



## USE CASE

# IoT Solution for Concrete Mixer: Automation Delivers Concrete Results



**15%**

**Increase in  
Uptime**

**0** hrs

**For  
Invoicing**



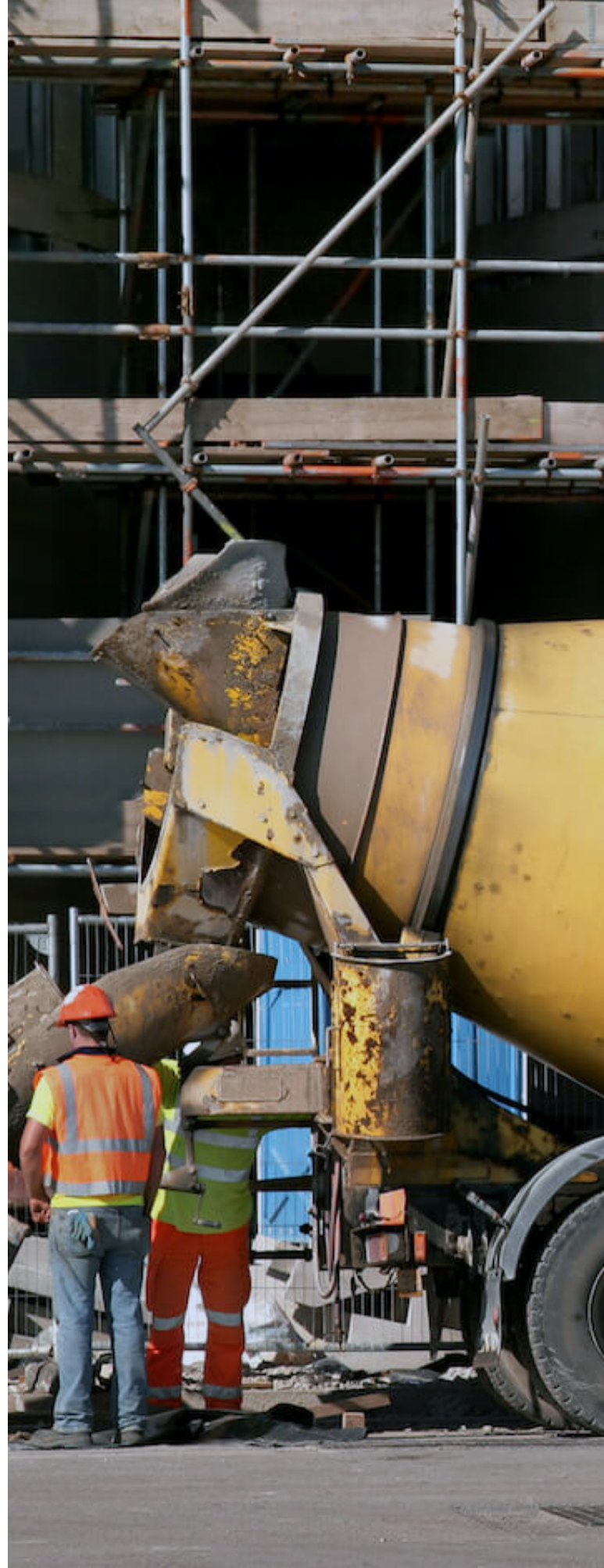
**Automatic  
Recipe on  
Receipts**

## Overview: Improving Concrete Production

A manufacturer of concrete mixers, concerned with eliminating human error, decided to deploy Elevāt to automate the concrete production process. Their goal was to offer a concrete mixer that could provide accurate and reliable reports of the product being poured while saving their buyers from excess costs.

## The Solution: Automating Machine Operation

Using their knowledge for machinery, the manufacturer was able to collaborate with Elevāt to install sensors to track various aspects of machine operation and cement production. Pressure sensors were installed in the hydraulic motor to measure the critical slump component of the concrete, bringing more accuracy to the production process. Next, quadrature encoders were positioned to track drum speed and total revolutions while flow meters were installed to precisely measure how much water was added. Several additional sensors were installed to decrease mixer downtime through predictive maintenance.



## The Results: Accurate Process Delivers Better Concrete

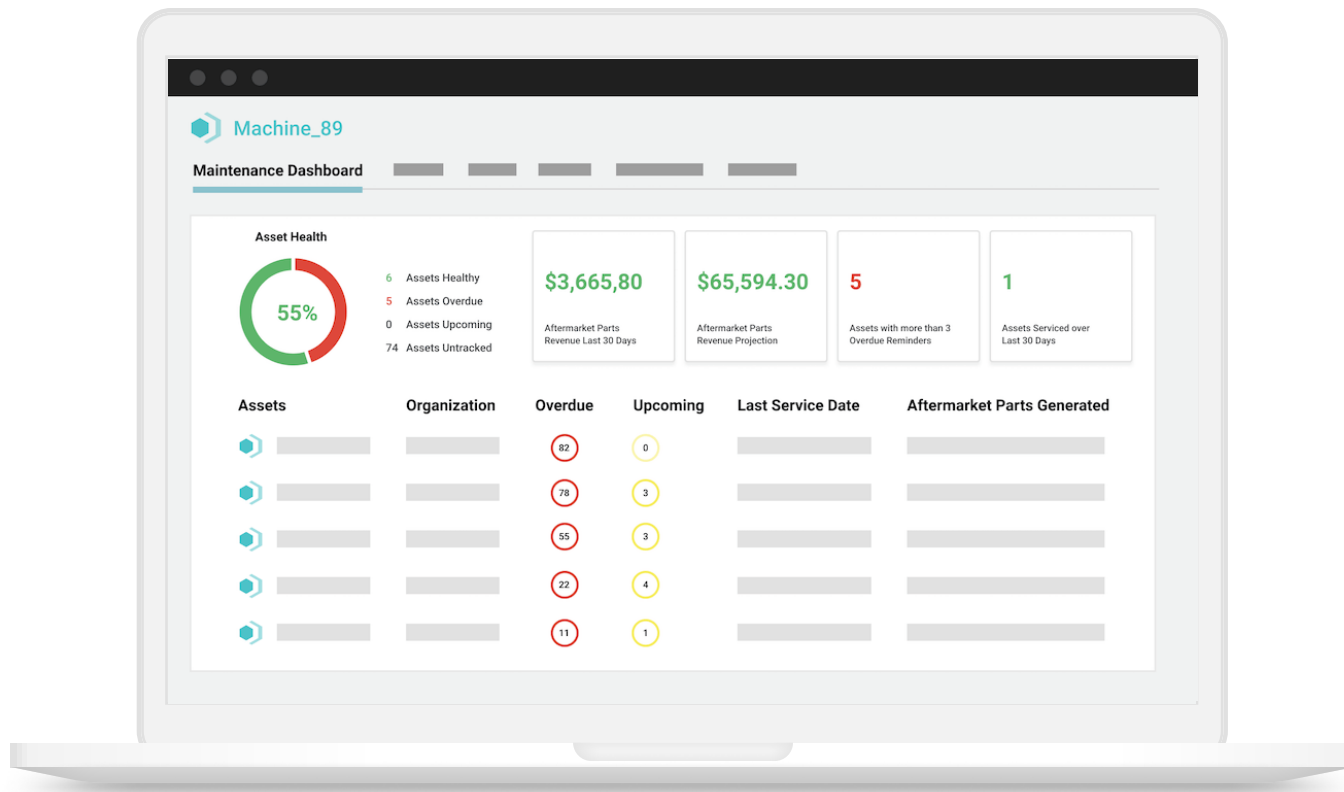
The Elevāt system provided quick and easy implementation that created a seamless path from order receipt to delivery of product. After implementing Elevāt, the manufacturer helps cement contractors eliminate the error and variability of the final cement product while delivering a more advanced machine. In addition to a more accurate system, the manufacturer utilizes maintenance tracing features to recommend and support aftermarket services. By counting drum revolutions, they can set up service intervals for parts like fins, chutes, and hoppers. Service

intervals provide recurring revenue for the manufacturer while customers benefit from resource scheduling and parts allocation to improve uptime of their fleet. Automated billing eliminates unnecessary administrative work and results in faster transactions. By improving their machines, both manufacturers and machine owners were able to realize increased revenue and efficiency in their businesses.



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*Applied Fluid Power Connect - Maintenance Dashboard*