

Plans, Papers and Pipelines

How Oil and Gas Companies Can Go
Paperless and Improve Workflows



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Introduction to Data for the Oil and Gas Industry

From ever-evolving regulatory and political scenarios to natural disasters, the oil and gas industry has experienced some persistent challenges in recent years. These difficulties have forced upstream, midstream, and downstream oil and gas companies to adopt new strategies to sustain profits over time. While some companies look for ways to cut production and delivery costs, others are looking to innovative tools for managing their workflows and processes as a way to increase their efficiency and boost their bottom line.

Transitioning to a paperless data management system and embracing data mobility are two of the most effective ways for oil and gas companies to meet these modern challenges head on. By going paperless, companies can access the most updated and accurate information in the field, office, and beyond. This type of data mobility is a game-changer for companies that are looking for ways to create better workflows and processes to increase productivity and safety.

The key to going paperless without major disruption is to adopt a digital data management tool that is easy to use and integrate into your existing operations. By having such a tool, companies can drive productivity in the field and improve emergency response.

Benefits of Moving to a Digital Data Management System

Many oil and gas companies continue to rely on processes that routinely require paperwork to be filled out and change hands. However, these same companies are quickly finding out that it is difficult to keep physical paperwork updated and even harder to ensure that there is one true source of information for all parties to work from. This can lead to costly misunderstandings or mistakes that disrupt operations.

As most well-established industries make a shift to paperless operations, the oil and gas industry has slowly been embracing the benefits of digital technology for their data and process management. As the industry continues to face pricing and regulatory challenges, there has never been a more important time to digitize documents and adopt digital process models. In fact, a Deloitte report on industry outlook suggests that tomorrow's leading oil and gas businesses will need to adopt digital technologies to remain competitive in the industry.¹

Why Oil and Gas Companies Need to Go Paperless

Paper forms and physical blueprints are not the most efficient or effective way to store, track, and update data in the field. With multiple sources of physical data, uncertainties arise as to which data is the most up to date or accurate. This causes issues for engineering, procurement, and construction (EPC) companies that need accurate information to make decisions in the field and when emergencies arise.

Not having one source of accurate and timely information can also cause problems when it's time for EPCs to hand this information over to the owner. Owners need an accurate record of what has happened on the site during construction and operations. When detailed on physical paper, this information may be disorganized or simply incorrect, making it harder for owners to access and gain insights from it.



In the Oil and Gas Trends 2018–19 report, industry experts from PricewaterhouseCoopers recommend that companies in the oil and gas industry "double down on digitization" as part of their strategy to futureproof their business.² According to the report, the best place to start is by going paperless with digital data management and productivity software like PlanGrid.

The oil and gas industry will benefit many ways from going paperless. They will:

- **Save time** - With digital documents, you no longer have to go back and forth from the jobsite to the office to get the answers you need. Digital solutions make this information available on any mobile device or PC.
- **Stay organized** - It's very easy for physical paperwork to get lost or destroyed when it changes hands so frequently. With a digital tool, information is stored securely in the cloud, so you no longer have to worry about damaged or missing reports or blueprints.
- **Improve accountability** - By creating, storing, and managing your documents digitally, you have a clear idea of who has submitted or made updates to a report. You no longer have to decipher handwriting or track down who had the documents last. Everyone is held accountable for their contributions, which are tracked in the digital system.

Data Mobility and Its Importance for Field Workers

Once you've gone paperless, your data becomes more mobile. And data mobility is essential for productive and effective work environment for field workers both during construction and operations.

When workers are on the rig, they will be filling out and submitting field reports.

With a digital data management tool in place, workers can immediately upload their reports into the centralized system.

This information will be available to anyone with access to it.

Mobile data plays an important role in decision-making both on the job and in emergency situations. Everyone on your team can access the most up-to-date documents, notes, and other information from their mobile device or desktop computer. This information is immediately available if there is an issue or question in the field. Also, when rushing towards a possible emergency, instead of running back to the office—workers can quickly pull up pertinent information. This saves time while limiting potential damage or downtime.

4 Ways PlanGrid Can Improve Workflows and Processes

From EPC companies who are building a drilling rig to downstream oil and gas company owners who want a seamless turnover process, PlanGrid can help you improve workflows and processes during construction and facilities management. PlanGrid is a construction productivity software that converts your paper drawings and documents to digital sheets. This digitization enables team members to store and access the most up-to-date and accurate information from anywhere on their mobile device or computer.

PlanGrid helps EPCs and owners of oil and gas companies improve their business processes in 4 essential ways:

1

Drives Field Teams' Productivity

Uptime is a key concern for downstream oil and gas companies. To drive and maximize revenue, plants have to be up and running around the clock. Any miscommunications or issues that stop a plant from processing crude oil into products mean a disruption to that revenue, which impacts the company's bottom line.

PlanGrid helps drive field team productivity by optimizing uptime and limiting such disruptions. With PlanGrid's easy-to-use platform, field teams can submit maintenance reports and access reference documents right from the jobsite. Field workers can also create issue reports directly in the field to ensure that any problems are addressed swiftly.

2

Enables More Effective Response to Potential Emergencies

Safety is a major concern for oil and gas companies. An on-site injury can be devastating for a plant. That's why everything at the plant is engineered for the safety of the personnel and facilities. If team members don't have all the information they need in an emergency, there can be disastrous consequences.

PlanGrid empowers teams to effectively respond to potential emergencies. Workers can run toward the problem with the proper information in hand instead of going back to the office to collect the necessary documents. This saves time when every second counts.

3

Empowers Teams to Work from Accurate Information

Concerns about the environment are driving an increased focus from plant employees, leading to multiple dedicated teams. These teams need the most accurate information about the build and operations in order to address concerns and prevent emergency situations.

PlanGrid empowers the entire team to work from the most accurate information. With a living as-built that gives the most up-to-date information about every part of the plant, owners can reduce the chances of equipment failure or environmental hazards that may spark an emergency.

4

Allows You to Control Access to Sensitive Material

Owners and EPCs need to know their project information is secure. Many may worry about their intellectual property being stolen or even potential terrorist threats. Oil and gas companies must know and must control who can view and edit sensitive material.

PlanGrid enhances information security by giving owners and EPCs the ability to limit access to plant drawings and other sensitive information stored in the system. Owners can add administrators and control who accesses what information. PlanGrid also maintains SOC 2 Type 2 Compliance to ensure customers' data is secure, private, and resistant to theft.



How to Drive Productivity with PlanGrid

The more supported and knowledgeable a team is in the field, the more productive it will be, enabling a more positive impact on the company's bottom line. PlanGrid was designed to offer essential tools that empower the entire team to access, update, and manage documents, drawings, and other information in real time.

Here are some of the most important features that PlanGrid offers to help drive field productivity:

Sheets

Sheets is the main area in PlanGrid where a user can access all the team's Piping & Instrumentation Diagrams (P&IDs) and Isometrics. Much like Google Docs, the sheets can be updated or marked up in real time from the field. For instance, let's say a field worker notices a pipe that needs a patch plate added. Instead of going back to the office to edit the master sheet, they can make the edits right in PlanGrid, making these changes immediately visible to everyone who has access to the document. The Sheets feature also keeps track of versions so that team members can be sure they are working from the most current set.

Field Reports

When operators are working on a rig, they routinely need to fill out and submit reports. PlanGrid Field Reports get rid of the paperwork. With this tool, team members can select and fill out custom forms and templates including work orders, daily inspection reports, and safety reviews and submit them directly from the field. Users can share reports instantly from the portal or invite others to receive automated email updates of the days' reports. Having this information immediately available in PlanGrid saves hours each week of manual report filing and tracking.

Document Management

With PlanGrid, there is no more shuffling through papers or running back and forth from the office to the field to get the necessary documents. PlanGrid provides a central information source that allows workers to view and update the most up-to-date documents and drawings right in the field from their mobile device. The version control system also ensures team members are looking at the most updated version of the maintenance schedule, inspection report, or other field documents.

Tasks

PlanGrid also makes it easy to create and organize punch lists. Users can keep a running list of tasks to assign to workers while they are tracking through to completion. Team members can create new tasks right from their mobile devices as they walk the site. By opening up the drawing and then zooming in on the problem area, users can create a new task and enter all the necessary details for their team to reference, including annotated images. Team members can then quickly access these tasks and update progress or add notes as needed.



Hyperlinks

Hyperlinks make it easy for you to navigate the project documents on PlanGrid. Once you upload your drawings, PlanGrid will automatically link the detail callouts to the appropriate locations. The links are highlighted, and you can tap on them to see a quick preview of the linked drawing. Team members can add their own hyperlinks to highlight valuable information. They can add this information in the field from their mobile device or from their computer in the office.

Turnover

Once the project has been completed, the EPC needs to hand the project data off to the owners for ongoing operations and maintenance. PlanGrid makes this process simple and effective. Users can export all the necessary elements into a living as-built into any file type. Since the data is digital, there is no concern about missing, inaccurate, or disorganized information being turned over to the owners.





Conclusion

Just as companies in the gas and oil industries need to continually improve extraction and production processes, they also need to periodically rethink operational processes and adopt new technologies to improve operations and the company's bottom line. Investing in digital tools that make data more mobile while improving processes and workflows is an easy decision that can have a significant impact.

All the major concerns that oil and gas companies have regarding operations are addressed with PlanGrid. PlanGrid helps drive field team productivity by allowing workers to submit any necessary information—from maintenance reports to reference documents—directly from the field. With all the up-to-date information stored in one place, teams can better respond to potential emergencies as they will have all the timely and accurate information they need to make an informed decision. What's more, PlanGrid allows you to control who has access to sensitive material so that important data doesn't end up in the wrong hands.

PlanGrid allows upstream, midstream, and downstream EPCs and owners to quickly and easily submit field reports, make P&ID annotations, maintain punch lists, and manage documents from the field. With a deliberate rollout of PlanGrid, oil and gas companies can avoid disrupting operations and be on their way to driving higher productivity and profit.

References

- [1] [2019 oil, gas, and chemicals industry outlook](#)
Duane Dickson, Duane Dickson, 2018
- [2] [Oil and Gas Trends 2018-19](#)
Giorgio Biscardini, Reid Morrison, David Branson, and Adrian Del Maestro, 2018



See a Live Demo

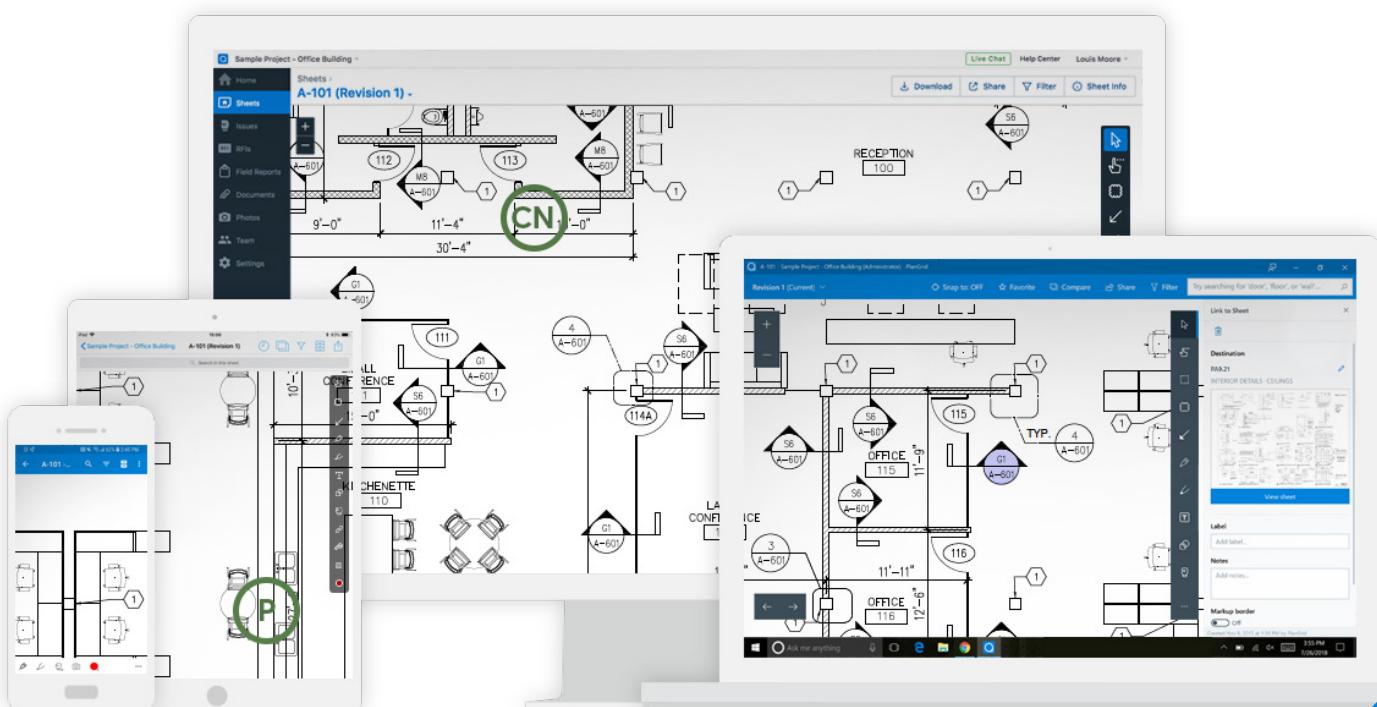
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PlanGrid's Construction Productivity Software is the easiest and most cost-effective way to get substantial return on your investment in construction mobile apps. By using PlanGrid you will:

- **Complete projects faster:** 90% of project costs occur in the field and not in the office. This includes wasted time and project delays. With PlanGrid, you can reduce wasteful trips to the trailer and time delays, while eliminating costly rework. PlanGrid also allows for faster collaboration and communication.
- **Reduce costs:** PlanGrid allows you to optimize productivity in the field, which eliminates time waste that causes project overruns. By completing projects early or on time with PlanGrid, contractors will benefit from reduced costs.
- **Win more bids:** The best way to bid more competitively is not just to track costs so you can provide more accurate estimates — it's to improve your overall productivity. PlanGrid's Construction Productivity Software will allow you to increase productivity so you can reduce costs and win more bids.



PlanGrid is construction productivity software used on more than 1 million projects across 90 countries. Our software helps teams collaborate more efficiently with access to an intelligent record set on any device.





Used on more than 1,500,000 projects around the world, PlanGrid is the first construction productivity software that allows contractors and owners in commercial, heavy civil, and other industries to collaborate, collect, and share project information from any desktop or mobile device through the entire project lifecycle.

PlanGrid increases project efficiency by streamlining document management, providing construction teams with easy access to all project information from any device, and enabling seamless collaboration within teams.

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