

Increase uptime 25%— automating out-of-control action plans

The situation

- A leading global electronics company uses out-of-control action plans (OCAPs) to guide employee reactions to emergent situations.
- Execution of the OCAP process was tedious and time-consuming for operators and engineers.
- When a statistical process control chart went out of control, the tool or equipment would be stopped and a complex recovery process executed, negatively impacting production.

The challenge

- Charts and OCAPs were paper-based. Operators needed to find, read, comprehend and correctly perform the tasks to complete the OCAP.
- Proper execution was time-consuming, often crossing shift boundaries, further complicating the process.
- Disconnected systems delayed the flow of information, requiring operators to monitor multiple systems and rekey information, particularly across the SPC, tool management and history database. Delays in data visibility and knowledge transfer resulted in lost production time.

The approach

- Utilized SymphonyAI Industrial to connect the systems, tools and historian to automatically collect, store, monitor and track events.
- The system monitored drift, faults and other anomalies to trigger an OCAP. When an event was launched, the system responded by instructing specific employees to take action.
- Captured, timestamped and historized all event and resolution data for compliance, learning and improvement efforts.
- The engineers and operators utilized the Platform to build upon the OCAP knowledge base and institutionalize predetermined responses to critical events.

The value

- 25% increase in equipment uptime.
- Increased operator productivity, reduced downtime and errors and automation of the OCAP process.
- Eliminated waste due to errors and inconsistencies especially at shift change.
- Improved compliance tracking, advanced data analytics and continuous improvement metrics.

Asset utilization • Paperless factory • Connected worker • Work orchestration