

## squeaks<sup>®</sup> PI PRODUCT OVERVIEW

The SQUEAKS Production Intelligence (SQUEAKS PI) system drives productivity, improves OEE, slashes downtime, and provides real-time insight on key performance metrics. SQUEAKS PI integrates manufacturing-specific information into the SQUEAKS productivity and communication platform.

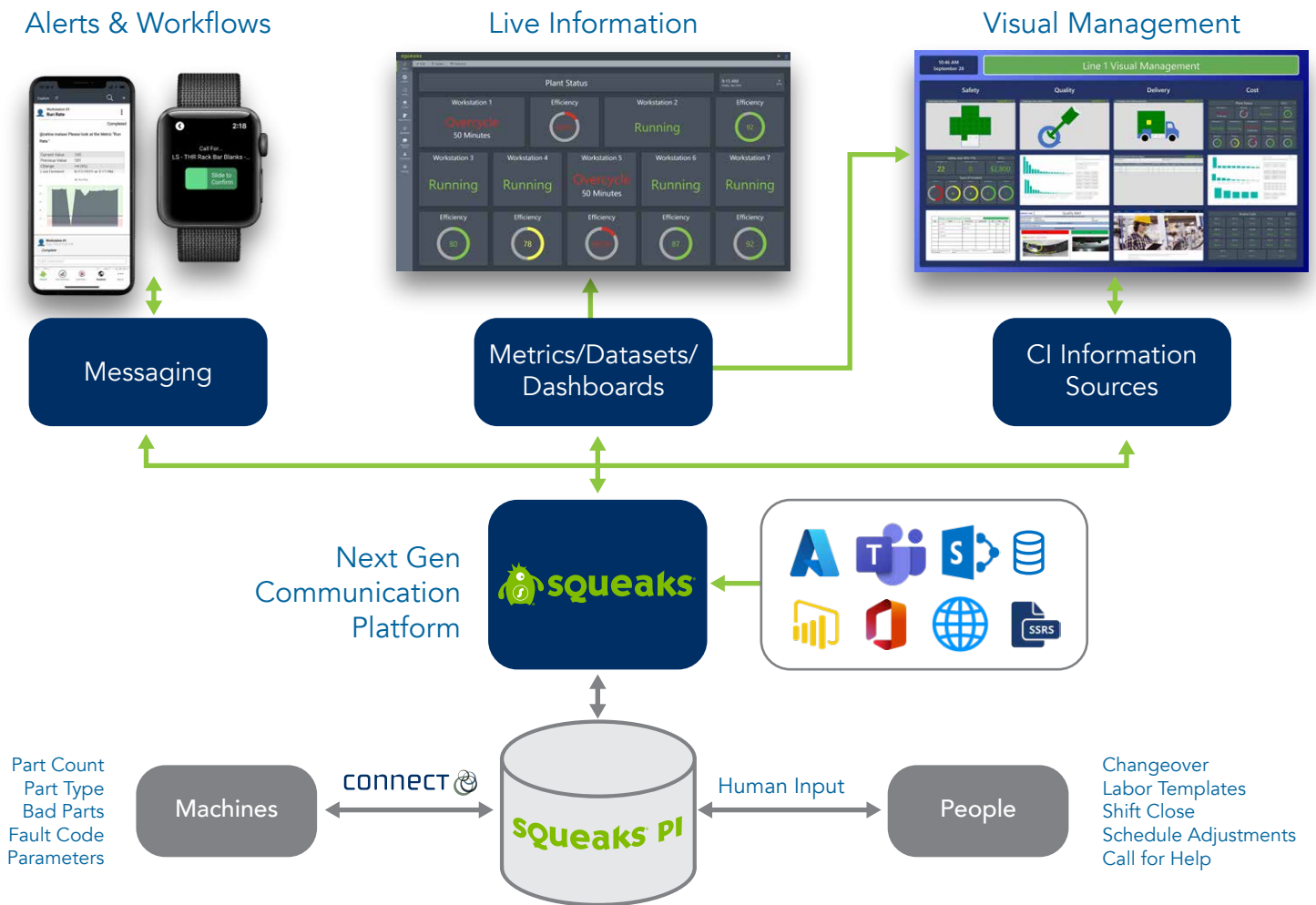
As an example, with a single part counter on a work center (machine or line), SQUEAKS PI provides multiple metrics and dashboards along with some basic visibility into the performance of the process. Applying some context to the counter, including the type of part, number of operators on the line and the shift/break schedule, the system can provide an accurate OEE (Overall Equipment Effectiveness) score for the various work centers or to the hierarchical groupings in which they belong.

SQUEAKS PI can additionally detect downtime or operator-instantiated calls for support staff. What differentiates SQUEAKS PI is the ability for machines, operators, and support staff to collaborate in real time. For example, a machine faults and goes into downtime, a Squeak (message) is automatically sent to the maintenance team. A flashing light is shown to the operator indicating the machine is down and maintenance has been dispatched. Upon the acknowledgement of the fault, one of the

maintenance techs indicates they are on the way via the SQUEAKS mobile app. This event turns the flashing light solid so that operator knows that help is on the way. Once the maintenance tech arrives, they can ask others for information about a specific condition, if needed, via the same message thread. Once the machine is up and running again, the light is turned off. All these workflow state changes are recorded and pareto style reports are available to provide Mean Time for Response and Mean Time for Resolution durations – providing management with the visibility on the capacity of the support staff and their impact on the production performance of the lines.

SQUEAKS PI is powerful, inexpensive, and easy to deploy. With a single input of each time a part is produced, combined with some contextual information about that input, SQUEAKS PI can provide a rich set of metrics, datasets, real time messages with workflows, dashboards, and interactive plugins to the SQUEAKS platform to give insight and visibility into the manufacturing production performance. Additionally, pre-built historical reports are provided as well as a full set of data mining functions for custom reports and/or integration with external systems such as Microsoft Excel<sup>®</sup> or Microsoft Power BI<sup>®</sup>.

SQUEAKS PI (Production Intelligence) drives productivity – slashes downtime – improves OEE – reports real-time production counts – and cuts cycle times



SQUEAKS PI is quick to deploy – low cost – provides insight into current production concerns – and ensures everyone is on the same page with information that drives results.

### SQUEAKS PI Integrations (plug-ins)

<p><b>Hourly Production Report</b></p> <p>Shows real-time production data per hour to include target, good parts, bad parts, downtime, OEE, and ability to add comments for each hour.</p>	<p><b>Downtime Root Cause</b></p> <p>Ability to add root causes and comments to individual downtime events to drive historical reporting and pareto charts.</p>	<p><b>Production Control</b></p> <p>Ability to perform manual changeovers, shift schedule deviations, and labor template changes that drive the production target and ideal cycle times factored into OEE.</p>
<p><b>Safety</b></p> <p>Ability to drive a digital Green Cross of Safety by logging safety incidents to include category (color), incident details, and related media.</p>	<p><b>Quality</b></p> <p>Ability to drive a digital Quality Arrow by logging customer complaints and safety alerts to include category (color), incident details, and related media.</p>	<p><b>Delivery</b></p> <p>Ability to drive a digital Delivery Truck Graphic by logging delivery concerns to include category (color), incident details, and related media.</p>

