# EXPERIMENTE HIGHLY AGMENTE HIGHLY OCAHLAB OPERATORIS CHAO OPERATORIS CHAO OPERATORIS CHAO

Service Note

Honeywell's advanced operator effectiveness tool leverages process data and utilizes advanced analytics to provide real-time insights and contextual, actionable recommendations for plant operations teams.

With today's workforce challenges, industrial organizations must find ways to improve post-pandemic resilience and business continuity. Due to the high stakes of operator and human error, training and competency development have never been more important.

Plant operating companies need to reduce operational cost and improve throughput through human reliability and operator effectiveness improvements and optimize production to industry benchmark levels.

#### **OPERATOR ADVISOR**

Honeywell has introduced Operator Advisor from Experion® Highly Augmented Lookahead Operations (HALO) suite. It is a powerful software solution enabling plant owners to objectively measure gaps and drive operator effectiveness to the next level – analyzing historical process and event information and assessing performance using advanced algorithms and data analytics. Experion Operator Advisor is part of Honeywell's comprehensive Operations Excellence service program, which focuses on improving overall operator effectiveness and efficiency. This tool differs from current manual and subjective assessment processes, which do not link operator effectiveness and behaviors to operator actions and plant performance based on system data.

Honeywell's advanced operator effectiveness solution, utilized within a software-driven service program, performs analytics on plant data and provides a set of calculated metrics with recommendations that enable informed decisions to maximize automation utilization and assure production at its full extent.

## **FEATURES & BENEFITS**

- Provides valuable insights on operator effectiveness
- Helps to optimize
  operator efficiency
- Links operator behavior to plant performance
- Provides consolidated scorecard of automation utilization
- Shows deviations from optimum production due to operator actions/inaction
- Provides insights on operator workload
- Offers recommendations for a targeted training plan to accelerate time to competency

With Operator Advisor, operations teams can:

- Monitor key indicators such as operations performance and resilience
- Turn data into actionable insights
- Improve plant operations and production to optimum industry benchmark levels

# Honeywell

### **OUR APPROACH**

Operator Advisor provides a consolidated scorecard of automation (control and safety systems) utilization effectiveness with recommendations towards autonomous operations and process resilience. The software shows deviation from optimum production due to operator actions/inactions and provides recommendations to improve throughput.

This solution also provides insights on operator workload during shift operations so that actions can be taken to improve operator productivity, as well as delivering a view of operator competency and recommendations that support a targeted training plan to accelerate time to competency.

Overall operator performance can be viewed across the enterprise. Critical operational metrics are also visible at the site level (Figure 1).

The tool's intuitive graphics make it easy to follow individual unit KPIs. Operator actions, including possible errors, are correlated with unit performance (Figure 2).

Finally, calculated metrics are used to provide detailed recommendations. The entire plant hierarchy can be visualized with a detailed status of each area or unit (Figure 3).

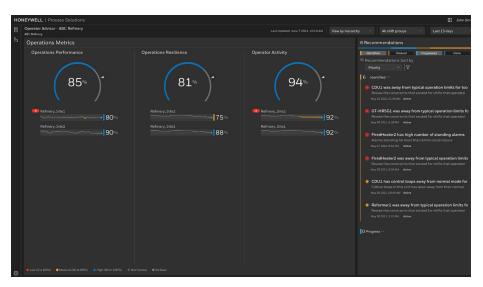


Figure 1: Enterprise-wide view of overall operator performance.

HONEYWELL   Process Solutions										
図	Operator Advisor - CDU1 ABC Refnery > Refinery-Site1 > Crude_Handling_Area1 > CDU1 > Operations Metrics									
ъ	Unit Performance					2 Recommendations				
	11FC025 Find Matter Control 22.37 T/hr 11LC005 CDULwel controller 58.08 %								Statute      Database      Programmed attaines      Statute      Database        ***      Recommendations      Statute      Statute	
	11TC033 Coli Cullet Temperature 363.6 °C								CDU1 has control loops away from normal mode for Critical loops in this unit has been away from their normal May 30:2021, 08:45.84. Antwe	
	Operations Metrics							Wed Collapse All	O Progress ∨	
	Operations Performanc									
	Operations Resilience									
100	😑 Low (0 to 60%) 🛛 😑 Medium (60 to	00.99) 🗢 Hiĝh (80 to 1009	io 👳 Not Normal 🔍 No	Usta						

Figure 2: Correlated operator actions with unit performance.

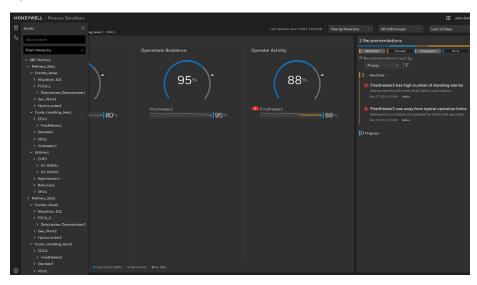


Figure 3: Plant hierarchy

Operator Advisor addresses bottlenecks in operator performance through the analysis of historical process and event data using the latest data analytics technologies.

#### **\*CUSTOMER BENEFITS**

With Operator Advisor, industrial companies can recover a \$1.5M margin annually (per plant) of production loss due to operator performance, by reducing 75% of abnormal events and human errors. They can reduce operational cost by \$2M annually by optimizing operator productivity and training costs on their journey to full autonomous operation. Furthermore, plant owners can maintain site production levels by improving operator productivity – contributing another \$1.3M annually. Improved equipment reliability will result in \$1M annual savings on maintenance cost.

Through timely insights and recommendations provided by this tool, the operating team can reduce human errors and implement best practices to achieve higher throughput, lower production losses, and better automation and equipment utilization. This makes it possible to recover \$5M+ margin annually per site.

\*Benefits estimations may vary based on customer requirements and Industry segments.

#### For more information

To learn more about HALO Operator Advisor, visit Honeywellprocess.com or contact your Honeywell account manager.

#### **Honeywell Process Solutions**

2101 CityWest Blvd, Houston, TX 77042 Honeywell House, Arlington Business Park Bracknell, Berkshire, England RG12 1EB UK Shanghai City Centre, 100 Zunyi Road Shanghai, China 200051

Experion® is a registered trademark of Honeywell International, Inc. All other trademarks are the property of their respective owners.

SV-21-03-ENG May 2021 ©Honeywell International, Inc. THE FUTURE IS WHAT WE MAKE IT

