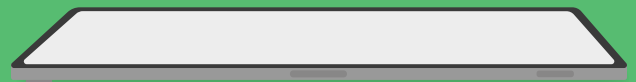




# How to Eliminate Paper and Save Time and Money

Rethinking Paper-Based  
Business Processes in the  
Finance Office Using  
Low-or No-Cost Technologies

BY EVA OLSAKER



As organizations and employees shifted to remote working amid the COVID-19 pandemic, state and local governments have been forced to transition to remote business operations. As a result, COVID-19 has spurred organizations to rethink business processes that require access to the office or involve large amounts of paper.

For example, think about paper-based purchasing approvals, the approval of paper time sheets, leave requests, and paper applications for a business license or permit. Governments have an opportunity to eliminate or rethink paper-based business processes to operate effectively under current social-distancing guidelines—and to save money and improve customer service when restrictions are no longer in place.

This article identifies opportunities for governments to move away from paper-based business processes. For each of these opportunities, options for both do-it-yourself (DIY) solutions and commercial off-the-shelf (COTS) software solutions are presented.

DIY methods are easy, basic solutions to reduce paper using low- or no-cost, commonly available technologies. Below are examples of DIY solutions, some of which we'll discuss in detail later.

- Take a photograph of a completed time sheet or create an Excel-based time sheet and email it to the approver.

- Take photographs of receipts, invoices, and other documents so they can be emailed or sent via text message for approval and then used for documentation of the work process.
- Create an Adobe-fillable form and allow people to submit the completed form electronically.
- Create a Microsoft Word accounts receivable invoice and email it to customers.

As we will discuss later, low-cost, online form builders allow organizations to collect information, applications, payments, and other information online. Many form-builder tools allow for integration with third-party payment providers (e.g., PayPal) to collect fees and other payments.

Of course, it is important to consider security with DIY solutions. Work with your IT office to make sure you are adhering to your local government's security policies. Your IT staff may be able to help you put in place DIY solutions that meet your needs and are compatible with the security and technology policies of your government.

COTS refers to software that is purchased as is from the vendor with no customization of the underlying code. Some of the opportunities we will discuss can take advantage of software that governments already own or that can be acquired with little upfront investment.

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#### GFOA Does Not Endorse or Recommend Software Firms or Solutions

In this article, we have provided examples of COTS software packages that could help eliminate paper. These examples are not intended to be exhaustive of all available software. Also, the reader should not interpret the mention of a particular software package or firm as an endorsement or recommendation from GFOA.

## Opportunity #1

### Electronic Routing and Workflow Instead of Paper Forms

Many organizations do not use electronic routing and workflow; they rely on paper forms to obtain the routing and approvals. In a remote work environment, it is not realistic to physically hand off forms for review and approval.

#### DIY

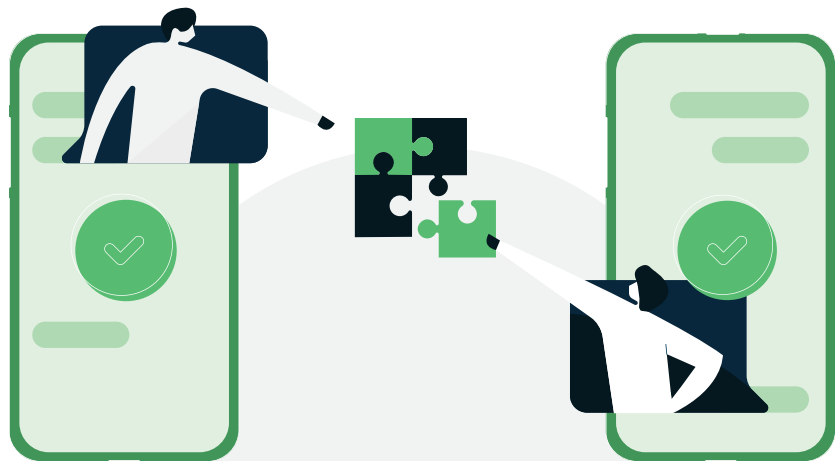
If a work process requires review and approval of documents, you can send an email or text to the appropriate person and he/she can reply (e.g., approve). The email or text communication can be saved via a screenshot and then saved to a document management system, local shared drive, or other storage medium to create an audit trail and backup. With texts or emails, consider adding a copy [CC] to a generic “approvals” address to use as an audit trail and approval record.

If you use either emails or text messages for approvals, consider what to do with them after the process has been completed. For example, will you require them to be printed for backup and audit trail purposes?

#### COTS: Look for Opportunities Within Your Existing Software

Organizations often purchase software but do not use its full capabilities. The technology you own may have routing and workflow capabilities that you don't know exist or that aren't being used. See if your technology has functions that you can turn on. Many governments own systems with configurable approval functionality. Below are common applications that may have routing and workflow functionality.

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#### Document Management and Collaboration Systems.

These systems are used to track, manage, approve and store documents and tasks. They include functionality to collaborate with other users to track versions of tasks and documents, monitor due dates, assign tasks, etc. Below are ways to use these systems to go paperless:

- Create an electronic form that needs approval (e.g., requisition, leave request) and post it to the document management system, and then use the system to route it to the right person.
- Upload a received or scanned invoice into the document management system to indicate it is approved for payment.
- Post and approve council meeting agendas.
- Post and approve contracts.

Following are some document management and collaboration systems. You can search the Internet to find others.

#### Enterprise Document Management and Collaboration Systems *(increased costs and complex enterprise-wide implementations)*

- Laserfiche
- OnBase
- Tyler Technologies Enterprise Content Management
- Basecamp
- Smartsheet
- Zoho
- Microsoft Teams
- Microsoft SharePoint
- OpenKM

**Enterprise Resource Planning (ERP).** ERP systems provide finance, purchasing, human resources, and payroll capabilities. Electronic routing and workflow capabilities are included, especially in modern systems. Explore the capabilities in your ERP to determine if you can configure the system to meet your routing and workflow needs.

**Microsoft Office 365.** Office 365 is a cloud-based software-as-a-service that has a variety of products, many of which you are likely familiar with, such as Office (Excel, Word, PowerPoint, etc.). Most important to this discussion is Microsoft Power Automate (previously known as Flow). It is an Office 365 product that provides routing and workflow capabilities within the Microsoft environment.

Many state and local governments use Office 365, so Power could be an easier way to get started with electronic workflow and routing. Many, if not all, users will be familiar with Microsoft products and the user experience.

Find additional information on Office 365 at [flow.microsoft.com](https://flow.microsoft.com).

Consider using a new system for workflow approvals and communications. Implementing new technology can be challenging, as decisions need to be made regarding roles and security. Focus on the initial needs at hand—not too far in the future. Simple is better, at first. The good news is that some of these solutions offer free trial versions initially (see the list of companies mentioned earlier).



## Opportunity #2

### Electronic Time Sheets

Many governments have employees submit paper time sheets to be approved before the employee can be paid or are part of processes to allocate labor costs to programs or projects. Collecting paper time sheets is a challenge in the remote work environment. For governments interested in federal reimbursement, having accurate time entry records with required detail is essential. Below are ways to gather employees' time sheets when most are working remotely.

#### DIY

Employees can take their paper time sheet home to fill out, then take a picture of it and text or email it to their manager for approval.

Employees or managers can create a spreadsheet. Have your employees insert the data from their paper time sheet into the spreadsheet and then email it to their manager for approval.

Organizations will need to decide what to do with the original paper time sheet. It might not be needed, as the time sheet has been collected

electronically, but the organization may require the original papers to be turned in later.

#### COTS: Basic Electronic Time Sheet System

It is likely not practical for many governments to implement a fully featured time entry system as of this writing, given constraints on financial and/or staffing capacity. Having said that, there are free time sheet and project management software options that can be used to track employees' time. Two examples of such systems are Clockify and Homebase. You can search the Internet to find other time sheet applications.

## Opportunity #3

### Electronic Forms Tools

Governments still rely on paper applications or forms that are hand-delivered to the government office. Social distancing and remote working present barriers to accepting them. Electronic form-building tools allow users to create forms to collect data (e.g., applications, surveys), files, and payments. Many electronic form builders allow for the

secure online collection of payments between third-party applications (e.g., PayPal, Chargify, credit cards).

### DIY

Allow applicants to download the application/form from the government website to fill out, scan or take a picture of the completed application/form, and then email it to the appropriate department.

### COTS: Create Online Forms

Another option is to create an online form that will capture the same information as the paper form. You can eliminate the paper form altogether. There are tools available to create online forms that allow organizations to collect payments (with encryption).

### Form Builder Vendors

- Wufoo
- Microsoft Forms
- Formstack
- Google Forms
- Typeform
- Zoho Forms
- Formsite

## Opportunity #4

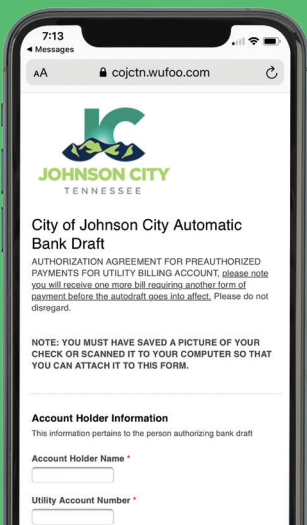
### eSignatures

Many governments require wet signatures, where a person physically signs a document (e.g., contracts, time sheets, invoices). Obtaining physical signatures is inefficient. It requires the physical signature and transfer of documents when the required parties are not physically located at the same organization or location. Governments should consider the use of electronic signatures (eSignatures). COVID-19 has shown the need for electronic notary signatures. People are not able to meet a notary public in person due to social distancing. Examples of eSignature vendors include:

- DocuSign
- SignNow
- PandaDoc

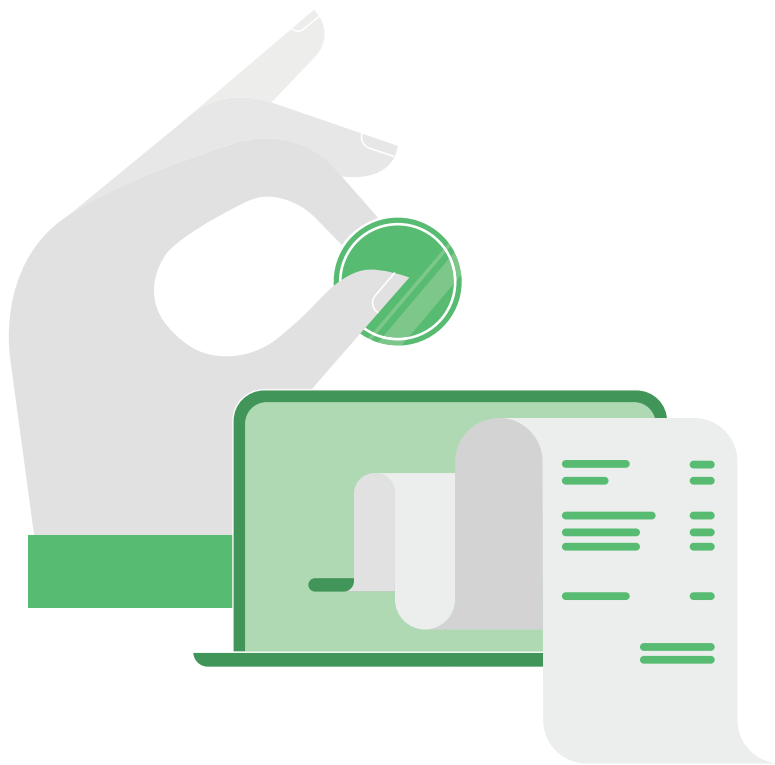
See GFOA's best practice on using electronic signatures at [gfoa.org/using-electronic-signatures](https://gfoa.org/using-electronic-signatures). Be sure to assess the risk of fraud, error, or misuse of various types of electronic signatures. Also, consult your legal counsel on the implications of using electronic signatures.<sup>1</sup>

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### CASE STUDY: The City of Johnson City, Tennessee

Prior to COVID-19, the City of Johnson City, Tennessee, required utility bill customers to physically bring in a voided check to the utility department to set up customer accounts for autodraft payment from a checking or savings account. The IT department created a Wufoo (form builder vendor) form in less than one hour. It allows customers to submit an online form and attach a voided check to enroll in the utility bill autopayment program (which includes encryption). This new form and process allows citizens to enroll in the program from home instead of bringing a voided check to the utility billing office.



## Opportunity #5

### Issue Employee Paychecks via Direct Deposit

Many organizations use direct deposit to pay employees as a way to avoid printing, stuffing envelopes, and mailing paychecks. Printing checks requires staff to work from the office. This is not an easy process to change. Employee banking information needs to be entered into the payroll system. However, doing so does provide the opportunity to go paperless and thereby improve the payroll process (e.g., no need to print, sort, stuff, and mail checks) and reduce costs.

#### DIY

Set up an online form and have employees enter their banking information, or have them take a

picture of a voided check and email or text it to payroll. Payroll can then update employee banking information to process direct deposit.

## Opportunity #6

### Issue Electronic Payments to Vendors

Many governments issue and mail paper checks in a remote work environment, which is inefficient and impractical. This is especially obvious given that governments can issue electronic payments (i.e., EFT, ACH, wire transfer, PayPal, and other payment portals). Paper checks are not easy to eliminate. For example, some vendors may insist on paper checks. Nevertheless, many

payees will welcome electronic payment. GFOA's best practice on payments made by governments states that governments should use electronic means to make payments when possible.

#### DIY

Set up an online form and have vendors provide their banking information in the form. Vendors can also email or text a picture of their banking information. Accounts payable can then update their record and issue electronic payments moving forward.<sup>2</sup>

## Opportunity #7

### Accept Electronic Payments

Accepting in-person checks or cash payments (or property taxes, business license, etc.) is inefficient and unhealthy for the community during social distancing (and not feasible in a remote work environment). Setting up online payment collections can be challenging, as organizations need to consider PCI compliance,<sup>3</sup> find a vendor, make sure the accounts are set up for reporting and reconciliation purposes, and communicate the payment methods to the community. There is also security to consider. Online payment technology must have safeguards against fraud and use encryptions. Having said this, there are ways to accept online payments quickly. GFOA released a research paper in April 2020 on *Maintaining Treasury Operations During the COVID-19 Crisis*.<sup>4</sup>



## Other Opportunities to Go Paperless

- Where else can you accept scans, pictures, or other electronic versions of documents that used to be physically delivered to government offices?
- People often take the path of least resistance. Can you encourage others you work with to go paperless? You can change requirements, like refusing to accept paper proposals from vendors and only accepting electronic submissions. Also consider how to make it easy for people to choose the electronic approach to working with you.
- Can you use Google Drive, Microsoft OneDrive, DropBox, Box Drive, or other file storage application to post files if you do not have access to your network drive?

### DIY

Create an Adobe-fillable form and have your customers fill out their banking and routing information. Customers can also email or text a picture of a voided check. Organizations can then set up the account for autodraft for future payments.

Create an online payment form (using electronic forms) that includes embedded third-party payment capabilities (e.g., PayPal, Venmo). Customers can use the form to submit their payment. Using third-party payment capabilities keeps governments from having to accept credit card numbers or other sensitive payment information. This eliminates a security risk.

Organizations will need to identify the type of payment form that will be accepted. Think of this as a drop-down menu, where the customer can select the type of service for which they are making a payment (e.g., dog license, business license, utility bill). In addition, the customers will need to enter their account number in the form.

Organizations will need to confirm if the third-party payment processing fee will be charged to the customer or the government—and if the processors are PCI and HIPAA compliant.

### COTS: Allow for IVR Payments

An interactive voice response (IVR) system, where customers can make payments over the phone, could be set up quickly. IVR systems will act as a third-party payment collection provider. Organizations will need to determine if they send the account and balance information to the IVR (e.g., nightly upload) or if the

system will pull and extract it. Most organizations push or upload account information to the IVR system. Customers can then make a payment over the phone.

## Opportunity #8

### Create Electronic Accounts Receivable/Billing

Local governments that do not have an accounts receivable module in their financial system (or ERP) often issue paper invoices to customers. Examples could include sending an invoice for conference room rental, police coverage for a parade, damage to public property, or printing a GIS map.

### DIY

Create a Word (or electronic) version of an invoice and email it to the customer instead of printing a paper invoice. Make sure the accounts receivable type (e.g., rental, off-duty police coverage, etc.) and the description of the services are included so that it can be reconciled when the payment is received.


### COTS: Accounts Receivable Functionality in an ERP/Financial System

Implementing an ERP or financial system that includes an accounts receivable module will allow an organization to issue invoices (or templates) electronically through the system. It will also allow for thorough tracking, reconciliation, and collections on these receivables. Typically, the accounts receivable module is part of the financial suite of applications, thus it is usually implemented at the same time as the ERP/financial system.

Necessity is the mother of invention. Think about ways to use commonly available information technologies to work smarter.



## Conclusions

The COVID-19 pandemic has had terrible consequences for lives and livelihoods across the world. Especially now, local governments must go on with their important work. We hope this information helps you in not only continuing your operations but also doing them better now and in the future. In fact, don't limit yourself to the opportunities we described in this paper. Necessity is the mother of invention. Think about ways to use commonly available information technologies to work smarter. Even small improvements add up to big changes over time. 

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<sup>1</sup> GFOA Best Practice on Using Electronic Signatures is available at <https://gfoa.org/using-electronic-signatures>

<sup>2</sup> GFOA Best Practice on Payments by Governments is available at <https://www.gfoa.org/payments-made-governments>

<sup>3</sup> Payment card industry (PCI) compliance is mandated by credit card companies to help ensure the security of credit card transactions. Payment card industry compliance refers to the technical and operational standards that businesses follow to secure and protect credit card data provided by cardholders and transmitted through card processing transactions.

<sup>4</sup> *Maintaining Treasury Operations During the COVID-19 Crisis* is available at <https://gfoa.org/maintaining-treasury-operations-during-covid-19-crisis>