used by various applications.

3 major value drivers of integrating IDP solutions, like Hyperscience, into government agencies, offices, and processes are:

#1

The ability to answer citizens faster - Managing growing document backlogs while providing citizens with the services they need is no small feat. And serving citizens correctly can take time, especially with dated, paper-driven processes like invoice processing.

By deploying an IDP solution that can read, process, and output relevant, accurate data quickly, citizens will be able to stay more connected and informed; getting the answers or critical services they need faster.

Establish a framework to understand Intelligent Document Processing, evaluate vendors, and select the right tech - and solution - for your needs.

Download the E-Book →

#2

Historical record access and analysis - One of the biggest things government agencies do is collect data. It's suggested that the Department of Defense and the General Services Administration alone have well over 10,000 forms poised for download. The inconsistency of documents prevents this data being analyzed to scale as there aren't enough employees to read, key, and process every piece of information.

IDP can help process and extract information from different types of historical, archived documents. By unlocking the data in these documents and creating an analytical database, private and public entities will be able to analyze historical trends.

#3

Improving record management and compliance - A record is anything that is a transaction with an agency, and all of these documents need to be stored in a manner that is compliant with federal regulations.

IDP software is one of the only adept solutions that will help government agencies convert and digitize these paper files quickly and accurately.

For TD Ameritrade deploying their solution quickly and getting it in place so the machine can start learning and improving was key.

"From when we signed the agreement [with Hyperscience] to when we started to see data flow through, it was a matter of 5-6 weeks. On an initial pilot, that just doesn't usually happen. That's rare in tech. People enjoy seeing results. We do it in our daily lives all the time and it's no different in our corporate lives. We want to see things come together and have positive outcomes and being able to do that quickly is just another feather in the cap."

- Sean Van Moorleghem, Managing Director, Head of Clearing Technologies, TD Ameritrade



[Read the full TD Ameritrade story](#)



When agencies need to digitize their records, they need technology that can read those applications and supporting documentation, know what they are, extract the information, and translate it into data that can live in systems of record for further processing and analysis.

The complexity of what agencies have to deal with is always going to push legacy tech to its limit. Solutions like Hyperscience must be adopted to stay ahead. With the right tools, government entities can stay current, consistent, and compliant.

Speak with one of our experts to discover we can help your agency streamline efficiencies

CONTACT US



Through the Hyperscience Platform, enterprises are empowered to transform their operations, and drive operational efficiency as well as human productivity by fully unlocking the power of their data. Ranked on the Inc. Fastest-Growing Company List, Hyperscience has raised \$190M+ from investors including Tiger Global, BOND, Bessemer Venture Partners, Stripes, and FirstMark. The company has a global footprint with offices in New York City, Sofia, Bulgaria, and London, UK.