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Member Communication Experience

A LOOK AHEAD AT TOMORROW'S TECHNOLOGY-DRIVEN OPERATIONS

It can be hard to keep up with the heavy equipment industry these days — new excavators and wheel loader models with new options, gadgets, and updated features are popping up at a more frequent pace than they once did. It can be easy to lose track of these developments, and some new machine options may go unnoticed by the

It's no secret that emerging technologies have improved the compact equipment industry. But what's next?

Keep in mind that this future is one in which innovation will coexist side-by-side with conventional machine and technology offerings. Ultimately, business owners and contractors will have a variety of choices for which types of solutions they incorporate into their operations, and at what time they do so.

Today, the industry is in the connection phase. One-way telematics, remote operating capabilities, and software-as-a-service (SaaS) dealer offerings have become commonplace, and these solutions continue to improve over time. Business owners have become comfortable with telematics and using

operation.

Within 3 to 5 years, the industry is expected to enter an engagement phase, where semiautonomous equipment operation becomes the norm. The growth of augmented reality (AR) technology in the consumer and automotive sectors will also increase in popularity and provide more opportunities for

cloud ecosystem of information that will provide incredible opportunities for multiple-machine coordination and connectivity.

Throughout each of these phases, operators and business owners will see continued improved performance and better oversight into the inner workings of their companies. In addition, this movement toward deeper connection and autonomy will transform how the industry thinks about jobs, recruits and retains employees, and how construction operations are scaled. While the unknown can sometimes feel uncertain, this as an exciting opportunity — a true transformation of the industry.

Connection Phase: Hardware

Business owners can't be on every jobsite 24/7 and need an easier and more precise view of what's going on across their operations. They want to anticipate future needs instead of reacting to current demands. And within the next 3 years, there will be will an increased amount of technology to do that.

With advents in remote operation, increased hardware platform

they choose, will be able to assign operatorless equipment to complete repetitive tasks like basic material movement while reserving their skilled operators for the most complex tasks to complete. Because the need for operators — and skilled workers in general — will continue to be in high demand, equipment manufacturers are designing and building equipment that maximizes their productivity without having to make trade-offs in performance. In addition, assigning autonomous operations to those repetitive tasks will allow your team to tackle larger, more complex jobs that may not have been a reality before.

For jobs with complicated tasks that require an operator, such

now appear on the front windows of the operator's machine via virtual and augmented reality. Features, elevations, and grade data are easily accessible to operators, allowing them to accurately orchestrate each project.

Operations that were once estimated and varied will become precise and measured. Specialization will increase, and the businesses that can orchestrate and coordinate a project's distinct pieces will meet the most success going forward.

Connectivity is about information. If businesses know more — more about the machines, their operations, the jobsite, the operators — they can do more and can do it better, improving

Again, there is room in this inevitable future for all ways of

owners who wish to maintain their current business models.