MOBILE FIELDWORK IN GOVERNMENT

BREAKING DOWN WHAT YOU NEED TO KNOW

IMPROVING DATA MANAGEMENT, DA APPROVAL WORK COMMUNICATION BENEFITS OF EMP FIELDWORKERS W TOOLS AND PROC

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FOREWORD FROM ADOBE

We live in times of tremendous change for government. From digital identity to chatbots, from user-centered design to secure cloud data, we've seen great transformation in what government can offer in online self-service to its citizens. However, paper-based processes persist because of the complexities that emerge when the problem extends to the field.

But this creates a serious problem, because a growing percentage of government workers are operating out in the field and away from their desks and the office. Whether it's a foster care caseworker visiting a potential home for a child up for adoption, a Food and Drug Administration inspector visiting a manufacturer's facilities, or a law enforcement officer conducting investigations in the field, these government employees are mobile. They spend most of their time out of the office, collecting information that can be obtained only in person to support the delivery of mission-critical services.

Unfortunately, all too often, these mobile fieldworkers struggle with burdensome paperwork. A typical inspection process requires workers to print application forms, fill them out manually, rekey them digitally and sometimes reprocess them because of missing or inaccurate data. The problem extends to the home office, where receiving information from the field is often still a manual, error-prone process.

There is a path forward for agencies with mobile fieldworkers. Improving data management, data capture, approval workflows and communications are all benefits of empowering fieldworkers with digital tools and processes. By replacing paper processes with streamlined digital forms and documents, agencies can reduce operational costs, improve citizen satisfaction, accelerate service delivery and transform government services.

In short, empowering mobile fieldworkers helps create a more efficient government that saves money and improves the citizen experience. But it requires a dedication to technology and workflows that will empower these workers and the people that they're helping. Are you and your agency ready to make the move?

— Aaron Qayumi,
Product Marketing
Manager, AEM Forms
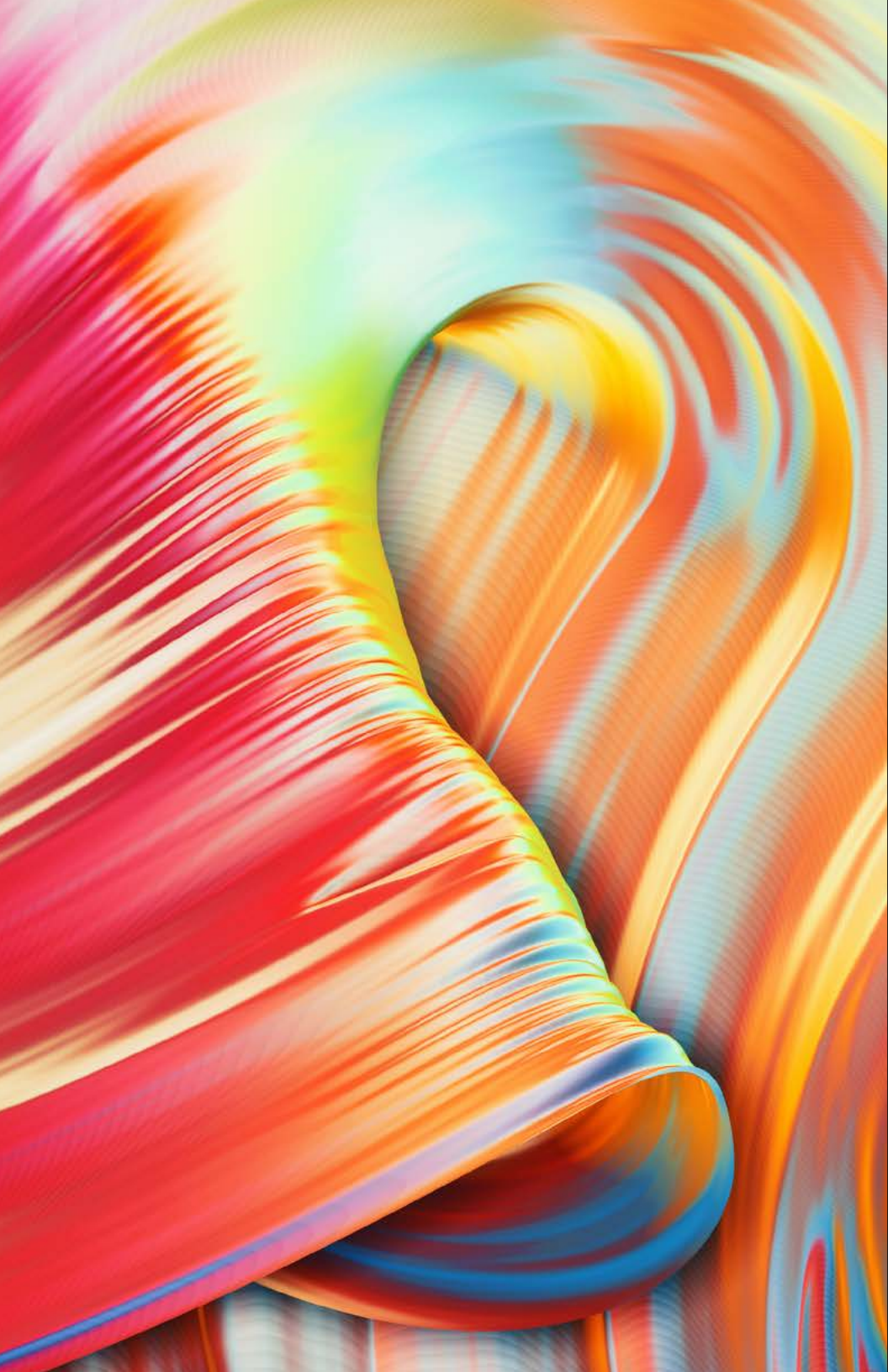
Enroll, onboard, capture data — even offline.

Government today is more mobile than ever. With the passage of the Connected Government Act, all new or updated federal websites will need to be mobile-friendly. But many public sector field employees — whether in federal, military or state and local agencies — are still working with pen and paper. This leads to burdensome paper processes, delayed citizen services, and inefficient data rekeying.

Adobe solutions for government help enable efficient digital forms processes, making mobile field work fast and painless — even offline. This saves time for your employees and constituents, and helps your agency budget go further.

To request a demo call 1-800-87 ADOBE

[Learn more about digital forms]

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EXECUTIVE SUMMARY

Mobile access is the primary way that **more than 93 million U.S. citizens get online**. **Three in five Americans use smartphones to access the internet**, **and one in three** has no other way of getting online. But just around **40 percent of federal government websites are mobile-friendly**, and an even lower percentage of applications and forms have been optimized for mobile. This means a substantial amount of access to government services is severely limited, both for end users and internal employees who may need to access mobile websites and forms outside the office.

Today, many frontline government workers still use paper-based processes for the intake of information. This places a high administrative burden on caseworkers who may have to fill out hundreds of forms for one case and spend up to 50 percent of their work time on paperwork, according to a GAO report. In government, this leads to turnover and inefficiencies, and detracts from more mission-critical tasks.

Agencies need the right tools to provide the best, most efficient experience for employees. One way that government agencies can improve their efficiency and effectiveness is to transition from paper forms to digital forms with integrated workflows on mobile apps for their fieldworkers. The benefits to transitioning from paper to digital include better information collection and management, better engagement with and use of the collected information, fewer data-entry errors, and improved security.

To help clarify how agencies can better arm mobile fieldworkers, we've created this pocket guide. This new piece from GovLoop will give you an overview of mobile fieldwork modernization, the tools to carry it out and why they matter, plus case studies and how-tos that will help you get where you need to be today.

MOBILE FIELDWORK

THEN AND NOW

The approach to mobile fieldwork
has evolved thanks to legislation
and realities about use of mobile
technology in the government and
among citizens.

MOBILE STATISTICS

We all know that mobile technology has expanded rapidly, but it is important to consider the impact in the context of government and mobile fieldworkers specifically to understand the importance of this trend.

49%

49 percent of U.S. households are mobile device-only (Source: **Pew**)

22%

22 percent of government workers use mobile devices more than 40 hours per week to complete their primary job functions.

70%

Use agency-issued devices

24%

Use personally owned devices

Of the government workers who spend more than 20 hours per week on a given device:
· **53%** use agency-issued laptops.
· **17%** use agency-issued smartphones.
· **14%** use personally owned smartphones.
· **10%** use personally owned laptops. (Source: Adobe)

0.9T

A mobile employee can help save 0.9 tons of greenhouse gas emissions annually by not traveling to the office. (Source: **Deloitte**)

42X

In-person processes are 42 times costlier than digital ones. (Source: **GovLoop**)

$5M

The Agriculture Department's National Agricultural Statistics Service rolled out 3,500 tablets to its field enumerators to collect and share crop data. That move improved processing and collection speeds and saved $3 million to $5 million in printing and mailing costs. (Source: Adobe)

45%

Mobile adoption can increase caseworkers' productive time by 45 percent. (Source: **Deloitte**)

LEGISLATION
LANDMARKS

1980

The Paperwork Reduction Act of 1980 was designed to reduce the total amount of paperwork burden the federal government imposes on private businesses and citizens. The act levies procedural requirements on agencies that wish to collect information from the public.

2011

The Making Mobile Gov project was a three-phase multimedia project that the General Services Administration's MobileGov Community of Practice created to help federal agencies discover, discuss and design a citizen-centric path to mobile government services and information.

2017

April 2011: The Streamlining Service Delivery and Improving Customer Service executive order required agencies that provide significant services directly to the public to identify and survey their customers, establish service standards, track performance against those standards, and benchmark customer service performance against the best in business.
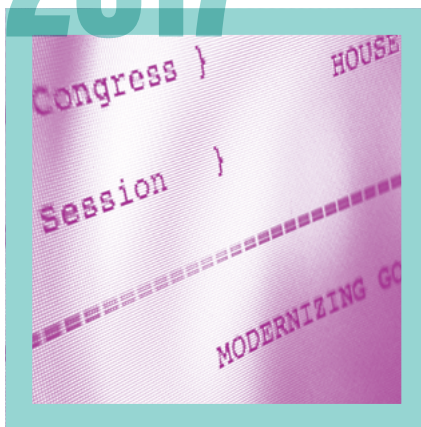
December 2017: The Connected Government Act passed both chambers of Congress. The act requires new or updated federal websites intended for use by the public to be mobile-friendly.

December 2017: President Trump signed the Modernizing Government Technology Act into law, giving agencies more resources to modernize, helping to enable cloud migration, implementing shared services and improving cyber defenses.

TODAY'S LANDSCAPE OF MOBILE FIELD CASEWORK

This section will dive into a few areas: the drivers of mobile fieldwork, what it looks like and the benefits of modern mobile fieldwork in government.

Mobile technology has significantly affected the way government does business, both internally and in the methods in which it communicates with and provides information to constituents. According to IDC, there are over 6 million mobile workers in government.

This means the technology fieldworkers need and use must evolve and improve. From social workers to police officers, many state, local and federal employees don't spend the majority of their days in an office. They are out collecting data, taking notes, talking with citizens, recording information and more.

To understand the true promise of deploying modern mobile technology in government fieldwork, imagine this scenario involving a hypothetical caseworker we'll call Sarah. Without mobile technology, Sarah's job collecting critical information was inefficient. She would go into the field to gather information and conduct interviews, but she'd have to manually enter the data into paper forms back at her desk. Despite her best efforts, she wasn't always accurate, and the data wasn't always secure because of its format. Additionally, she spent much of her time in transit to and from the office, and she couldn't spend as much time in the field as she wanted because of all the administrative duties she had to handle at the office.

WITH PAPER

INSPECTOR

HOME OFFICE

▶ PRINT ▶ FILL ▶ TYPE ▶ SIGN ▶ ROUTE ▶ REVIEW ▶ RESPOND

WITH TABLET

DIGITAL FORM ▶ INTEGRATED WORKFLOW

Enter modern mobile technology. It completely transforms Sarah's ability to get her work done efficiently so she can focus more on the impactful parts of her job, rather than the administrative duties. Using her mobile device, she enters data and notes into an app on her mobile device with intuitive and secure forms that transmit data to back office systems. Data automatically synchronizes with web-based case management system from any location — even when offline, because the platform has an online/offline capability. Sarah can even easily take a photo with her mobile device and include it with her report as an attachment. Finally, her colleagues in the home office can view the status of her reports and push any additional requests to her as part of a standard workflow. Sarah used to spend more than 50 percent of her time doing administrative work and

digitizing her handwritten notes, but now spends most of her time visiting clients and performing the work she finds most rewarding.

Sarah's work is made more meaningful, her clients get more of her valuable time and expertise, her data and information are secure, and her agency saves money by reducing manual, paper-based efforts. Modern mobile technology for fieldworkers is transformative.

To help you even more deeply understand the situations mobile fieldworkers face and the technology they must have access to, consider the following hurdles and how mobile technology could overcome them:

SITUATION:

The first task mobile fieldworkers face is getting assigned a case. But even today, citizens still commonly request government services via paper applications, which they mail to the agency. On receipt, an employee might have to enter the information into a digital system and route it to a caseworker and then a field agent.

WHERE MOBILE TECHNOLOGY COMES IN:

Connecting the application, case management records and field assessment form can address these inefficiencies. When agencies let citizens apply digitally, data flows directly to case management systems, and workflows can automatically assign cases to fieldworkers to accelerate service delivery times. Fieldworkers would also able to add legally compliant electronic or digital signatures to the application.

SITUATION:

Fieldworkers spend too much time collecting data in the field only to rekey it at the office.

WHERE MOBILE TECHNOLOGY COMES IN:

Digital assessment forms can be pre-filled with data from an agency's existing systems, whether they're for a citizen who requests a service or a restaurant that receives an inspection every year. Once a worker completes the form, all the data can go directly to a case management system to reduce work, errors and duplicate records. And with the ability to capture data offline, offsite inspection data can automatically appear in the system when a fieldworker regains network connectivity.

Perhaps most importantly, according to a **Deloitte report**, mobile fieldwork can increase caseworkers' productivity by 45 percent. This allows government workers to be more engaged in and spend more time on the mission-driven issues that matter to them, and less time on paperwork and administrative issues that could potentially disengage them from their jobs, reduce morale, or take away their focus from improving the lives of citizens they are serving.

Clearly, agencies employ a large number of inspectors, caseworkers, investigators and other mobile fieldworkers who would benefit from a robust mobile solution that improves efficiency and effectiveness. Such a solution has been difficult to realize, though, primarily because of costs, legacy technology and difficulty of implementation.

SITUATION:

Fieldworkers don't have clear visibility into the outcomes of their inspections and cases. For example, military inspectors who have conducted an asset management audit want to ensure that the results of their inspections have been appropriately processed and communicated. With paper forms, inspectors must wait for the central office to receive, route, process and approve the assessment before getting feedback.

WHERE MOBILE TECHNOLOGY COMES IN:

By digitizing the process, fieldworkers can get clear visibility into the status of applications, and the home office can eliminate lengthy manual workflows with convenient application dashboards that make approvals as simple as the click of a button. The home office can also connect backend data sources to generate personalized communications documents to send to all relevant stakeholders via digital and print channels.

SITUATION:

IT teams struggle to manage form and document content across many agency departments. Siloed data and fragmented repositories of forms and documents are common and contribute to content chaos.

WHERE MOBILE TECHNOLOGY COMES IN:

The mobile era has brought with it tools for IT to easily manage and update content across all channels — including web, mobile, apps and even print. When agency IT organizations centralize the creation and management of forms and documents, the process of creating new forms is greatly streamlined. Organizations can even extend to business users the flexibility to make updates to the forms and documents being delivered to employees in the field--without requiring a project request to IT.

In the past, the mobile worker products that existed had poor user experiences and were difficult to tailor to agency requirements. Most fieldworkers need access to agency networks and business application data in the field: Caseworkers need case data, inspectors need permit data, and parole officers need offender information, for example.

Today's mobile government should be able to incorporate field data collection that can quickly update back-office systems and databases. Applications such as executive dashboards provide insight that moves agencies from static data collection to a more responsive position.

Mobile data collection apps should allow workers to collect and process data in the field, in the office or in any other location — a powerful ability that allows government to reach communities where they are.

Online or offline, government workers should be able to submit, collect and decode information that they analyze away from their desks.

INDUSTRY SPOTLIGHT

THE CRITICAL IMPORTANCE OF DIGITIZED FORMS IN GOVERNMENT

An interview with Matt Kim, Project Manager, Adobe

There's a growing realization within agencies that paper forms are expensive to deliver, difficult to update and time-consuming to process, which leads to a growing backlog internally as well as frustrated citizens and unhappy employees.

But the digitization of forms provides a better way forward for government and its end users. To understand why government agencies need to invest in digital transformation, what challenges they face, and how bringing digitized forms on mobile devices can drastically improve government fieldwork operations, GovLoop sat down with Matt Kim, Project Manager at Adobe, for his insights. Matt Kim has 5 years of experience supporting digital transformation and next-gen digitized forms for State and Local government agencies.

"Agencies need to move away from paper-based processes and forms. The documents you manage today need to be digital, mobile, secure, trackable, easy-to-use and intuitive," Kim said. "This is what you can get from next-generation digitized forms."

With next-generation digital forms, agencies can standardize form creation and management, which means reducing paperwork, improving response times, increasing efficiencies, and, most importantly, reducing costs. Digital data capture technology can allow personnel to create and manage forms across any medium, such as websites, mobile devices, and apps.

But to have digitized forms that truly serve the needs of government, field workers, and its citizens, a few aspects must be kept in mind, Kim said.

"Next-gen digitized forms should be clear and concise and easily adaptive to any screen and platform, including websites and mobile apps," Kim said. "They must also have an online/offline capability so work can be performed anywhere at any point. Finally, security and compliance is another key feature. For government agencies, data security is top of mind, and the data that is transmitted via these forms is often sensitive and must stay secure."

Next-gen digitized forms are a game changer for mobile field workers, Kim explained.

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>
> *—Matt Kim,*
> *Project Manager at Adobe*

"Most field workers need quick access to information and data in the field," he noted. "Adobe has products like the Adobe Experience Manager Forms that enable agencies to automatically extract relevant data from business applications and transfer it to a custom app on field worker mobile devices."

Adobe Experience Manager Forms includes the AEM Forms App, which enables agencies to automatically extract relevant data from business applications. Field workers can then use the app to search and view crucial information while in the field—even when they're offline. Adobe Experience Manager Forms also manages the digital forms that field workers fill out during site visits.

Finally, these products enable the automatic recording of inspection or case visit data in back-end business applications. The data entered or captured in a digital form in the AEM Forms App is synchronized with back end business systems. It also builds an official inspection or case visit report as a PDF document that's automatically saved in an agency repository and emailed to the appropriate parties. Typically, this can eliminate an hour or more of manual data entry per field worker.

By deploying professional worker–oriented mobile apps and digital forms, agencies can improve productivity and reduce the cost of field operations. Because the Adobe mobile app provides all the information field workers need to do their jobs, productivity and effectiveness are significantly improved. Similarly, Adobe can help accelerate information capture and allow field workers to spend more time on their professional responsibilities and less time filling out paper forms.

The combination of increasing expectations from citizens and the need to boost efficiencies for field workers should make next-gen digitized forms a priority for many agencies. The ability to reduce burdens on staff, streamline processes and save valuable time are all benefits that cannot be overlooked.

Adobe's solutions for the mobile fieldworkers are unique and powerful, combining online and offline capabilities, connecting critical forms to powerful workflows, and giving a superior user experience for field workers.

"When you have digital forms that have good user experience, security, and capabilities, that's when agencies can really evolve," Kim said.

LEARNING FROM OTHERS:
CASE STUDIES

Here we describe two government entities that have benefited from Adobe's digitization services. Read how San Diego County improved access to services and streamlined business processes, and how the Los Angeles International Airport empowers managers with real-time updates on airport assets.

THE COUNTY OF SAN DIEGO

San Diego County prides itself on providing superb, cost-effective services and making every citizen interaction convenient, including offering timely access to services through digital and mobile channels. To help achieve its goals for public engagement and efficiency, the county chose deployments of Adobe Experience Manager (AEM) and AEM Forms on-premise, which are part of Adobe Experience Cloud.

"With more than 3 million county residents and limited budgets, we must continually improve customer satisfaction while reducing costs and enhancing efficiency," said Susan Green, the county's Assistant Chief Information Officer. "To modernize our infrastructure for citizen communications and service delivery, and streamline many of our internal processes, we adopted Adobe solutions."

Among the first agencies to adopt AEM Forms was the Department of Environmental Health. Previously, department workers had to download information for every restaurant licensed to do business in the county and fill in multi-page forms by hand — a process that could result in delays and backlogs. Auditors used paper forms and photos to conduct inspections in the field, and then scanned the inspection reports into the computer system.

Today, instead of using clipboards and paper to conduct restaurant inspections, auditors use tablets and electronic forms. The e-forms come pre-filled with relevant information on each restaurant to save time. Inspectors access the forms on tablets while they are in the field, simply checking boxes and taking digital photos. They can enter the digital inspection reports into Documentum, Open Text's enterprise content management platform, without scanning or rekeying data for easy search, accurate tracking and reference. Today this has increased efficiencies, and the department's backlog is shrinking, benefiting restaurant owners and the county.

"Adobe Experience Manager forms is enabling digitization and automation of business processes by eliminating the need to print, sign, and scan paper forms," said Michael Proctor, the county's Chief Technical Architect. "Eliminating manual, paper-based processes with Adobe Experience Manager forms is a big enabler of business change for the county and a major benefit to the public."

The San Diego Health and Human Services Department is also automating the process of determining citizens' eligibility for services using AEM Forms. The eligibility case management process is elaborate and complex, requiring hundreds of forms to be filled out at intake centers nationwide. Today, the eligibility process is fully automated using e-forms with prepopulated information automatically entered into backend systems. Citizens can now receive faster answers to their questions about eligibility and access services sooner.

LOS ANGELES INTERNATIONAL AIRPORT

The second busiest airport in the United States, Los Angeles International (LAX) serves almost 7.2 million passengers annually. Owned and operated by Los Angeles World Airports (LAWA), LAX seeks to maximize passenger comfort and convenience across its nine-terminal facility. To continuously monitor the condition of 1,900 critical assets — from escalators to access control doors and bathrooms — LAX relies on a mobile fieldworker solution based on AEM Forms.

"Our ability to monitor thousands of critical assets is essential for passengers traveling through LAX, yet it is not an easy task in an airport with nine terminals ranging from brand-new to 50 years old," said Dominic Nessi, Deputy Executive Director/CIO at LAWA's Information Management and Technology Group. "We previously used spreadsheets or had our terminal managers call in to operations staff to manually track information. The effort was massive, and the information was fragmented and difficult to update. We had no way of obtaining real-time situational information."

LAX
Los Angeles World Airports

Airport officials decided to implement Adobe fieldworker and forms solutions. Today, 20 terminal managers conduct daily field inspections, walking through terminals with an Apple iPad and a customized form created using Adobe Experience Manager Forms. Through a series of drop-down fields, they can update the status of those 1,900 assets.

The information flows into the built-in, backend SQL database available in Adobe Experience Manager Forms. The captured data is updated in easy-to-read dashboards accessible to terminal managers and about 50 other executives and managers who need the information.

With the detailed dashboards, managers can immediately gauge the condition of each terminal at a glance. The dashboard is color-coded, with blue, green, yellow, orange and red rating the status of each terminal from excellent to poor.

"One of the biggest benefits of Adobe Experience Manager Forms is that we can capture information from mobile teams and then present it dynamically to stakeholders so they have an immediate view of each terminal's status," Nessi said. "With Adobe Experience Manager Forms, we can track information in real time, and we can identify trends, such as if certain terminals are almost always in better shape than others. Based on this information, operations can work to make long-term changes to improve passenger experiences."

"One of the biggest benefits of Adobe Experience Manager Forms is that we can capture information from mobile teams and then present it dynamically to stakeholders so they have an immediate view of each terminal's status."

—Dominic Nessi,
Deputy Executive Director/CIO at LAWA's
Information Management and Technology Group

CHEAT SHEET

This takeaway section will give you actionable steps toward modernizing your fieldwork, plus best practices and further resources and reading on the topic.

What capabilities do you need in your mobile fieldworker technology? (Select all that apply.)

- ☐ Ease of use on mobile phones and tablet devices, iOS and Android
- ☐ Ability to capture data offline and sync when online
- ☐ Data security
- ☐ Ability to include annotations, notes and attachments including photos
- ☐ Geolocation
- ☐ Mobile field technology as part of an overall digital strategy including workflow automation, analytics, and digital self-service for employees and citizens

Key questions to ask as you modernize your mobile fieldworker technology:

1. What casework platforms or systems are you using today, if any?
2. There are multiple use cases for mobile fieldwork technology. Which is the most urgent for your organization?
3. Are other departments in your agency using digital forms and mobile technology to speed and automate business?
4. Do you worry about the compliance and security of your employees' sensitive casework information?
5. Do paper processes slow your fieldworkers?
6. Are you delivering the best possible experience to attract and retain top talent?

From a business standpoint, here are some questions to answer when weighing the financial benefit of digitization:

1. What is the net financial change for my organization?
2. How will it benefit citizens?
3. How will it benefit employees?

For more, visit adobegovernmentsavings.com to see how much time and money your department can save by modernizing the experiences of the people you serve.

Implementing a modern mobile field strategy and technology can also, according to a report about mobile government fieldwork:

1. Reduce time spent on data entry.
2. Enable better situational awareness for frontline employees.
3. Enable work from any location.
4. Improve accuracy and reduce the effort involved in performing tasks.
5. Enhance collaboration and data sharing among employees/agencies.

FOR
MORE
INFORMATION

This video walks through the workflow of an agent in the field needing to visit a citizen to validate a registration.

Learn how Adobe Experience Manager Forms helps governments transform applications, manual processing, and statements into secure and efficient web and mobile experiences.

Read about increasing efficiency in government with digitized forms.

THANKS TO ADOBE FOR T
SUPPORT IN
PRODUCING
PUBLIC-SECT
RESOURCE.

THEIR

THIS

OR

About Adobe

Adobe enables next-generation enterprise digital government services with trusted, proven, and integrated enterprise solutions that help drive agency efficiency, deliver remarkable experiences, and protect mission-critical data. Learn more: **adobe.com/industries/government.html**

About GovLoop

GovLoop's mission is to inspire public sector professionals by serving as the knowledge network for government. GovLoop connects more than 270,000 members, fostering cross-government collaboration, solving common problems and advancing government careers. GovLoop is headquartered in Washington, D.C., with a team of dedicated professionals who share a commitment to the public sector.

For more information about this report, please reach out to **info@govloop.com**

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