

Selecting an Online Construction Management Service

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Today, contractors need to do a lot more with a lot less. In this competitive environment, many look at online (web-based) construction management systems to make decisions faster, automate their documentation and reduce costs.

While most contractors use email to send cost estimates, schedules and reports, there is no guarantee that email recipients receive the latest information or have immediate access to the messages. Given the nature of construction, email materials (and their corresponding logs) can be out of date soon after they are sent. Materials can't be updated in real time and outstanding items can't be easily tracked. This uncertainty about the status of information mirrors the problem with faxes, which can often be garbled, mislaid or misdirected, causing confusion and delay.

Benefits of Online Construction Management Systems

Online systems, on the other hand, use web sites to give users an identical view of the latest information. The systems also maintain a date-stamped log of all Requests for Information (RFIs), Construction Change Directives (CCDs), Architect's Supplemental Information (ASIs) and the like, eliminating confusion about whether (and when) users received the information.

Online systems transfer the responsibility for access to those who need to act on the information. All users see identical information, making it possible to resolve issues quickly. Decisions are automatically documented online, eliminating the problems that occur when key information is not faxed or emailed in a timely fashion.

Web-based construction management systems also eliminate the need for onsite staff to constantly expand and reformat contract-administration spreadsheets, a time-consuming and error-prone process. Online systems provide the user with a simple standardized form to input and submit data. A superintendent, foreman or project engineer can directly input and submit information without waiting for help from support staff.

Because much of the communication traffic is either generated by the contractor or requires action by the contractor, contractors play an important part to play in identifying and promoting online construction management systems to improve efficiency. *Whether* they buy and *what* they buy affects their productivity and profitability, and the success of the project.

To ensure a system fits their needs and provides the greatest value, contractors should participate early on in the selection of an online service, much as they do in the design phase of a design-build or negotiated project. Contractors choosing an online system

should, however, be prepared to face a bewildering array of options, ranging from high-end, multi-faceted applications to simple focused offerings.

Contract Administration: the Appropriate Application

To decide *whether* to use an online construction management service, the contractor must know which processes are best suited for online activities.

The most effective systems automate routine and repetitive tasks (e.g., RFIs, CCDs, ASIs). Depending on the project's size, there can be several hundred questions and directives. Routine questions, which often involve design changes to solve field problems, require rapid responses from architects and designers. With an online service, the contractor can get the quick responses needed to move projects forward, keeping delays and any cost increases to a minimum. The information is automatically updated online, keeping everyone up to date.

Effective online systems also make it easy to monitor the cycle of approvals from the architect or designer to the contractor to identify situations where information is delayed.

Additionally, online systems can store reports, memos and correspondence, although these items are normally secondary to the high-traffic communication areas (e.g., RFIs) that keep a project on schedule and minimize increased costs.

Selection Criteria

Having decided *whether* to use an online system, the contractor must decide *what* to use.

When selecting a system, four of the most important criteria are:

- Simplicity
- Ease of use
- Focus; and
- Flexibility.

Simplicity – Generally construction personnel prefer tools that look simple and are simple to use. Field superintendents and foremen need a system with a carefully designed user interface to input information with ease. If the system looks complicated, field personnel are less likely to use it.

Some online systems, however, offer a bewildering array of links and choices that make the user's job more difficult. Such systems, which may have been designed for big utility or transportation programs with large technical staffs, are often impractical for individual building projects.

Ease of use – The system must be intuitive and easy to use. It must mirror the way the construction team communicated for years and not require the teams to learn a new way

to communicate. It must employ familiar methods for formatting and presenting information.

If users can virtually teach themselves with little or no training, they are more likely to try a system and discover its advantages. With a complex system that uses unfamiliar ways of presenting information, team members are likely to reject it and revert to other, more labor-intensive (and costly) methods.

Additionally, the online system must preserve the private exchanges of information that occur between contractors and subcontractors or architects and designers. To protect that privacy, avoid cross-communication and prevent unauthorized approvals, online systems should have pre-set communication paths that users cannot change. The more confident users are that the right people are accessing the information, the more likely the system will be used, reducing costs.

Focus – A system should focus on the areas where it can make the most difference (e.g., routine, repetitive tasks) and ignore – or link to – other applications that are needed less frequently (e.g., CAD drawings and schedules). The first online systems attempted to do too much. They were too complex and difficult to use, making many contractors reluctant to use them.

Flexibility – Finally, the online system needs to be flexible enough to accommodate projects using the traditional structure (architect, general contractor and subcontractor) as well as jobs with multiple prime contractors that provide and receive information without overall control from a general contractor.

Thanks to the advances in online construction management services, contractors can now select the appropriate system to minimize delays, reduce workloads and lower overhead costs. However, it is essential that contractors become involved early in the selection of an online service. Small to mid-sized companies using online services for the first time will find this approach especially important.

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Sampson is president of Richard Sampson Associates, developers of the Construction Communicator™ online construction management service. For more information, visit www.constructioncommunicator.com.