

Digital Workflows: Leveraging Actionable Data From Key Stages Of The Manufacturing Process



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How do you help manufacturers access, analyze, and leverage data from key stages of the manufacturing process?

We provide workflows that help manufacturers digitize their processes. We also provide the sensor systems to feed data to these processes. For example, we read data from production equipment so that operators will not have to manually enter production data. We typically deploy sensors to measure uptime/downtime, machine speed, machine cycles, parts made, and parts passed through each stage of inspection. We also pull production targets for speed and parts made from your ERP or MES system. We report on how your current production is performing against these production targets and we can present operators with a listing of all the downtime events for a system so that they can then assign causes to the events for later analysis.

Why is utilizing this data important? What are the benefits?

The production data that we capture with our sensor systems is more accurate than the data that operators would capture manually and is also available sooner than data from operators at the end of a shift. When we first add sensors to a system, we typically find that the actual OEE of that system is much lower than the OEE that was estimated from the manually captured data. We also find that the production data that we capture with our sensor systems is much more actionable. An example of this is that we have the start and stop times of every downtime event. Once a cause is applied to these downtime events, we provide a pareto chart that drives the right repairs and maintenance to increase uptime.

Another example is capturing of loss and understanding how much loss occurs at each stage of inspection. In a system where bad parts go to re-grind, there is no count of failed parts. By capturing the loss at each stage, this data can be reviewed and analyzed real-time.

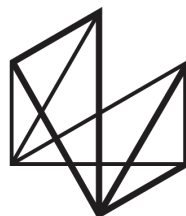
What are your specific solutions catered to the CPG market?

We can provide your Overall Equipment Efficiency (OEE) for a production line and for an entire factory. To provide OEE, we can capture uptime/downtime, machine speed, and first pass yield (FPY) based on data read by sensors that we install. By having uptime/downtime, we can provide a downtime tagging system that allows an operator to assign a cause for each downtime event. We also provide a downtime pareto that shows the total downtime and the total number of downtime events for each cause. Additionally, we offer a line walk system that requires the operator to do inspections at a number of stations before each shift. And, we provide a red tag system to track maintenance requests and the status of those requests.

What is your advice for a company that is just starting to look at digital solutions?

Any company should start by understanding their pain points. If a customer can tell us their pain points, then we can suggest digital workflows that can address those issues. For every workflow, we analyze their current process and provide them a "Future State Map" that will detail their new digital process.

We also advise any company starting this digital journey to work with a partner that understands not only digital workflows and the sensor technologies but also has deep knowledge of how to use this digital sensor data and integrate into workflows.



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