Construction Project Management Software Buyer's Guide

Procore's Buyer's Guide provides you with a comprehensive overview of today's construction project management software offerings and delivers important buying criteria to help you select the best solution for your business.

Why Construction Project Management Software?

Your construction project is a constantly moving swirl of details you struggle to contain—at least it can seem that way on the ground. From a certain elevation, though, the fast-moving parts of the project become distinct and clear and obvious, and can be more easily managed and overseen. At that height, budgets and benchmarks are plainly visible, and the complete date is a bright mark on a timeline. Clarity rules.

Project Management (PM) software provides this elevated clarity and puts it in the right hands—those of your project teams. Real-time financials, shared drawings and specs, plain-sight benchmarks—cloud-based PM software synchronizes everyone's project view so you will all be, for once, working off the same page at the same moment; 24/7.

Choosing your construction software solution is a critically important decision, to say the least. A substantial investment in terms of cost, time, and resources, your software selection will also define the daily work culture and communication environment of your construction teams. There is nothing more important.

This eBook will provide you with a basic framework for evaluating and comparing the various tech solutions you will come across in your research. This includes:

+ Tips on how to identify your needs
+ Functionality aspects to assess
+ Specific tools and features to look for
+ How to evaluate the software company

This guide is broken down into the following:

Chapter 1

Self Assessment and Goals

Identify your project management pain points in order to properly align them with the best solution for your unique needs.

Chapter 2

Platform Basics

Understand the type, logistics, usability, cost, and security of the software candidate.

Chapter 3

Software Features

Learn the project management tools of the software candidate.

Chapter 4

Software Implementation and Support

Identify the onboarding, training, implementation, and support processes of the software candidate.

Chapter 5

Company Evaluation

Review the reputation, references, health, and growth of the software candidate.

CHAPTER 1

Self Assessment & Goals

Before you begin researching potential software solutions, you need to analyze the current processes you have in place to help you pinpoint areas that can be improved with project management software.

Use the following tips to help you identify your current pain points and needs:

Define the problems you need the software to solve

List your current pain points and needs and prioritize them in order of importance. Then decide which solutions are a "must" versus a "nice to have." You won't find a solution to your problem if you can't define the exact problem, or problems, you need to solve. This allows you to align your pain points with the correct software solution. For example, if your RFIs are constantly falling behind schedule, you know you need software with a dedicated RFI tool with responsibility assignment capability and automatic reminder notifications.

Define what type of software you need

Using applications that can be applied to anything, such as using general project management software to manage your construction projects, is like using a penny to tighten a screw when you really need a screwdriver. While the penny will get the job done, it won't perform at the speed or efficiency of the tool designed for the job. This is the difference between industry-specific construction project management software and generic project management software.

Consider your growth

Just because you don't currently need every feature the software offers, doesn't mean you won't utilize it or require it in the near future. When making the list of your company's needs, make sure to consider what the future may entail so that you don't end up with underpowered software that only solves half of your problems by year two or three.

Demo the software

Make sure that as many end users as possible lay their eyes on your potential solution—not just the software purchaser. This allows potential users to get a feel for the software and understand whether or not it will be the most helpful. Getting your team involved early will also give them a say in the selection process, making them more likely to use the product you select. Make sure these are solution demonstrations, not product demonstrations. Product demonstrations show flashy features and functions of the software that may have little to no relevance to your needs. You want a solution demonstration that clearly illustrates how the solution is superior in solving your unique business needs.

CHAPTER 2

Platform Basics

There are countless software platforms on the market offering a different solution to your problem. In order to locate which one is best for you, utilize the following functionality aspects to assess whether or not the software is right for you.

Ease of Use

The purpose of seeking this solution is to make your life easier. Don't equate more features with more use. Make sure the platform you select not only solves your problems, but is easy to use. It can be a robust solution, but needs to be intuitive and easy to learn to ensure your team will utilize it.

On-premise vs Cloud Server

One of the biggest decisions in selecting project management software is choosing the type of solution—client server or cloud-based. Below is a breakdown of each offering.

On-premise

Cloud Servers

On-premise	Cloud Servers
With this traditional model, you license software and run it on your own servers. When considering this model, be sure to account for the capital and operating expenses associated with deployment, operations, support, customization, integration, maintenance, and upgrades. Upgrades and maintenance are typically necessary, but require additional fees.	**This software delivery model is licensed on a subscription basis and is centrally hosted.** One of the biggest selling points for cloud-based software is the potential to reduce IT support costs by outsourcing hardware and software maintenance and support to the SaaS provider.
Expensive to maintain. Servers can also be expensive to setup and maintain. Hardware and software need to be purchased, installed, and maintained. Maintenance becomes costly when software and hardware need to be upgraded frequently.	**No maintenance cost.** No maintenance cost. Since cloud-based software requires no hardware, construction companies don't have to worry about the cost of acquiring, installing, maintaining, and getting their teams connected to their servers.
Time consuming setup. On-site servers usually require IT on-site personnel for installation and can take weeks or months to complete, plus potential delays with appointment availability and installation hiccups.	**Fast and easy deployment.** Cloud-based software is simple and almost instant to deploy. On-site technicians are not required to setup and no hardware is needed.

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On-premise

Cloud Servers

Limited storage. Servers do not have unlimited data storage. Upgrades can be costly and many times IT companies require their clients to upgrade software and even purchase new computers to maintain compatibility with required updates.	**Infinite storage space.** Cloud-based software offers more storage space without the hassle of upgrades and additional servers as businesses scale or require more data storage.
Complicated accessibility. Because of how servers are setup for security purposes, it can be difficult for subcontractors and affiliated team members to access the network. Dedicated servers typically only support certain operating systems and tend to have compatibility trouble with older software. Additionally, installed solutions are only available on the computer where they were installed.	**Flexible accessibility.** Cloud-based tools can be accessed anywhere, at any time, with any Internet-connected device. Anyone can access the software from a remote location to receive the information they need when they need it. Many cloud-based tools offer supplemental mobile apps, built specifically for iOS and Android devices.

Verdict

A construction project can only move as rapidly as the decision-making process of its team members. Limited accessibility to project data drastically inhibits the communication and collaboration required for timely decision-making and judgment calls. Team-based projects require seamless project collaboration, accurate data, and around-the-clock accessibility to that data for all project team members. For these reasons, and the ones listed above, cloud-based solutions win the battle against on-premise servers.

Security

Cloud-computing vendors have a unique opportunity to partner with elite data center providers that offer a secure and trusted backbone for their software. The beauty of having data security in the cloud is the ability to leverage the infrastructure of very large corporations primarily focused on securing customers' data and authenticating access.

Physical security measures for cloud-based systems are much higher than on-site server rooms. The servers are backed up on multiple servers, in various physical locations, with the same high-level security measures in place. Special sources of power and backup generators provide additional disaster security and stability.

Data Ownership

It is important to ensure that you, the client, own your own data and can obtain a copy of your data at any time. You'll also want an agreement for appropriate assistance in migrating away from the vendor should you ever decide to leave. Many software companies control their clients' data, so it's important to investigate before making a decision.

Cost

The cost involved in buying and using construction project management software varies based on the type of licensing model. Depending on how your software is deployed and the internal skillset required for supporting the software, there can be vast differences in the cost to acquire various capabilities. It is important to understand the benefits and drawbacks of each licensing model. Each model is broken down below.

SEAT LICENSES: Price is based on the number of individual users who have access to the software. When evaluating a seat license contract for construction software, it's important to determine how many employees and contractors will login concurrently.

NAMED ACCOUNTS: Companies that purchase named accounts must provide the actual names of those users, which are in turn linked to software login credentials. Companies purchasing named accounts may need to buy hundreds of user licenses, regardless of the frequency of the software usage by those licensees. In this scenario, it requires time, money, and effort to manage and adjust the named user licenses as companies grow and every time employees leave or join.

UNLIMITED USERS: Other solutions offer unlimited users for a fixed monthly or annual rate. By paying an annual fee, clients are free to authorize an unlimited number of users for concurrent login privileges. This model is ideal for giving all team members access to the software, and in turn, increasing and improving project collaboration and communication.

Verdict

In order to increase efficiency and productivity, anyone and everyone that plays a role in project development can greatly benefit from access to the software. Based on the cost implications of this scenario, unlimited users for a fixed monthly or annual rate offers the best scenario for expansion and collaboration.

Integrations

Superior project management platforms are more than just point solutions because they offer integration opportunities with solutions beyond project management tools, including: accounting, estimating, budgeting, and scheduling. Look for platforms with the flexibility to integrate with industry-leading technologies.

Mobile Applications

Because construction takes place on the job site and not in the office, it's vital that your software candidate has powerful, fully functioning, native mobile applications to maximize project efficiency to the fullest extent. With mobile applications, professionals can retrieve real time project data around the clock from any location with their mobile device. Teams no longer have to rely on outdated and slow virtual private networks (VPNs) to manage and collaborate on construction projects. Team members now have the power to review, edit, and share up-to-date project information with others in a matter of seconds.

Offline Accessibility

Since many job sites are situated in remote locations with no Internet connection, many project management tasks need to be achievable offline. Best in class software offers offline accessibility to project data and synchronizes all changes made offline once back online.

Multilingual Interface

Most SaaS companies have originated in the United States and few have a strong user base outside the US. But, if you are a global company, and have non-English speaking employees from a different geography, your software needs capabilities for internationalization and localization. Look for solutions that offer a multilingual interface.

Customization

If you require customizations, there may need to be some give and take by both parties. Most solutions offer customizations for workflows, templates, integrations, and reporting that come at an additional price. Make sure you determine your customization requirements before purchasing software to avoid unanticipated costs.

CHAPTER 3

Software Features

For buyers who just need to organize, schedule, and track a small project, there are plenty of spreadsheet-based products on the market. These products work well for smaller or single initiatives, but have limitations when it comes to collaboration, version control, and data latency issues with larger projects. To manage higher project volume and complexity, you need a proven enterprise-grade solution.

A solution should offer or integrate with software that provides the following features:

Mobile Applications

- Manage RFIs, submittals, and change orders as soon as they require attention—cut your turnaround time in half
- Mark up drawings, link RFIs, and drop punch list items to create Real Time As-Builts®
- Prioritize the most recent drawing set with automatic version tracking
- Access your project directory and schedule, and record meeting minutes
- Take photos and attach them to drawings and punch items
- Scan QR codes to quickly locate relevant submittals
- Record and view daily job site activities, weather, labor, and labor productivity

Project Management Basics

- Manage an unlimited number of projects
- Support multi-project and multi-department programs
- User permission system that supports client-controlled visibility based on permissions
- Control access to which projects each user can see
- Define and assign user roles
- Control access within a project

System Administration

- Permissions are role-based, and roles are configurable to the individual user level on a specific project
- A single user can have different permission levels within different projects
- A user can be assigned more than one role
- Permissions can be managed at the project level
- Templates can be applied to a new project for cost, document, process, and schedule management
- Project administrators can add multiple users to a project at the same time
- Project administrators can define what information users can view based on permission levels
- Administrators can reassign work from one user to another

Workflows

- Predefined templates for the common capital project execution processes
- Tool-based workflows for RFIs, submittals, and other common processes
- Notify users via emails and easy-to-read dashboards
- Time/date/user stamp, track, and archive all actions taken in the software
- Automatic overdue notifications to involved parties
- The ability to label items as private and only allow specified users to view

Document Management

- Unlimited document storage
- Track the author and the addressee(s) as well as when items are sent, received, and read
- Track file name, date uploaded, who uploaded it, and who downloaded it
- CAD file viewer
- Mark up capability
- Version control
- Support for all file types with a cloud-based viewer for DWG, PDF, DOC, XML, and images

Contact Management

- Central vendor contact database where all vendor companies and contacts can be stored
- CSV templates to import existing companies and contacts into the vendor contact database
- View the contracts of companies
- Mass email project information to one or multiple contacts

Scheduling

- View the most recent schedule from the field with mobile applications
- View schedule by day, week, month or traditional Gantt view
- Sort tasks by status: completed, in progress, and critical
- Ability to import from MS Project, Primavera, Suretrak, and other major scheduling tools

Reporting and Dashboards

- Real time reporting
- Scheduled reports for automatic email delivery
- Reports provided at the program and project level, and a subset of projects may be selected as part of that program
- Report viewing based on permission levels

Project Dashboard

- Comprehensive overview of entire project portfolio (percentage complete, ID number, start and completion dates)
- Project communication statuses
- Scheduling integration
- Real time notifications

Contact Directory

- Unlimited contact storage
- Share contact information with other team members
- Assign role or tool-based permissions
- Customize notifications

Drawing Management

- Real Time As-Builts (i.e., linking RFIs, dropping punch items onto drawings, creating markups)
- Automatic sheet linking from detail callouts
- Automatic sheet naming and numbering for fast uploads
- Mark up drawings with notes and annotations
- Version control
- Easy distribution
- Offline accessibility

RFIs

- Quickly create an RFI
- Easy accessibility and approval via email
- Automatic tracking and archiving of all RFI history
- Hyperlink or attach related documentation

Submittals

- Quickly create a submittal
- Attach related documentation
- Search filters (response status, type, or approver)

Transmittals

- Customizable transmittal form
- Track and archive transmittals
- Export capability (PDF/CSV)

Daily Logs

- Customizable logs
- Automatic job site weather tracking
- Archive and track daily logs

Timecards

- Time card filters (cost code and type)
- Real time tracking
- Export capability (CSV)
- Time entry from mobile devices
- Ability for each user to enter time for their crew

Meeting Minutes

- Track meeting dates, times, locations, topics, and attendees
- Track all meeting action items
- Distribute meeting agendas and post meeting minutes via email

Photos

- Efficient uploading and downloading of project photos
- Secure and unlimited photo storage
- Capture, store, and share photos from a smartphone, tablet, or computer
- Photo mark up and annotation tools
- Permission settings

Accounting Integrations

- Access to real time accounting data and project cost information
- Integration with leading accounting tools

Punch List

- Create, edit, and assign punch items
- Attach photos with markups to punch items
- Automatic overdue emails
- Drop punch items onto drawings
- Filter by status (open, closed, or pending)

Bidding

- Solicit and receive bids
- Bid packages with unlimited document storage
- Bid history and tracking

Interaction Between Documents

You are not only seeking software to serve as a central repository for all your project documentation, but to also organize that data. Sophisticated solutions have correlation functionality that allows you relate supporting information—plans, specs, photos, PDFs—via hyperlinking or attaching.

Reporting

Reporting is vital to keeping all involved parties on track and up to date on current changes. The software should be able to track, archive, and export all project data throughout the entire history of a project, including portfolio-wide data or details of individual projects. The software should be able to export report data to a PDF or CSV file to provide summaries for project executives and owners. Sophisticated platforms can also generate custom, activity-based reports specific to the information requested.

CHAPTER 4

Software Implementation and Support

Buying construction project management software, or any enterprise software, isn't enough to improve your business. The implementation and customer support must be timely, effective, and helpful.

Implementation

Make sure your solution not only solves your specific pain points, but is also easy to use. If it's too complicated to understand and implement, you will have an entirely different problem on your hands. A good indicator of usability is implementation and training time. If it takes six months to a year to implement and begin training, there's a higher chance that the software is not intuitive or easy to use. Look for software with an implementation requirement of days, not months.

Look for software with a clear implementation strategy with measurable goals, action items, and timelines that can be implemented quickly with an online learning system, support documentation, and live training sessions with a software expert. Look for software that will have you up and running quickly.

Customer Support

You need to be able to have your teams' questions answered in a timely and efficient manner in order for the software to be a contribution to project success rather than an inhibitor. Look into the support staff—are the service representatives US-based or do they use a third party also selling their competitors' software? You want software experts that know the software better than anyone else and can communicate clearly with you to solve your problems quickly.

CHAPTER 5

Company Evaluation

Expand your requirements beyond a product
standpoint to consider the reputation, development,
and growth of the software company.

References

Customer testimonials speak volumes about a SaaS vendor's viability, as customer satisfaction is often a clear indicator of long-term success. When you're trying to manage deployment risk, there's nothing more comforting than knowing you're not the first organization to have implemented the specific configuration you're planning. Read software reviews and case studies. Look for answers to the following questions:

+ Implementation (i.e., how long did it take?)

+ Solution performance (i.e., how well does the solution work, has it met expectations, and what kind of value have you derived?)

+ Uptime and reliability (i.e., is the system always available when you need it?)

+ Functionality (i.e., how comprehensive are the features, and how often are new capabilities introduced?)

+ Usability (i.e., are the features and functions easy to navigate, and were your users able to get up and running quickly, or was extensive training required?)

+ Support and responsiveness (i.e., how quickly does the vendor respond when you have a problem, and how knowledgeable and helpful is their service team?)

Investment in Research & Development

You don't want the software you just purchased to be outdated by next year and have to wait for the next upgrade to see enhancements. User feedback is one of the most valued inputs to the software development process. When customers have questions or concerns, it's vital that the vendor to spend the time to understand the root of the problem. Seek a provider that prioritizes the development of new features and improvements with user groups and events that invite customer feedback.

Seek out software that is constantly improving with new features and product updates. This is another advantage of cloud-based systems—you receive product updates seamlessly without having to purchase the latest version of the software or new licenses. Make sure the solution you choose does not make you pay to receive product updates and enhancements.

User-Focused Software Development

Development based on real customer feedback creates solutions that grow as the industry evolves, keeping it current and valuable. Software that relies on customer feedback for development has a very unique advantage of responding to your business more quickly, resolving universal system issues from a single code base, and soliciting feedback on platform enhancements.

True agile software platforms remain ahead of their competitors with respect to product advancements due to a focus on culling customer feedback and incorporating it into the development roadmap.

Scalability

Software that is scalable in design simply means that it can easily grow with your business, at minimal cost to you. Factors include customizations, number of users, current database structure, and inputs and outputs like reports and connectivity to your other database systems. Scalability is very important for small businesses, because they are dynamic in growth. No one wants to test, develop, customize, and train on software only to find out a year later you have outgrown and need to replace the solution. With proper planning at the time of purchase you can increase your chances of selecting a successful software experience.

Construction Software Shopping List

Determine your company needs, evaluate must-have features, and find the best solution to fit your business.

Buying Criteria	PROCORE'S PROJECT MANAGEMENT	Leading Candidate #1	Leading Candidate #2
PLATFORM FUNCTIONALITY			
Construction Operating System	✓		
Open API	✓		
App Marketplace	✓		
Dashboards	✓		
Insights	✓		
Directory	✓		
Unlimited Storage	✓		
Unlimited Users	✓		
Security	✓		
Cloud Based	✓		
100% Data Ownership	✓		
Native Mobile Applications for iOS, Android, and Windows	✓		
Offline Accessibility	✓		
Multilingual Interface	✓		

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Buying Criteria	PROCORE'S PROJECT MANAGEMENT	Leading Candidate #1	Leading Candidate #2
PLATFORM FUNCTIONALITY			
Customizations	✓		
SOFTWARE FEATURES			
Drawing Management	✓		
RFI Management	✓		
Submittal Management	✓		
Punch List Management	✓		
Daily Log Management	✓		
Photo Management	✓		
Transmittal Management	✓		
Document Storage	✓		
Document Sync	✓		
Change Events	✓		
Bidding	✓		
Specifications	✓		

Buying Criteria	PROCORE'S PROJECT MANAGEMENT	Leading Candidate #1	Leading Candidate #2
SOFTWARE FEATURES			
File Types	✓		
Scheduling Integration	✓		
Custom Reporting	✓		
Email Tracking	✓		
Directory Management	✓		
Time Card Management	✓		
Meeting Management	✓		
Permissions Management	✓		
COMPANY EVALUATION			
Quality References	✓		
Investment in Research and Development	✓		
User-focused Software Development	✓		
Continuing Education	✓		
Unlimited On-Demand Training	✓		
Software Certifications	✓		

About Procore Technologies, Inc.

Procore helps firms drastically increase project efficiency and accountability by streamlining and mobilizing project communications and documentation. This real time data and accessibility minimizes costly risks and delays—ultimately boosting profits.

Using our award-winning suite of project management tools, over a million registered Procore users across the globe manage all types of construction projects including industrial plants, office buildings, apartment complexes, university facilities, retail centers, and more.

For more information or to schedule a free demo visit **www.procore.com** or call **866.477.6267.**
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