Lennon, Smith, Souleret Engineering, Inc.
Civil Engineers and Surveyors
Est. 1985

Lennon, Smith, Souleret Engineering used GoFormz to digitize their forms collection and accelerate data capture and extraction, resulting in incredible time savings and 'thousands of dollars' saved.

INDUSTRY
Engineering

CUSTOMER SINCE
April 2018

FORMS
- Physical Surveying Forms
- Service Orders
- Inspection Forms

At-A-Glance

Challenge

Lennon, Smith, Souleret Engineering struggled with the vast amount of time required to manually complete, deliver, process, and store field paperwork and images. Data collected within paper forms was isolated, while image capture was cumbersome and difficult using fillable PDFs.

Solution

Using GoFormz to digitize their extensive forms collection, Lennon, Smith, Souleret Engineering streamlined field data capture and extraction, leading to simplified data storage and analysis. Leveraging *Automated Workflows*, forms, data, and images can be instantly and dynamically stored within connected platforms and databases, saving considerable amounts of time.
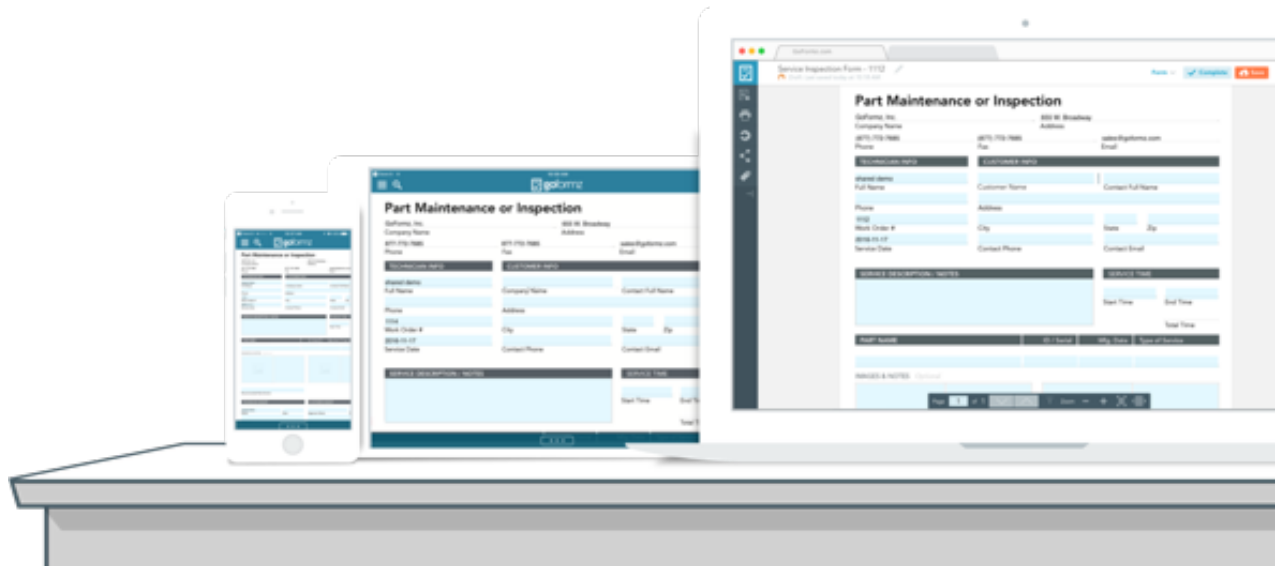
Results

- Form and workflow automations save "thousands of dollars"
- Dynamic form, data, and *Image* storage simplifies record-keeping
- *Upsert* functionality eliminates redundancies, increases project visibility, and simplifies reporting
- *Required* fields ensure accurate, consistent data capture
- Dynamic *Image* naming saves significant time

Why GoFormz

"It was crucial to have our forms look a certain way… to be able to do that without a ton of programming is exactly [why we chose GoFormz]."
– Gwen Zarko, GIS Manager, Lennon, Smith, Souleret Engineering

About Lennon, Smith, Souleret Engineering

Founded in 1985, Lennon, Smith, Souleret Engineering, Inc. (LSSE) delivers a 'broad spectrum' of civil engineering and surveying services to Pennsylvania and the Pittsburgh Tri-State region. LSSE strives to deliver quality service, while also contributing to community enrichment and to Pennsylvania State University engineering educational programs.

The Full Story

Lennon, Smith, Souleret Engineering, Inc. (LSSE) provides a variety of civil engineering and surveying services to the Pennsylvania area, including frequent field work and physical surveying. Gwen Zarko, a Geographic Information Systems (GIS) Manager at Lennon, Smith, Souleret Engineering, recounted the frustrations of relying on paper forms to conduct surveys: "Forms were all just paper and handwritten, meaning all of that information went into binders and went nowhere."

Seeking a means of accelerating data processing and liberating isolated data, Gwen and her team tried using Adobe fillable PDFs to extract captured data. Initially, this process worked just fine for Gwen and the LSSE team. However, it soon became unsustainable because PDFs could not allow for the input of critical field images, so all images to be manually centralized and renamed. "It was frustrating and took a lot of time," Gwen explained. "I thought, there has to be a better way to do this."

Searching for a solution

When researching and testing digital solutions to LSSE's data capture obstacles, Gwen sought a platform that would maintain the look of her original forms, while also granting the ability to capture new data types. Because the Geographic Information Systems (GIS) team often collaborates with municipal groups, identifying a solution that could preserve the formatting of their original forms was of the utmost importance.

"It was crucial to have our forms look a certain way. Because they go into government agencies, we have to maintain that look and feel. To be able to do that without a ton of programming is exactly [why we chose GoFormz]."

Digital efficiency

Gwen found digitizing the Lennon, Smith, Souleret Engineering form collection with GoFormz to be extremely easy. By merely dragging and dropping fields onto her uploaded form, Gwen and her GIS team could maintain the original look and feel of their forms, while simplifying data capture and enforcing accuracy via digital features like embedded logic and calculations.

Among the many digital advantages LSSE has leveraged using GoFormz are *Automated Workflows*. Automating common tasks, like routing forms to teammates and updating spreadsheets, allows Gwen and her team to more efficiently process, store, and analyze their data. "A workflow extracts data from every field and upserts that data into an Excel row," Gwen explained. "It then renames each photo, renames each form, and puts them into an appropriate directory on OneDrive. That makes my life epically better."

Using the automated 'upsert' functionality, when a LSSE user completes a form, the form data is used to update or add a row in a spreadsheet. If a row with the completed form's service ID number already exists, then the existing row is updated; otherwise, a new row is added. This upsert feature allows the LSSE team to reopen, edit, and re-complete forms, without fear of redundancies.

"GoFormz has changed the way we do business."

Prior to GoFormz, collecting, renaming, and storing geographical survey photos was an extremely monotonous and involved task requiring significant amounts of time. With mobile forms and *Automated Workflows*, once a form is completed in the field, it is dynamically routed to an existing or new project folder within OneDrive. Within that folder, subfolders store forms by their project date, as well as images extracted from the form. These images are then named based on the survey ID and the photo number (e.g. 'Survey 1234567 - 1'). This process has greatly streamlined LSSE's form and photo processing. "Because the photos are already renamed it saves me hours and hours of time."

Similarly, embedded form logic like Required fields has helped to enforce the capture of critical data. "If it's required, the field turns a certain color so that users know that it's mandatory, so that I get what I need," Gwen explained. "Pulling field data together was once a pain, and now it's not."

RPR forms

On a daily basis, Lennon, Smith, Souleret Engineers oversee construction projects, requiring them to complete a large number of reports from the field. These reports record important

construction site features, including asphalt elements and utilities like water lines. Using GoFormz, field reporting is drastically simplified. Once a form is completed in the field, it is instantly emailed to a supervisor, who then approves the report by signing it. Finally, an upsert function is used to update a log detailing what project documents have been completed, allowing LSSE team members to go back and view what has been submitted for each location and project.

Municipal hurdles

When working with factors like stormwater, LSSE teams must document specific regulatory details. These projects require field teams to collaborate with the Department of Environmental Protection (DEP), which frequently releases new documentation requirements. Using GoFormz, uploading and using new DEP forms is easy for Gwen and her team, "What I do is I load those new forms into GoFormz, so they look exactly like the DEP's forms, and then I just make them completely fillable and easy for us."

Surveying, simplified

When working in Geographic Information Systems (GIS), collected

mages must be taken from completed field reports and uploaded into an asset management portal. GoFormz automates this process, extracting photos from a form and uploading them as soon as the form is completed. For example, LSSE teams must record different sewer and water systems throughout an area, using specific survey equipment to capture the geographic location. GoFormz is used as the mobile data capture front-end of this process, capturing project information and photos which are then used to update a data set and the asset management portal. This process also leverages calculations to populate the specific inverts and slopes of features like pipes. "It saves the engineers tons of time."

Record-keeping, made easy

GoFormz has also helped to simplify the storage and accessibility of Lennon, Smith, Souleret Engineers' completed forms. Using automated dynamic features like Tags (which use form data like project name or ID to label completed documents), forms can be more intuitively located and accessed.

"GoFormz organizes forms for us, so people don't have to go hunt and search for forms."

Compelling results

With over 7,000 mobile forms completed, Lennon, Smith, Souleret Engineers have achieved meaningful, sustainable efficiencies and results. While Gwen's team once struggled with processing, locating, and finalizing forms, using GoFormz has streamlined and expedited these tasks. "Now a form goes right to their inbox, so they can sign it and it then goes onto the network." This simplified process is further complemented by the automation of photo renaming and Cloud storage. "The simple renaming of the photos saves me eons," Gwen explained. "It's saved me, I'm sure, thousands of dollars."

What's next?

Since implementing GoFormz, Lennon, Smith, Souleret Engineering's collection of digitized forms has grown rapidly from one to thirty. Next, the LSSE team plans to digitize their internal forms, including personnel forms and tickets, to further streamline their operational efficiency.