a. | TECHNICAL TIP

Concrete in the Cloud

By Jason Myers

he world is becoming more and more connected and it was only a matter of time before we saw it in the concrete industry as well. In Northern California, most of the major ready mixed suppliers have developed computer website programs and online applications that are accessible from smartphones and internet-connected devices. For the past couple of decades, the internet has been identified as the cure for all of the world's ills. Through the evolution of connected technology, we finally see it making sense for concrete applications. This article discusses the advantages and disadvantages of the features that are being used in existing systems and makes recommendations for additional refinements.

ORDERING

These concrete ready mixed applications can save time in ordering concrete and then making sure orders are correct. Several of the apps allow you to order, modify, and verify orders online. Rather than calling into the concrete plant dispatch and placing an order, the online app allows a quicker and more efficient way to get orders into the system and thus a faster turnaround for the dispatchers. This also

minimizes the chance of human error because of mistyping or getting the wrong mixture components ordered. Many of the apps offer ways to directly text dispatch so that once the order is setup, modifications can be made in the field without having the full job folder with you. These apps allow for the order to be reviewed at any time so people in the field can easily see what is ordered and the details of the order whenever needed.

TRACKING

One of the biggest strengths of these online tools is the truck tracking ability. The days of calling concrete dispatch and the dispatcher stating, "the truck was batched 5 minutes ago," and wondering if that was true or not are gone. Now, the dispatchers know that whatever they say is tracked and easily verifiable. The tracking ability is also beneficial in congested urban environments for finding a lost truck or sending a laborer to the opposite side of the jobsite to flag a driver down that does not know the shotcrete pump location. This also helps if you are waiting on a truck and you can see its exact location to know if it is 5 minutes or 30 minutes away. One of the apps provides

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additional information on the specific load including temperature, slump, and revolutions of the truck. Like many real-time information systems, there are sometimes gaps or discrepancies in the system and so you must be able to read beyond the face value of the information. Other convenient features are the ability to review the production graphs and availability of tools to verify delivery. With a quick glance, one can verify if the concrete delivery intervals match the requested spacing or to see if one of the concrete mixture components is off and needs to be modified. Often at the end of the day, you hear from the field about all the delays that they had, and when you dig into the supplier data, you find the trucks were emptying faster than the expected rate of delivery.

BILLING

One of the areas that I need to explore more and potentially use more often is the post-production portion of the apps. This is also were you get the most variation in the capabilities of the various concrete supplier systems. One allows for quick generation of invoices as well as the ability to review concrete tags within a day of the placement. This allows for a quick copy of any missed tags as well as an easy way to verify invoices. Lien releases can be requested and generated almost instantly.

While the available apps are optionally provided by the ready mixed supplier to provide and integrate into their system, they are certainly a step in the right direction. All the online systems I have seen are user-friendly and do not have a large learning curve. These apps are of value to both the office and the field. We're finally seeing the promises of connected technology for ready mixed suppliers truly being beneficial for everyone involved in the concrete construction industry.



Jason Myers received his bachelor's degree in civil engineering from California Polytechnic State University, San Luis Obispo, CA, and his MBA with an emphasis in project management from Golden Gate University, San Francisco, CA. Myers started his professional career working for an earth retention subcon-

tractor where he learned the importance of budgeting, scheduling, and client relationships. Also during this time, he was introduced to the use of shotcrete and its applications. After working for a general contractor for a couple of years, he realized that he enjoyed the tighter knit of working for a subcontractor and the ability to construct multiple projects on a tighter timeframe. Myers also enjoys the process of handling most of the procedures that go into constructing a project rather than seeing only a small portion of the process. Myers joined Dees Hennessey in 2004 and has been a part owner of the company since 2007. He currently serves as the Vice President of Operations as well as the Safety Director. Myers is Chair of the ASA Membership Committee and a member of the ASA Board of Directors.

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