

AIGC Services – Manufacturing Operations Management

Case Study: Manufacturing Operations Management deployment on a brown refinery

The Opportunity



One of AIGC experts was involved in deploying MOM at an existing refinery. The refinery technical team spent good time in a market search scouting for digital solutions and evaluating other peers experience on digital transformation. They were looking for integrated digital system that can improve the refinery yields and performance from all aspects capitalizing on the availability of big data at the refinery.

The Approach

The refinery team deployed MOM system with 25 integrated solutions covering Production Operations Management,

Quality Operations Management, Inventory Operations Management, Reliability and Integrity Management and Regulatory Compliance Management.

The team designed a Service-Oriented Architecture (SOA) – based solutions to ensure agility and scalability of the system. A portal – based application was used for a majority of the business processes along with centralized information solution to ensure seamless access to real-time data which enables prompt decisions at the refinery.

The Benefits

The MOM platform enabled the refinery front line leadership and staff to take business decisions timely and capture performance opportunities including:

- Improving Gross Margin/Production by 2%
- Enhancing the products yield by 7%,
- Cost saving of about \$0.6 per barrel
- Reduced flaring by 23%
- 10% energy saving
- Improved reliability by 5.5%
- Reduce downtime by 5%