



KYRO: Construction Management Technology Platform

Finish Work on Time. Get Paid on Time.

The Market

The increasing demand for mission-critical infrastructure is driven by a number of long-term trends, including the rise of electric vehicles, modernizing an antiquated power grid to accommodate changing mix of energy sources, upgrading aging transportation and communication infrastructure, and managing the effects of [billion-dollar natural disasters on infrastructure](#). The recent passage of the [Infrastructure Investment and Jobs Act \(IIJA\)](#), coupled with the [Inflation Reduction Act \(IRA\)](#), will result in nearly \$1 trillion being invested in US infrastructure over the next 5 years. This funding will be used to upgrade and expand the electric grid, improve broadband connectivity, and revamp transportation lines and transit points.

In order to effectively utilize and allocate these large investments, infrastructure companies are seeking software solutions to address inherent issues around broken workflows and delayed payments. In fact, the bill includes funds earmarked to accelerate the [adoption of digital technology](#), especially in the transportation sector. This is in tune with the growing consensus that construction management technology is essential to improve operational and financial efficiency.

The Challenge

Often plagued by communication silos, clerical errors and manual book-keeping, [more than 95% of big infrastructure projects get delayed](#), causing massive cost overheads. These delays end up increasing invoicing periods and net working capital for contractors. Close government scrutiny on infrastructure projects further requires companies to maintain proper documentation, the absence of which could lead to bureaucratic delays. All this leads to adverse impact on companies involved – large and small, local community based and global titans.

1. **Disconnect between field and office:** Very often, people in the office are not immediately aware of the work that has taken place on the field, which can lead to delays in communication. It is often the case that communication remains paper-based and cumbersome which delays feedback and decision loops. Construction oversight and safety reviews are not communicated and acted upon as quickly as they could or should be.
2. **Inefficiencies and Bureaucratic Culture:** Given that infrastructure industries are generally heavily regulated with active government oversight, there are significant needs for documented work, costs reports as well as proof of adherence to quality and safety protocols. A lot of these documents are currently maintained offline and are difficult to access when required.

3. **Delayed and Inaccurate Invoicing:** Typically, the Days Sales Outstanding (DSO) for contractors is anywhere between [60 and 120 days](#). Additionally, many contracting companies usually take around 4 to 10 weeks to invoice clients even upon completing jobs, mainly owing to uncertainty over the status and lack of supporting information and documentation of the work done on the jobsite (like relevant POs, WOs, details of the work completed for the invoice and such). In some cases, the communication silo causes invoices to be generated with incorrect job codes, leading to rejections and rework, thereby resetting the DSO. This combination of broken workflows, incorrect job codes and DSO can lead to further delays of up to 180 to 300 days.
4. **Effect of delays on Net Working Capital:** These issues can have a significant impact on a company's net working capital. Delayed payments can increase the need for working capital, leading to more borrowing and debt. Without a system to accurately track work done and correctly code invoices, companies may lose out on revenue and face financial difficulties.
5. **Adverse Impact on SMBs, DBEs and Local Communities:** While large companies generally may be able to withstand these workflow breakdowns and cashflow issues, the lack of systems and processes can be especially challenging for Small and Medium Businesses (SMBs) and Small, minority, and woman-owned businesses. These businesses, also known as disadvantaged business enterprises (DBEs) have poor access to capital and credit markets.

Another key issue that SMB and DBE companies face is the lack of scalable systems in place to handle their growing business needs. These businesses may lack the systems, records, collateral, credit history, and financial resources required to qualify for traditional bank loans, making it difficult for them to secure the capital needed to grow and thrive. Traditional financial systems may not be equipped to handle the unique needs of DBEs and as a result, these businesses may struggle to expand and scale their operations and to meet their liquidity needs. Workflow breakdowns and cashflows issues makes matters worse and creates cascading issues for these businesses.

What the Industry Needs – A Robust, Simple, Synchronized Technology Platform

The different issues in construction are thought of as separate problems, and there are stand-alone solutions for each. The current landscape of software solutions is a mixture of products that address specific issues (think Levelset for invoicing, FieldWire for jobsite visibility), and products that are industry-neutral (think QuickBooks Time for time tracking or ClickUp for project management). While these products may solve some pain points, they are each used by different departments within the same company, with limited possibilities for integration. In many ways, the communication silos between different functions still exist and may even be exacerbated by such point products.

To address this, the infrastructure industry needs a simple but robust software that brings different departments onto a single platform and addresses issues synchronously. For instance, if the accounts receivable division is on the same system as the project management



team, it allows for a shared understanding of a job's status, leading to shorter confirmation loops, less errors, and quicker invoicing.

KYRO Solution

KYRO is an AI-powered construction management technology platform that aims to solve two of the biggest problems in the industry - broken workflows and resulting financial issues. Specifically, it addresses the mission-critical infrastructure sector by providing a technology platform to manage projects in this field. Some key offerings of KYRO include:

- An intuitive mobile app to bridge the gap between field and office operations
- Enhanced communication channels that allow messages, media and smart notifications
- Real-time dashboards that intelligently analyze risks and visualize data
- Automated invoicing modules that eliminate coding errors on timesheets and invoices
- Access to a marketplace of credit capital lenders for SMBs and DBEs

Why KYRO Originated

KYRO was founded by construction industry veterans who have firsthand experience with the inefficiencies and problems that plague the mission-critical infrastructure industry. Perhaps for the first time, a technology company focused on the construction industry includes a world class AI engineering team in the founding team. The KYRO founding team recognized that the root of these problems lies in the disconnect between field and office operations. Without timely and accurate field updates, and with errors in timesheet coding for work done in the field, invoices created in the office were often inaccurate. This led to unpaid invoices, increasing DSO, and increasing the need for working capital. To effectively address cashflow issues, it was important to address the underlying workflow problems as well. KYRO was thus conceptualized to provide this unique solution.

Benefits of Using KYRO

1. **Bridging the field-office gap using AI:** KYRO's technology platform allows project teams to stay connected to the field, even when they are in the office. With real-time dashboards and instant communication channels, issues can be addressed immediately, and upcoming ones can be dealt with proactively. Also, with the help of AI, project timelines can be better optimized by automated scheduling of different project types (imagine creating timelines and schedules for re-laying 500 miles of electric transmission cables in just under a minute). Intelligent risk alerts for impending delays or weather forecast warnings can help companies take preventive measures and avoid delays.
2. **Intuitive mobile app for Jobsite Workers:** Field employees use a simple mobile app to log time, raise requests, or submit reports, and office employees are instantly notified, enabling them to resolve any issues quickly. This means field employees can spend more time on the job and office employees have the accurate and timely information



they need to generate invoices. Office teams feel that they are “*in the field with the construction crews*” while actually sitting in their office.

3. **Historical Documentation Storage:** KYRO can eliminate potential bureaucratic delays by storing the history of essential documents (such as proof of compliance and spending reports) along with work and time-log records. All of these are easily searchable and accessible at any time, ensuring that no record or document is ever lost.
4. **Timely and Accurate Invoicing using AI:** KYRO allows for rapid invoice generation and client approval, saving precious time. With the help of Optical Character Recognition (OCR), one can take key points of a work order such as the job code and timelines from just a printout or a digital copy. These can be intelligently stored and tracked throughout the project, eliminating the possibility of clerical errors. Since the system tracks every update from the field, any discrepancies during the process can be quickly ironed out by referring to the project's history. Timely invoicing will lead to a significant reduction in net working capital, as a steady DSO would mean a less borrowing and lower debt.
5. **Marketplace for Access to Credit Capital:** KYRO will provide SMBs and DBEs with access to a credit capital lending marketplace. A strong history of high-quality invoicing achieved through this system will help SMBs and DBEs improve their chances of raising capital through a suitable lending partner.
6. **Empowering Local Community Businesses, SMBs and DBEs:** Unlike larger businesses that can raise money during a cash crunch, SMBs and DBEs, struggle to do so. Their processes are broken, and there is a general lack of trust in them from banks and lenders. KYRO can help these SMBs and DBEs earn the trust of lenders. By using KYRO, SMBs and DBEs can improve their processes and show consistently tangible, high-quality output. Coupled with a record of prompt invoicing and improving cashflow, lenders would be more inclined towards providing them with the capital they need to grow.

Penetrating a nascent market; solving real problems

Many in construction still rely on manual work to keep track of projects and accounts, making the industry notorious for delays and inefficiencies. Throw in all the red tape and bureaucracy, and a lot of people are left disillusioned by the industry. This has caused a labor shortage in construction, which further aggravates delays. The best way to improve efficiency here is to use software that can improve field visibility and automate manual tasks.

With a growing awareness of the benefits of construction technology, coupled with the injection of funds from the IIJA and IRA, now is the ideal time for a construction software product to penetrate a nascent market, establish staying power and be ready when the market grows over the years.



KYRO, built by experts in both construction and AI technology, can be the perfect tool for first-time tech adopters. The system is simple to use and navigate, and those new to tech need not search for multiple options for each department. Users can reap the benefits of improved processes, better execution and positive cashflow all within a single system, paving the way for rapid growth.