



Open APIs: A Lifesaver in Construction's Digital Age

How open APIs can keep you from drowning in apps.

PROCORE[®]

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As a forward-looking, tech-friendly GC, you're looking for efficiencies wherever you can find them.

To your credit, you've done a little research and picked up a drawing tool here, an inspections tool, a tender tool, and a financials tool. You've embraced the future—or The Present, as it's now called—and are keeping abreast of ever-changing best practices.

But your thorough collection of unrelated solutions means your app footprint (your collection of various siloed apps) is all over the place—a patchwork of non-integrated construction management tools that don't talk to each other and if they could talk to each other, they would be arguing.

Basically, you are where you started, but with less paper and more logins.



I. When there are too many apps, there is too much to manage.

According to Intermedia, the average company uses 14 apps company-wide.

This is one of the biggest pain points for a construction firm of any size (integrating the various single point software systems required to be successful). From accounting to project management to the different kinds of quality and resource planning systems, construction firms need to piece together copious applications to run the myriad of operational tasks necessary for doing business.

That requires juggling licenses, managing devices, providing support, and generally trying to wrangle the chaos of an already hectic day. Unfortunately, all too often, the siloed nature and inability of many of these programs to fully integrate leads to missed work and blown budgets—ultimately creating dissatisfied customers and potentially ruining a construction firm's carefully constructed brand.

Here are some of the issues that you are up against:



DATA SILOES

With so much copying and pasting, manual data entry, and rework, important data can get lost in transmission.



SECURITY ISSUES

When users are forced to remember a bunch of passwords, they get sloppy. And hackers LOVE sloppy passwords—76% of network intrusions exploit weak or stolen passwords.



DOUBLE ENTRY AND REWORK

Poor decisions based on unreliable and out-of-date information leads to an average rework cost that accounts for 5% of your total budget.



MULTIPLE APPS REQUIRE MORE IT EFFORT

According to [Gartner](#), 91% of IT wages are spent on maintaining siloed systems. Instead, you should be paying to implement, deploy, and make sure things get done.

By eliminating these inefficiencies with an integrated system, data is free to flow automatically amongst teams. This only increases the benefit that technology has on your productivity by reducing the amount of manual work required to keep the lights on.

IN CONSTRUCTION, WE NEED TO COLLABORATE IF WE WANT TO WIN—THAT'S THE BOTTOM LINE.

If your apps aren't talking to each other in a common language and on a common platform, it doesn't really matter how wonderful each individual application is—you're not taking advantage of the incredible efficiencies for which the cloud was created.

It's time to pull all those apps into a single integrated system and combine their collective, but disconnected strengths.



II. What is an open API and more importantly, why does it matter?

Open Application Programming Interface

It means that third-party developers can use proprietary code and data to create or integrate software that interacts with the original program.

ESSENTIALLY, IT'S A ROSETTA STONE FOR CODE—ALLOWING TWO SOFTWARE PROGRAMS TO COMMUNICATE AND INTERACT FREELY WITH ONE ANOTHER.

INTEROPERABILITY IS KEY TO YOUR SUCCESS.

When users are able to choose the right software for their company and integrate it with their favourite must-have applications, everything can work as a single, holistic unit. Construction firms can create an integrated software ecosystem that stores all the data required for running their company. As a result, users have real time access to the crucial information they need to get the job done—on time and under budget. Meanwhile, SaaS companies are able to maintain the quality of their core products while allowing experts in

hundreds of different platforms and devices to master what they do best.

ACCOUNTING INTEGRATIONS

As a project manager or accountant in charge of project success, how quickly can you gain insight into the health of your budget? Are you able to identify root causes of overruns resulting from RFI delays or change orders? With an integration between a project management platform like Procore, and a financials app like Sage 300 CRE or Quickbooks, you could have real time insight into where RFIs are likely to cause a delay. Field teams won't be forced to wait for the office to tell them whether they are within budget before moving forward—they have access to that information immediately at their fingertips. Decisions can be made faster and with more confidence, without having to contact accounting for financial information.

QUALITY AND SAFETY

With a seamless bi-directional integration between your project management tool and your quality and safety tools, saving time, money, and lives fits easily within the context of everyone's daily responsibilities. Quality and safety then becomes as effortless as attaching photos, linking specifications, and using a deficiency list tool to help sort quality observation issues before substantial completion.

DOCUMENT RETENTION PLANS

A solid DRP can be your best insurance policy. New technologies like Optical Character Recognition (OCR) are making it easier than ever to find the information you need, when you need it most. Similarly, a Procore integration offered by [SmartVid.io](#) is making photos and videos searchable by adding metadata, locations, and keywords to media attached to RFIs, inspections, observations, and deficiency lists. In the unfortunate case of arbitration, you will be able to find exactly what you need to prove your due diligence.



**III. If you build it,
will anyone come?**

In 2008, when Apple launched the iOS app store, product developers earned \$2.5 billion dollars within the first six months. Today, there are over 2 million apps available to Apple users leading to nearly \$50 billion dollars in annual revenue for developers worldwide.

IN OUR REALM, THERE IS A MYTH THAT CONSTRUCTION HAS BEEN SLOW TO ADOPT TECHNOLOGY. THE TRUTH IS THAT TECHNOLOGY HAS BEEN SLOW TO PROVIDE SOLUTIONS FOR AEC.

An open API industry approach would allow for a culture of greater productivity and faster innovation—extending success across the AEC ecosystem and bringing ideas to life on platforms that deliver the best experiences.

The bottom line is, when companies have the freedom to choose the right software for their needs and have it all function as an integrated system, all ships rise with the tide.

INNOVATION

Because open APIs are accessible to developers outside of your business, it is easier to attract new, and often unexpected, innovation by enabling your core business service to be “remixed” by others outside of your company.

EXPOSURE

Marketing and branding are typically not a strong suit for construction software companies. So leveraging the audience and reputation of other leaders in the industry provides easy exposure and co-marketing opportunities for your product.

ADDING VALUE

For existing providers, partnering in an open API environment gives companies the opportunity to provide added benefits for their clients. For example, a tender tool application interacts with users at the beginning of the project cycle. By leveraging the power of other leading solutions, users can find value throughout the entire lifecycle of the project.

Ultimately, the seamless experience creates a product so sticky, your users aren't going to want to leave.

AGC's Simonson compared multifamily construction with single-family construction in the years since the great recession.





**IV. More platforms.
Infinite opportunities.**

Procore's App Marketplace has been leading the charge in creating a truly open API. Offering integrations that allow platforms to seamlessly integrate and exchange data with any other technologies used at a particular firm. Users are even free to create their own custom integrations (to the delight of IT managers everywhere).

**WITH AN INTUITIVE ABILITY TO CONNECT,
THERE ARE ENDLESS OPPORTUNITIES TO
INTEGRATE WITH:**

- + Accounting software
- + Estimating software
- + Time-tracking software
- + CRM systems
- + BIM solutions
- + Payroll
- + Data warehousing systems
- + Any custom applications and features

Connecting all your applications means important data no longer gets lost in transmittal or falls through the cracks left between the assortment of programs used to run a construction company.

With over 1.4 million users, developers are exposing their brand and leveraging the tools Procore has already built for them to manage their project. There are currently over 50 apps in the marketplace and it is completely free for developers to participate.



V. Connecting the lifecycle of construction.

Now that your thorough collection of apps are integrated, your next winning play is to minimize your app footprint.

Having all of your data unified in one integrated system means nothing if it is cluttered with apps. Utilize this base system and use it to gain real insights from your best-in-breed systems. This integrated operating system will connect every stakeholder to the complete construction lifecycle.

THIS IS A REVOLUTION CHANGING THE WAY YOUR COMPANY OPERATES.

The incredibly rapid adoption rate of new software in AEC means companies can use cutting-edge technologies to create better quality and higher value builds. It is easier than ever to discover best practices for implementing the latest technologies and get tailored, operational simplicity and intuitive workflows that your teams deserve.

When your collection of cloud-based tools have been joined together in a secure operating system, you save time and money and boost your productivity.

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